WORLD TRADE ORGANIZATION

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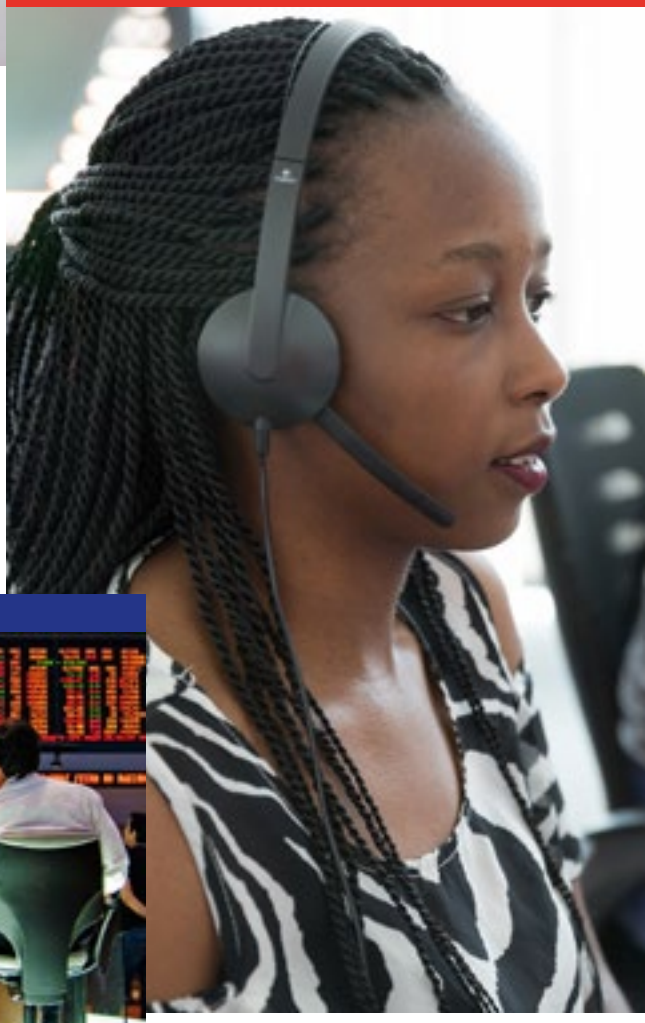
Trade in services for development

Fostering sustainable growth and economic diversification



About the World Bank

The World Bank Group is one of the world's largest sources of funding and knowledge for developing countries. Its five institutions – the International Bank for Reconstruction and Development, the International Development Association, the International Finance Corporation, the Multilateral Investment Guarantee Agency and the International Centre for Settlement of Investment Disputes – share a commitment to reducing poverty, increasing shared prosperity, and promoting sustainable development.

About the WTO

The World Trade Organization is the international body dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible, with a level playing field for all its members.

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A World Bank and WTO co-publication

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Disclaimer

Contents

Foreword

Services have emerged as the driving force that is shaping the economic landscape of countries at all levels of development. They account for the largest share of global economic activity by generating more than two-thirds of GDP, employ the most workers, and are the source of most new job creation, especially for female and young workers. At the same time, services trade has turned into a key element in growth strategies, becoming the most dynamic component of global trade in recent times, and creating higher value-added jobs.

The COVID-19 pandemic accelerated the growth of digitally delivered services, while travel services were hit hard. Modern services such as information and communications technology and business services now represent a greater share of exports in developing economies, helping these countries capture an increasing share of world exports in these dynamic sectors.

Services trade offers significant and multifaceted development impact. Services offer a direct route for developing economies to diversify their exports away from a limited range of products and commodities. Services-led export diversification can also boost resilience by reducing exposure to commodity price volatility.

Improved access to high-quality modern services is also critical to the operation of cross-border production networks and fundamental to economy-wide productivity gains. The trade facilitating role that services play as intermediate inputs is a key determinant of improved export performance of other sectors such as manufacturing and agriculture.

Moreover, high-value services and services exports are creating new well-paid jobs for young people and professionals in developing economies. Services trade is associated with inclusive growth, given its positive impacts on the employment prospects of women workers, the youth and entrepreneurs as well as on micro, small and medium-sized enterprises.

Advancing the United Nations Sustainable Development Goals requires effective access to a host of services, ranging from health and education to finance, transport and logistics services. Policy measures governing trade and investment in telecommunications and computer services are key determinants of enhanced digital connectivity, while trade in environmental services strengthens efforts to combat climate change and improve environmental stewardship.

Services represent the future of trade. Developing economies have already made important inroads in leveraging services trade, but much remains to be done to fully realize the sector's development promise. There is a need to re-ignite international cooperation in the services sector. Such efforts need to expand trade and investment, reduce trade costs, bring about greater transparency and predictability on trade policy regimes and, ultimately, increase the participation of developing

economies in policy deliberations and negotiations on services trade. Further, data must be able to move more freely and securely across borders to support digital trade and realize the growth potential for inclusion and jobs.

Deepened international cooperation on services trade requires more Aid for Trade, as domestic reforms and international negotiations in sectors subject to considerable regulatory scrutiny are still challenging for many developing economies. A "Trade in Services for Development" initiative could support deeper international cooperation by mobilizing resources for technical assistance and capacity building. The WTO Secretariat and the World Bank Group stand ready to help governments realize the full development potential of trade in services.

Ngozi Okonjo-Iweala
Director-General
World Trade Organization

Ajay Banga
President
World Bank Group

Executive summary

This co-publication by the World Bank and the WTO is motivated by a shared view that the structural changes associated with a more service-centric world economy and the central contribution that expanded trade and investment in services can make to economic growth and development warrant greater policy attention and revived international cooperation. An important aim of the publication, and a key reason for its joint nature, is to recall the benefits of advancing the negotiating agenda on trade in services, and the opportunity costs of not doing so. Accordingly, the publication aims to foster reflection on how best to mobilize additional support – and better assistance – for developing and least-developed economies in implementing services sector reforms and reaping the development gains from expanded trade and investment in services.

In arguing the case for reinvigorated international cooperation in services trade, it is important to remember that advancing the development prospects of countries and the welfare of their citizens remains the ultimate goal of policy reform efforts. Trade, economic diversification and deeper integration provide key channels through which broader development aims can be pursued. Such a distinction matters substantively, as a host of more purely domestic policy reforms, spanning areas as diverse as education and training, trade facilitating infrastructure – both physical and digital – and sound regulatory frameworks can affect the degree to which trade and investment in services can serve as development levers. Simply put, the development payoff from expanded services trade stands to be magnified by supportive domestic business, regulatory and human capital ecosystems.

While it is important to consider reforms to services trade in a broader development setting, this publication does not delve extensively into the development dimension of services per se. Rather, it draws attention to the role that can be assigned to deepened international cooperation, and thus to trade policy, negotiations and agreements in the sector, in helping secure the far-reaching development dividends associated to domestic reforms and increased trade in services.

The sheer diversity of the services sector suggests that policy reforms need to pay close attention to – and be informed by – differences in the nature and roles that various services play, in the multiple ways they are traded, in the intensity of the regulatory scrutiny they command, in the broad range of public policy aims their supply pursues and in the political economy forces they put in play. Such differentiation helps explain why services sector governance rarely – if ever – proceeds on a one-size-fits-all basis. It also explains why domestic reforms anchored in trade agreements typically proceed in a progressive manner.

Despite challenges linked to characteristics that are intrinsic to services and to the sector's heterogeneity, a deepened commitment to supportive domestic business environments and to trade openness in services form indissociable parts of a comprehensive growth-enhancing policy agenda. The world economy has in recent decades undergone structural shifts that have brought services to the forefront. Services account for the largest share of global economic activity, generating more than two-thirds of GDP, employ the most workers and are the source of most new job creation, especially for female and young workers. Services spur growth through the key intermediation role they play as inputs into the production of other

services and goods, such that the benefits of boosting the competitiveness of services and goods markets are mutually reinforcing.

The economy-wide ubiquity of services means the sector plays a key role in the export competitiveness of businesses in all sectors. Productivity gains in extractive industries, agriculture and manufacturing are all shaped by the ease of access to efficient services and infrastructure. Improved access to quality and affordable services can enable developing economies to integrate globally. Diversification, and hence a more varied range of services exports, will increase resilience to unexpected economic events and promote the pursuit of more sustainable development paths.

Beyond their rising importance in domestic economies and their key role as intermediate inputs, services are also an increasingly prominent feature of cross-border exchanges. Services had long been the most dynamic component of international trade and investment prior to the COVID-19 pandemic, and the world has since borne witness to how services offer growing export opportunities, including for developing and least-developed economies, as digitalization and the ability to deliver services remotely remove barriers to trade arising from the limited size and challenging geography of some economies.

Expanded trade and investment in services can spur productivity growth and act as a key channel for the dissemination and adoption of new technologies and know-how. A conducive business climate for domestic and foreign services providers therefore improves the overall efficiency of resource use. By contributing to improved performance in the sector, services trade policies also represent a critically important means of achieving the United Nations Sustainable Development Goals, contributing in the process to alleviating poverty and increasing shared prosperity.

Elevating the policy attention paid to services requires that domestic and international policies be brought up to speed with the reality of the global services economy. For trade policy-makers, this means intensifying cooperation to overcome obstacles that hinder trade and investment in services. At the domestic level, continued efforts need to be directed to putting in place business and regulatory environments conducive to the supply of more efficient and competitively priced services. At the global level, stepped up cooperation could entail renewed efforts to provide greater transparency and predictability to services trade regimes, building on advances registered in the latest generation of deep preferential trade agreements. Moving in this direction could provide a major boost to restoring the primacy of the multilateral trading system in matters of services trade governance at a time when calls for its reform and reinvigoration have gained wide currency.

Key messages

The publication delivers six key messages.

1. Services trade is highly dynamic and offers important opportunities for developing economies

Services trade has been the most dynamic component of world trade for the last 15 years. Such dynamism provides developing and least-developed economies significant opportunities for export-led growth, economic diversification, inflows of foreign direct investment (FDI) and integration into global value chains.

Services trade promotes greater inclusiveness, particularly for female and young workers and entrepreneurs as well as micro, small and medium-sized enterprises (MSMEs). In 2021, 59 per cent of employed women worked in the services sector, and 9 out of 10 services firms were MSMEs.

Today, the services sector generates half of employment worldwide and two-thirds of global GDP – more than agriculture and industry combined.

These changes in the structure of the global economy challenge long-held perceptions of services as a less desirable path to economic growth and development compared to manufacturing.

2. The growth in services trade is a result of mutually reinforcing factors

The growth in services trade has resulted from the interplay of a number of mutually reinforcing factors. These include not only policy reform efforts to make domestic service markets more contestable (e.g. competitive) but also the accelerating pace of technological change.

Intermediate services (i.e. inputs in the production of other goods and services) play an increasing role in sustaining trade growth through economy-wide improvements in efficiency and facilitating cross-border production.

3. Trade in services has become more digitalized

Fuelled by advances in information and communications technologies (ICT), exports of commercial services almost tripled between 2005 and 2022, with exports of digitally delivered services experiencing the fastest growth, increasing almost four-fold.

During the same period, developing economies accounted for an increasing share of global services trade, as least-developed economies' exports of commercial services grew more than four-fold between 2005 and 2002, while those of other developing economies more than tripled.

The expansion of developing economies' exports is increasingly tied to services supplied across borders through digital means. And developing economies account for an increasing share of non-traditional service exports. Such gains belie the export pessimism that long permeated earlier discussions of services trade and tended to limit developing country engagement in negotiations, particularly at the WTO.

4. Services are central to tackling the most pressing global challenges

Significant opportunities in the services sector still remain to be seized by developing countries. Barriers to trade remain an obstacle in different sectors and modes of supply. However, services trade policy has an important role to play in reducing trade costs, improving the performance of services, attracting FDI, boosting supply-chain resilience and increasing manufacturing productivity and exports.

In this regard, services trade policies play a key role in strategies to promote development. Moreover, there is a growing acceptance that services – and services trade – will prove central to tackling the most pressing global challenges These include benefits offered by a rapidly digitalizing global economy, facilitating timely access to critical goods and services in response to pandemics and natural disasters, addressing food security by adopting the latest technology in agricultural practices, facilitating the transition to a decarbonized global economy, and designing and deploying green technologies.

5. Improved commitments on services trade can bring key benefits

Although services sector reforms are chiefly undertaken by governments at the domestic level through autonomous policy measures, binding commitments in trade agreements represents a key policy complement. While services trade barriers impose significant costs, uncertainty stemming from the absence or relative paucity of binding commitments carries additional costs. Improving the level of binding commitments in services trade can send positive signals to investors about one's business and investment climate.

Encouraging WTO members to bind their best commitments from preferential trade agreements could provide a major boost to multilateral trade diplomacy – without requiring any additional liberalization undertakings – as commitments undertaken in preferential settings are typically implemented on a non-discriminatory (i.e. most-favoured-nation treatment) basis.

The complementary role played by legally binding commitments in trade agreements can help to prevent protectionist backsliding and lock-in prevailing degrees of openness. The scope for unduly discretionary or arbitrary trade action can be reduced through increased transparency and policy predictability. Economies stand to benefit from the significant development gains of reviving the WTO's market access negotiations on services.

6. An Aid for Trade roadmap for services can help tackle key challenges

Adapting international cooperation to the new realities of services trade calls for increased levels of Aid for Trade. This support should be directed to strengthening the capacity of developing economies to design and implement services trade reforms and supply competitive services to global markets. Many developing and least-developed economies find it difficult to conduct domestic policy reforms and negotiations in services trade – not least because of the diverse nature of the service economy, the regulatory intensity that characterizes it, constraints in policy formulation and regulatory enforcement as well as in supply-side capacities.

An approach in which Aid for Trade support underpins efforts to enhance international cooperation, reduce trade costs and improve the transparency and predictability of trading conditions could provide momentum to the services trade policy agenda – particularly at the WTO.

A "trade in services for development" initiative could help to mobilize a coherent Aid for Trade package in services, targeting five key challenges: (i) addressing data gaps in services trade; (ii) supporting greater participation of developing and least-developed economies in policy discussions on trade in services; (iii) strengthening regulatory frameworks and institutions; (iv) promoting diversification, notably that offered by digital services trade; and (v) addressing key supply-side constraints and improving the services-related skills of workers.

Introduction

Services are shaping how trade contributes to economic growth and development

The world economy has in recent decades undergone structural shifts brought on by rapid technological developments that have made services one of the most dynamic sectors. The services sector has been the main source of economic growth since the 1990s and services today dominate the production and employment landscape of economies at all levels of development (Nayyar and Davies, 2023).

Subsectors such as logistics, finance and information and communication technologies (ICT) are essential to the functioning of modern economies. Services have long comprised many of the fastest growing sectors of the world economy – such as business services, healthcare, entertainment and ICT services. Examples of the types of services covered by the General Agreement on Trade in Services (GATS) are provided in Figure 1.

Beyond their rising importance in domestic economies, services are also an increasingly prominent feature of cross-border exchanges. Services had long been the most dynamic component of international trade and investment prior to the COVID-19 pandemic and the world has since borne witness to how services offer growing export opportunities, including for developing and least-developed economies, as digitalization and the ability to deliver services remotely remove barriers to trade which can arise from the limited size and challenging geography of economies and ease trade within and across borders.

Services were severely impacted by the pandemic, with business closures and social distancing measures exacting a heavy toll on the sector. Health-related measures adopted to slow the spread of the virus, including restrictions on cross-border mobility, led to an unprecedented collapse of services trade, which declined across all regions. The impact was more severe for services involving face-to-face interactions. Services trade in the travel sector decreased 81 per cent year-on-year in the second quarter of 2020.

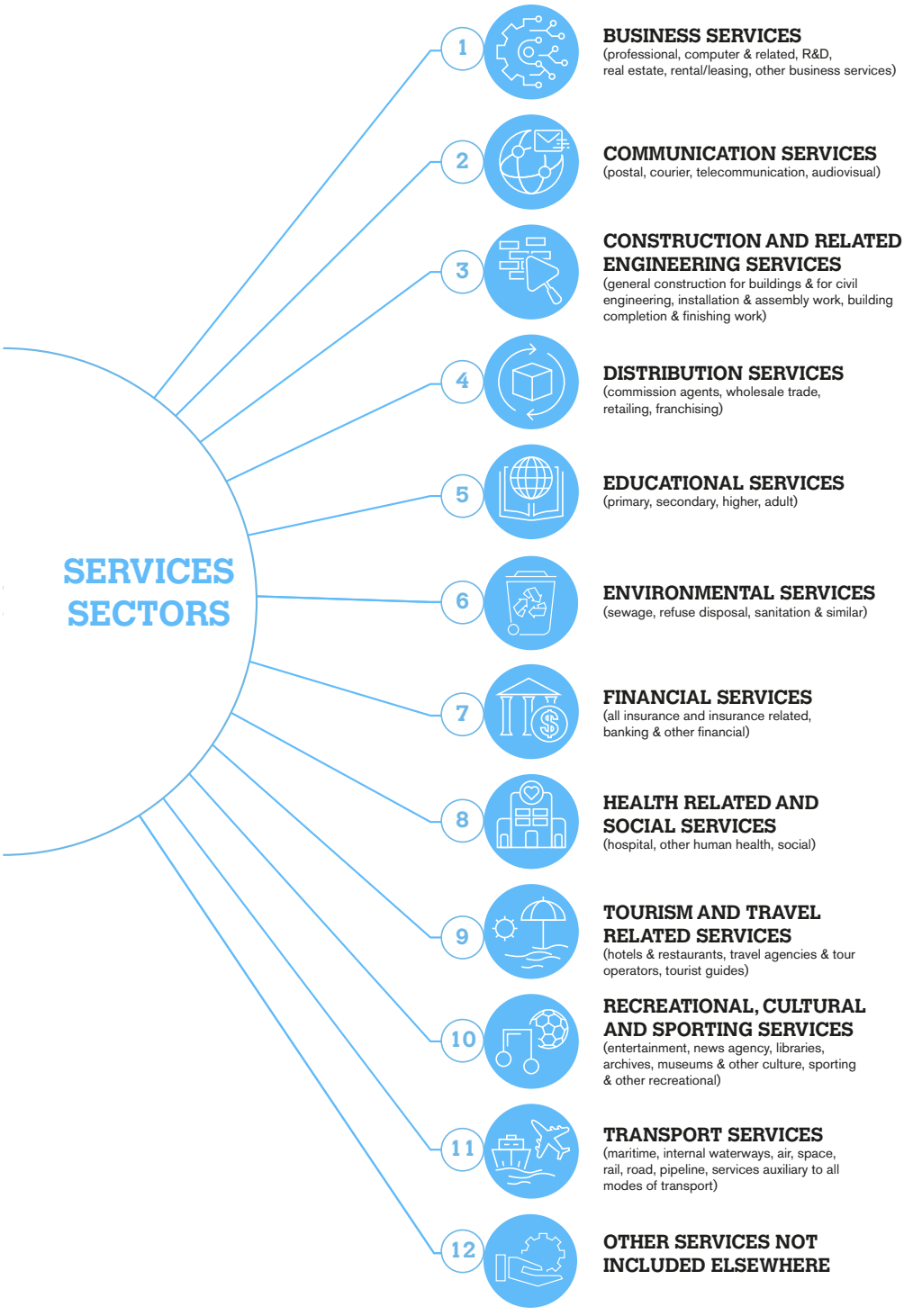
At the same time, ICT services were key in ensuring economic and trade resilience and in speeding up pandemic recovery efforts. A sustained rebound in services trade and investment will be critical to global recovery prospects.

Trade and investment policies in services are essential to harnessing the sector's growth and development potential. However, maximizing the benefits requires a rethinking of the central contribution that services trade plays in the development process. Furthermore, interest in tackling the barriers to trade and investment in the sector needs to be revived at the global level.

The ability of services firms and suppliers to operate outside domestic markets holds the key to promoting growth, deepening integration and speeding up efforts to diversify economies. Economic diversification can be fuelled not only by growing opportunities for services exports but also through the greater use (and sourcing) of competitively priced services as inputs in other sectors.

Services contribute centrally to the operation of cross-border production networks, such as regional and global value chains. When measured in valued-added terms, services account for 50 per cent of world trade.

Figure 1.
Services sectors and subsectors



Source: *Services Sectoral Classification List,* GATT document MTN.GNS/W/120.

“Trade and investment policies in services are essential to harnessing the sector’s growth and development potential.”

The economy-wide ubiquity of services means the sector plays a key role in the export competitiveness of businesses in all sectors. Productivity gains in extractive industries, agriculture and manufacturing are all shaped by the ease of access to efficient services and infrastructure. Improved access to quality and affordable services can enable developing economies to integrate globally.

Diversification can help to mitigate economic risk and trade volatility. Hence, a more varied range of services exports will increase resilience to unexpected economic events and promote the pursuit of more sustainable development paths (ADB, 2021a; UNCTAD, 2022). A fuller appreciation of the dual nature of services as intermediate inputs and final exports was largely absent, however, when the global services regime took shape during the Uruguay Round of trade negotiations.

Growth in the services sector amplifies the impact and relevance of government policies affecting cross-border trade and investment in services. Such policies, which span a wide range of “inside-the-border” measures of a regulatory nature, are increasingly important determinants of foreign direct investment, economy-wide productivity gains and export performance.

This publication is a collaboration between the World Bank and the WTO. It is motivated by a shared view that the transformative properties associated with a more service-centric world economy and the contribution that trade and investment in services can make to economic growth and development warrant greater policy attention and revived international cooperation.

The publication aims to help mobilize additional support – and better assistance – for developing and least-developed economies in implementing services trade reforms and reaping the development gains from expanded trade and investment in services.

In arguing the case for reinvigorated international cooperation in services trade, it is important to remember that advancing the development prospects of countries and the welfare of their citizens remains the ultimate goal of policy reform. Trade, economic diversification and deeper integration provide key channels through which broader development aims can be pursued. Such a distinction matters substantively as a host of more purely domestic policies can be expected to condition the scope that exists to use trade and investment as development levers in services.

Simply put, the development payoff from expanded services trade stands to be magnified by supportive domestic business, regulatory and human capital ecosystems.

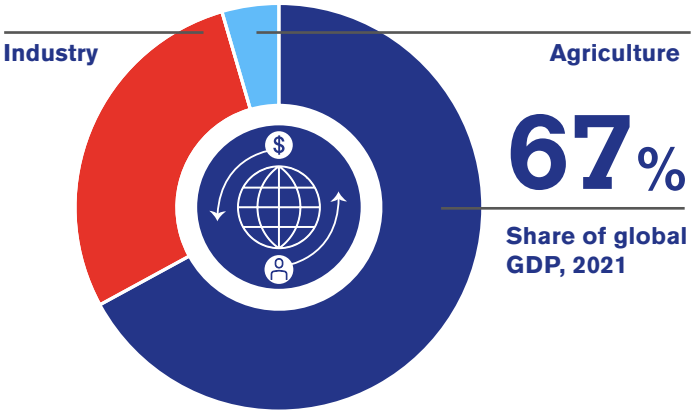
THE SERVICES SECTOR IS THE MOST DYNAMIC COMPONENT OF INTERNATIONAL TRADE

Services account for

50%

of global trade in value-added terms

Services sector is larger than agriculture and industry combined



Digitally delivered services exports were worth

US$ **3.82 trillion** in 2022

54% of total global services exports were delivered digitally in 2022

+375% The increase in digitally delivered services exports since 2005

1 The future of trade lies in services: key trends

Key points

- Structural shifts in the world economy brought on by rapid technological developments have placed services and services trade at the heart of economic transformation. These shifts challenge long-held perceptions of services as a less desirable path to economic growth and development. The services sector today generates more jobs (50 per cent share of employment worldwide) and output (67 per cent share of global GDP) than agriculture and industry combined – and is increasingly doing so in economies at earlier stages of development. Services trade and related policies are key to harnessing the promise of services-led development.

- Fuelled by advances in information and communications technologies (ICT), global commercial services exports almost tripled between 2005 and 2022, a period that saw marked changes in the composition of services trade, with exports of digitally delivered services increasing almost four-fold. During this period, developing economies accounted for an increasing share of less traditional services exports. The expansion of developing economy exports is increasingly tied to services supplied across borders through digital means.

- Expanding services trade is also delivering major gains in inclusiveness for female and young workers and entrepreneurs, as well as for micro, small and medium-sized enterprises.

- Beyond their rising importance as final exports, services also play a critical trade facilitating role in the functioning of regional and global value chains, with trade in intermediate services (i.e. inputs in the production of other goods and services) valued at US$ 3.95 trillion – more than double that of final services exports.

- Highlighting what has come to be called the 'servicification' of the world economy, services account today for 50 per cent of global trade in value-added terms, compared to 16 per cent for agriculture and 34 per cent for industry. The share of services content in total exports has increased the most in non-OECD members since 2005, recalling the significant development dividends at play in the sector.

- While services trade was hit hard by the COVID-19 pandemic, digitally delivered services have led the recovery in global services trade and proved fundamental to heighted economic resilience. Still, despite the continued rise of cross-border supply, services supplied through a commercial presence continue to predominate, recalling the central importance of facilitating investment and improving business climates, including through binding commitments in trade agreements.

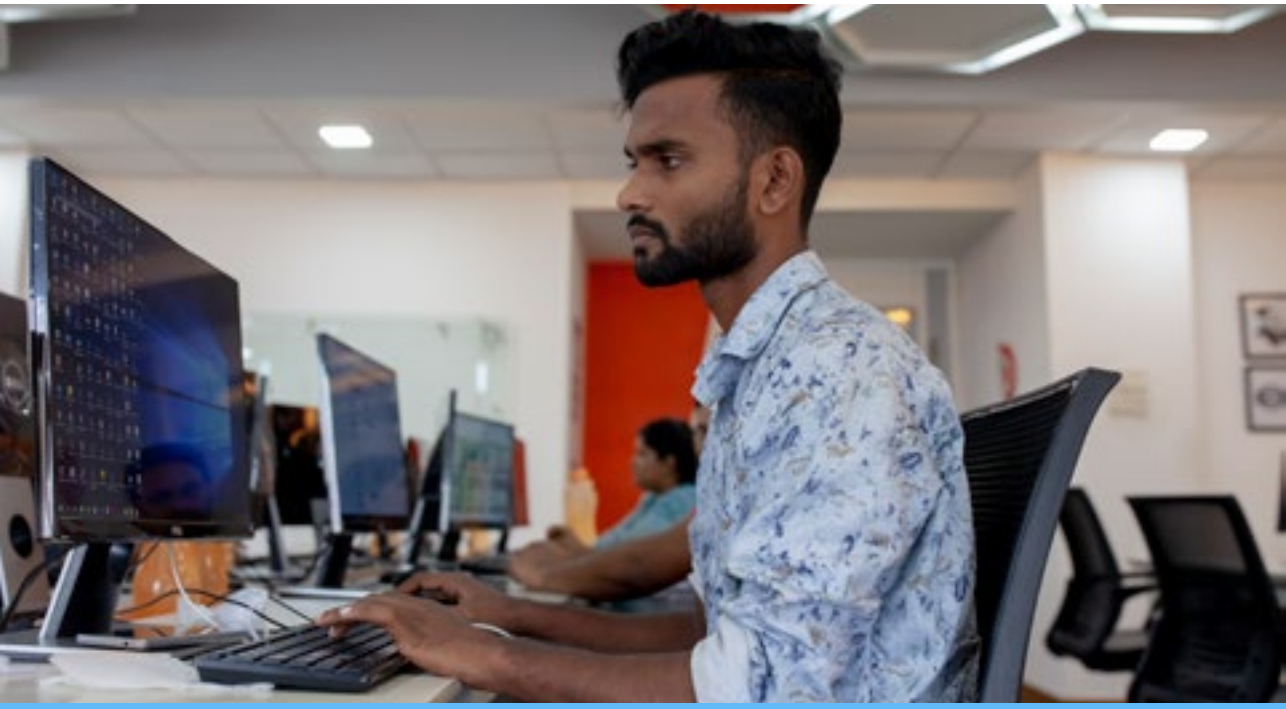
1. The worldwide shift towards services

The contribution of services in economies worldwide has increased markedly over time. The services sector's share of global GDP increased from 53 per cent to 67 per cent between 1970 and 2021. The increasing contribution of services to GDP has occurred in economies at different levels of development and has been accompanied by a marked decline in the relative share of agriculture (see Figure 2).

The shift towards services has been pronounced in developing economies. In much of the developing world, growth in services output has outpaced growth in industry and agriculture. On the basis of World Bank income groups, the shift towards services has been most prominent for upper middle-income and high-income economies, whose shares of services of GDP grew from 40 per cent to 56 per cent and from 59 per cent to 75 per cent, respectively, between 1970 and 2021.

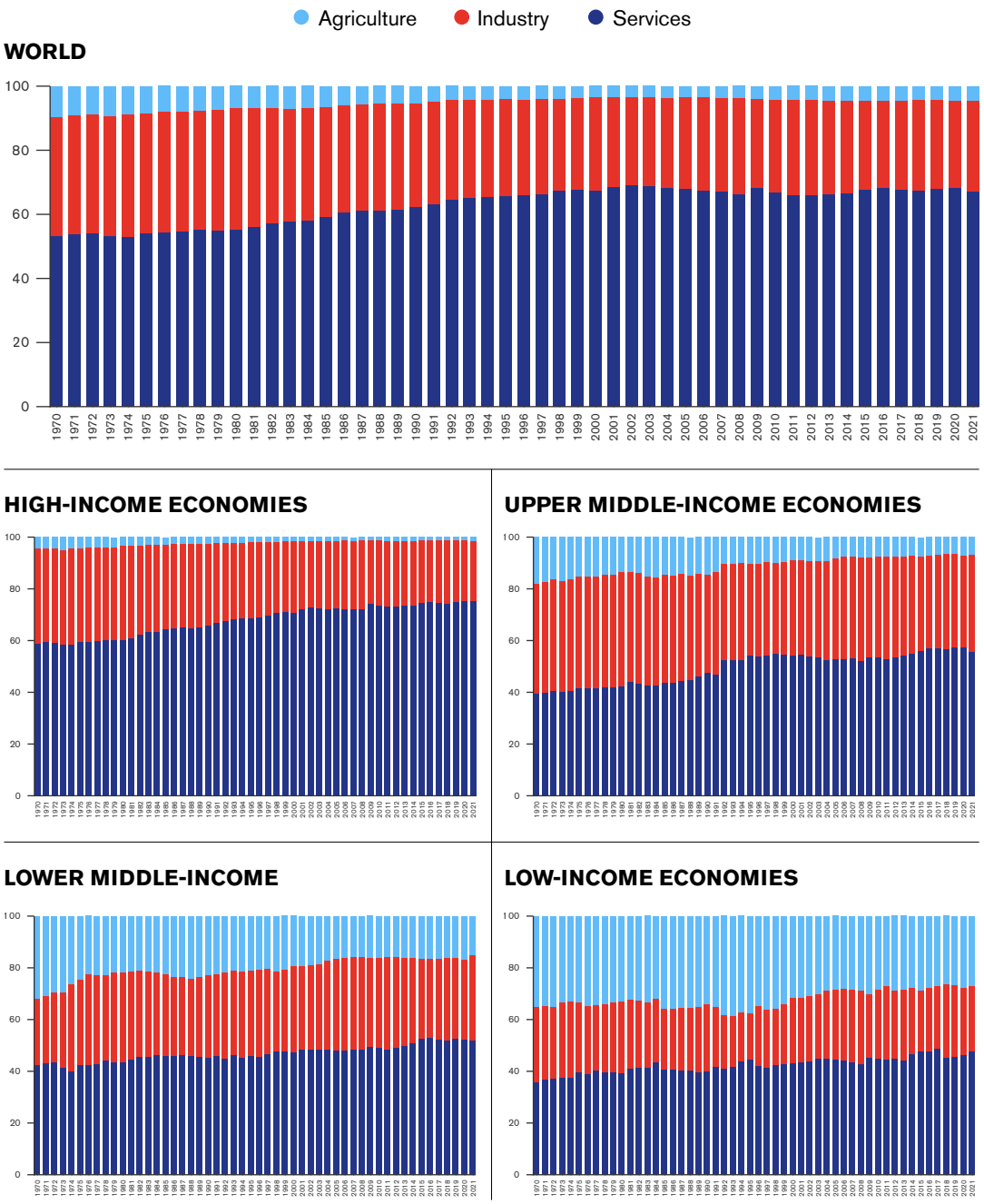
The GDP share of services in low-income economies also increased over this period, from 36 per cent to 42 per cent. This growth, however, was less pronounced than in the rest of the developing economies, and was largely due to the more significant role agriculture plays in the world's poorest countries.

Services sector's share of global GDP



> Growth in services output has outpaced growth in industry and agriculture.

Figure 2.
Share of GDP by sector, world and World Bank income groups, 1970-2021
(As a share of the respective GDP, in per cent)



Source: UNCTADstat database, available at https://unctadstat.unctad.org/wds. Estimates for 2021 based on the World Bank's World Development Indicators database, available at https://databank.worldbank.org/source/world-development-indicators.

Services today generate 75 per cent of GDP and of employment in most developed economies. In both developing and developed economies, services now account for a greater share of GDP than either agriculture or industry. While the share of agriculture in GDP has long been in decline globally, the relative contribution of industry has also been declining in many economies. Economies at all levels of development are generally specializing less in industrial activity – the manufacturing sector also employs fewer workers following the rapid spread of labour-saving technologies.[1]

Not surprisingly, the point at which industry peaks in terms of output and employment is occurring at earlier stages of economic development in a number of economies, prompting concerns of "premature de-industrialization".[2]

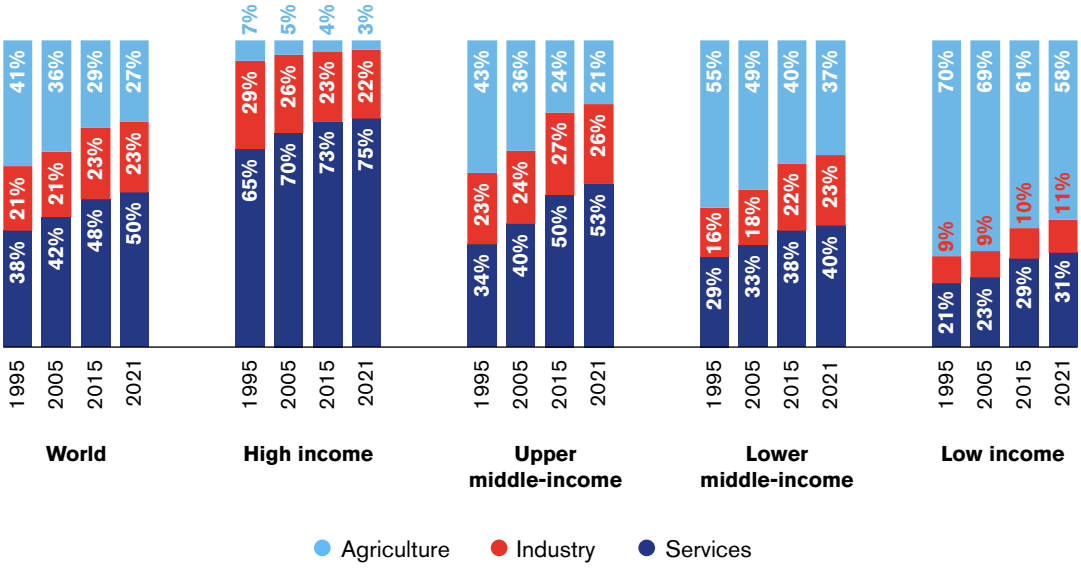
In a similar fashion, the services sector is driving labour market outcomes – and today generates more jobs than any other sector and at earlier stages of development.[3]

Data from the International Labour Organization (ILO) show that services and agriculture each accounted for 40 per cent of total global employment in 2000.[4] By 2021, however, 50 per cent of the world's workforce was employed in services, but the share of agriculture had dropped to only 27 per cent.

The services sector has grown to become the main source of employment in both high-income economies (75 per cent of total employment in 2021) and also upper middle-income economies (53 per cent; see Figure 3). Meanwhile, agriculture still accounts for the highest proportion of employment in low-income economies, at 58 per cent.

Yet, services-sector employment grew significantly in low-income economies, from 21 per cent in 1995 to 31 per cent in 2021. Figure 3 shows that, similar to the trend in the share of GDP, the share of services in total employment has grown significantly across all income groups since 1995.

Figure 3.
Share of employment by sector, world and World Bank income groups, 1995-2021
(As a share of total employment, in per cent)



Source: ILO World Employment and Social Outlook (WESO) Data Finder, available at https://www.ilo.org/wesodata.

(a) The inclusive dimension of services: women's empowerment, youth and MSMEs

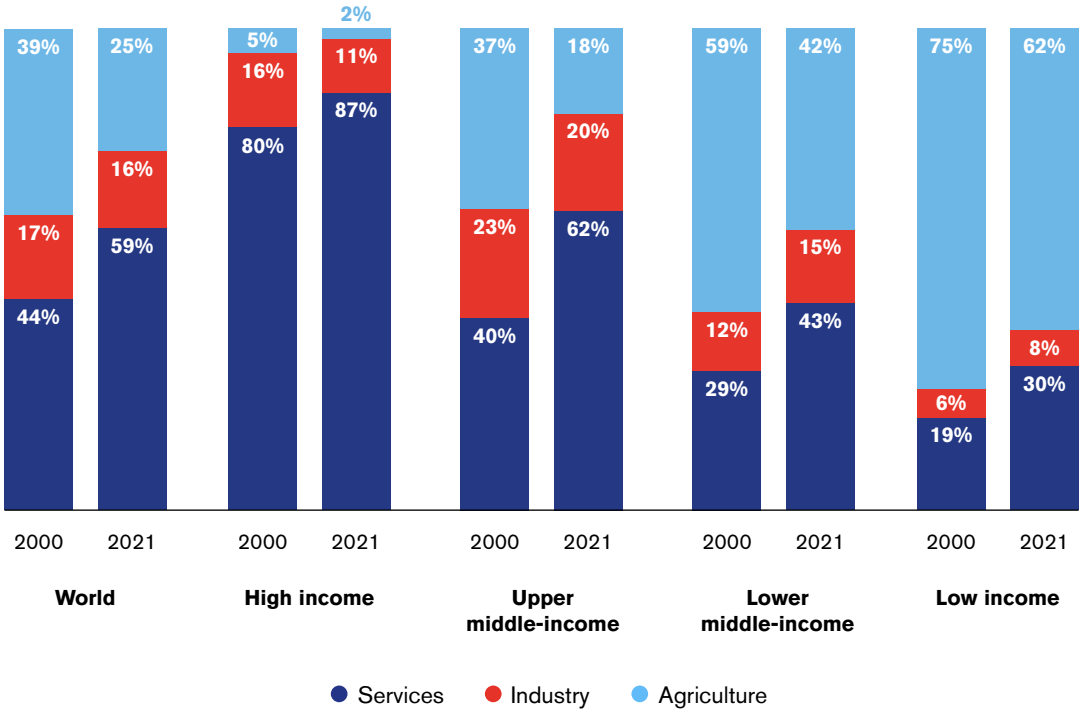
Women's empowerment

Services have a positive gender dimension and play an important role in women's empowerment. In 2021, 59 per cent of employed women globally worked in the services sector, compared to only 44 per cent in 2000 (see Figure 4). In contrast, services accounted for 45 per cent of total male employment in 2021.

The share of women employed in the services sector has increased in all economies since 2000. Services now account for 87 per cent of total female employment in high-income countries (up from 80 per cent in 2000), 62 per cent in upper middle-income countries (up from 40 per cent), 43 per cent in lower middle-income countries (up from 29 per cent), and 30 per cent in low-income countries (up from 19 per cent).

Women-led firms have more success in the services sector – in particular for services delivered remotely over digital platforms (Sauvé, 2020). This suggests that some gender-specific barriers to female entrepreneurship may prove less onerous than in industry, not least in light of the smaller average size and less capital-intensive nature of service exporting firms.

Figure 4.
Share of female employment by sector, world and World Bank income groups, 2000 and 2021
(As a share of total female employment, in per cent)



Source: ILO World Employment and Social Outlook (WESO) Data Finder, available at https://www.ilo.org/wesodata.

In 2021, three in every five employed women worked in the services sector.

Among firms that export, the proportion of enterprises owned by women in the services sector is significantly greater than in industry, even though the proportion of exporting firms that are led by men is higher in both sectors.

Youth

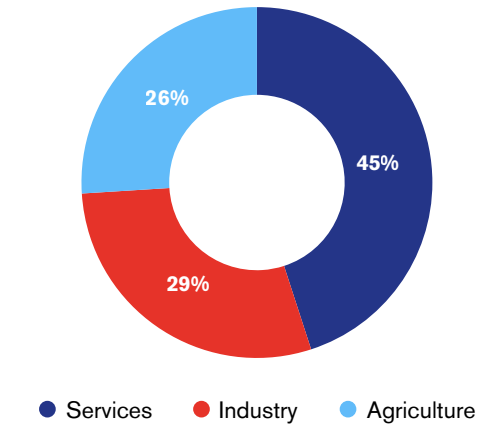
The services sector has also become an increasingly important source of employment for younger workers and entrepreneurs in developing economies. Across a range of economies, the services sector accounted for 45 per cent of youth employment in 2021 (see Figure 5). For example, in Albania, the service sector's share of youth employment grew from 35 per cent in 2010 to 56 per cent in 2020. In Guatemala, such a share rose from 45 per cent to 54 per cent over the same period. Among exporting firms, the proportion that are led by youth is once again much greater in services than in industry and for much the same reasons found to apply to female-owned or led firms (ITC, 2022).

Micro, small and medium-sized enterprises

Further underscoring its contribution to economic and social inclusion, the services sector accounts for the largest number of firms, particularly micro, small and medium-sized enterprises (MSMEs). The International Trade Centre (ITC, 2022) estimates that nine out of ten services enterprises globally employ fewer than 100 employees.

"Across a range of economies, the services sector accounted for 45% of youth employment in 2021."

Figure 5.
Youth employment in selected developing economies, 2021



Source: ILO YouthSTATS database, available at https://ilostat.ilo.org/resources/concepts-and-definitions/description-youth-labour-market-statistics.
Note: Data on 32 developing economies for 2021 or the most recent year available. Youth here refers to people aged between 15 and 29.

2. Services-led pathways to growth and development

Many services have long been portrayed as non-tradable activities characterized by low productivity and wages, responding primarily to domestic demand and offering less desirable growth and development paths relative to manufacturing.[5] The economic development gains associated with the export-oriented, manufacturing-led development, in East Asia reinforced the belief that the pathway to sustained growth for lower-income economies necessarily lay with manufacturing.

However, the trajectory of the structural transformation seen in recent decades in developing economies has challenged these long-held perceptions of services pessimism (see Nayyar *et al*., 2021). The structural changes have vastly expanded job opportunities and reduced cross-sectoral productivity gaps both within and across economies. Services are today seen as central determinants of productivity, competitiveness and rising living standards.

The ability to supply, access and export efficient, affordable and innovative services has become central to the realization of development strategies.

As services become easier to trade across borders, more technologically intensive and subject to growing economies of scale, the idea that productivity gains stem chiefly from manufacturing and that expansion of the services sector can only come at the expense of overall growth has lost considerable ground (see Nayyar and Cruz, 2019). The gains observed in services-sector productivity reflect the fact that a growing number of services sectors display features similar to those driving productivity growth in manufacturing – not least as a result of the opportunities offered by ICT. Digitalization favours economies of scale as the range of services become more easily storable and tradable, lessening the need for simultaneity in production and consumption and vastly expanding the range of markets that can be reached through remote means.

A growing body of evidence has in recent years documented how services offer a growth path that complements activity in agriculture and industry sectors. The growing contribution of services to economic transformation is attributed, among other factors, to their increasing tradability and to the greater contestability of services markets.[6]

The internationalization of services affords greater opportunities to specialize, exploit comparative advantages and export. However, the improved services sector performance associated with heightened market contestability, much of it pursued via unilateral pro-competitive reforms, has also been found to boost productivity in non-services sectors of the economy.[7]

Two other growth-inducing features of manufacturing were its innovation dynamics, through capital accumulation impacting labour productivity, and the spillover effects associated with cross-sectoral linkages. Both are attributes that are increasingly seen to operate in services. ICT applications across a range of services, from transport and logistics to professional services, have seen sustained product and process innovation fuel important gains in labour productivity (Nayyar *et al*., 2021).

Services are also increasingly linked to other sectors, expanding productivity by creating economy-wide spillovers. This is illustrated by the central intermediation role services perform as inputs in the production and export of goods and other services.

Still, while labour productivity in services has grown and reduced the gap with manufacturing, significant cross-sectoral and cross-country variance remains. The extent to which sectors share features associated with economies of scale, trade intensity, spillovers and innovation varies greatly. Some services sectors, such as financial and ICT services, have higher total factor productivity than manufacturing in low- and middle-income economies; while others, such as hospitality, have lower productivity than manufacturing.

In leveraging services for gains in employment and productivity, recent work at the World Bank has drawn attention to the critical importance of four major policy areas (Nayyar *et al*., 2021):

- expanding services trade;
- fostering technology adoption;
- training workers to upgrade skills;
- targeting services that provide benefits to the wider economy for public support.

How to harness gains in economic development by expanding services trade is to be seen in this broader context, where structural shifts towards services provide trade opportunities – but simultaneously – also where government policies on services trade are key to spurring services-led growth and development by helping to foster economy-wide gains in efficiency and competitiveness.

3. Increasing importance of services in world trade

The global shift towards services has a trade corollary. Services now account for a significant share of world trade and investment, as reflected in balance of payments (BOP) statistics. However, their greater – and arguably more important – influence stems from the central role services play in cross-border production networks.

(a) Trade in commercial services forms a large and growing share of world trade

Services had long been the most dynamic component of world trade prior to the COVID-19 pandemic. Measured on a BOP basis, trade in commercial services[8] expanded at a faster pace than trade in goods between 2011 and 2019.[9] The share of commercial services in global trade flows stood at over 22 per cent in 2022, down from 25 per cent in 2019, prior to the COVID-19 pandemic.

Since 2005, global commercial service exports have increased by almost 170 per cent (see Figure 6). The growth rate of commercial services exports has been stronger in developing economies and least-developed economies (see Figure 7). Between 2005 and 2022, commercial services exports from least-developed economies grew well over 300 per cent, while those of other developing economies grew more than 250 per cent.

As a result, the share of developing economies in global commercial services exports has increased markedly – from 23.5 per cent in 2005 to 33.5 per cent in 2022. Despite its impressive growth, however, the relative share of services exports for least-developed economies remains limited, at less than 1 per cent of global exports – a level that has further regressed following the COVID-19 pandemic.

Share of commercial services in global trade in 2022

>22%

Developing economies' share of global commercial services exports

2022
33.5%
up from
2005
23.5%

Growth in commercial services exports, 2005-2022

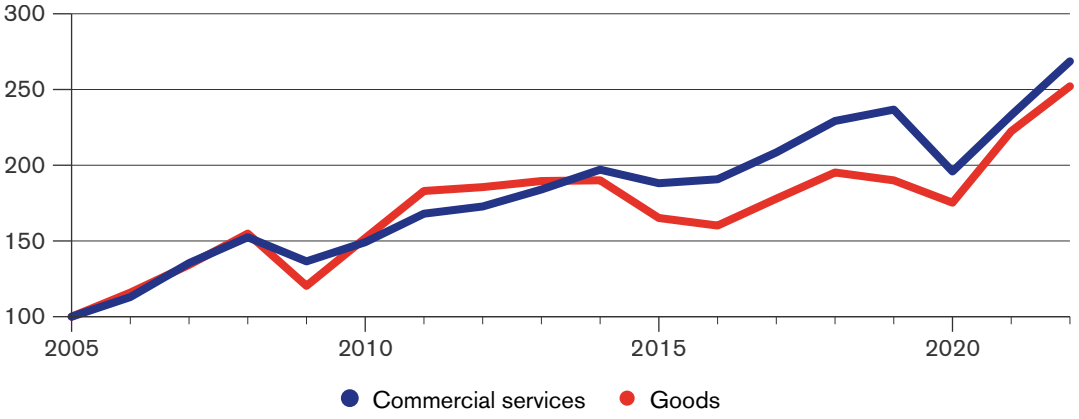
Least-developed economies
>300%

Developing economies
>250%

From 2005 to 2022, the share of global commercial services exports of Africa, Europe, Latin America and the Caribbean, and North America all declined, while those of Asia (from 19.5 per cent to 24.2 per cent) and the Middle East (2.5 per cent to 5.4 per cent) increased. China and India doubled their share of global commercial services exports from 2005 to 2022, from 3.0 per cent to 5.4 per cent, and from 2.0 per cent to 4.4 per cent, respectively. With regard to global commercial services imports, the shares of Asia, Latin America and the Caribbean, and the Middle East increased, while those of Africa, Europe and North America declined.

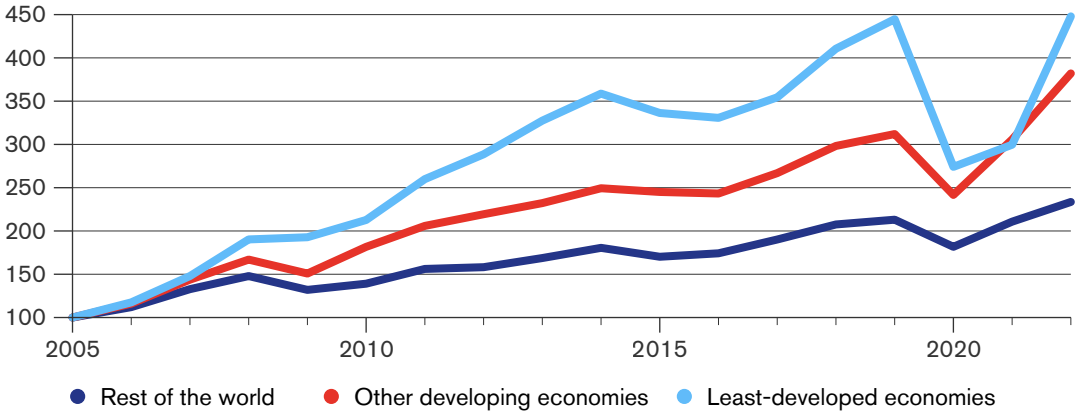
The expansion of trade in commercial services was fuelled by advances in ICT, perhaps best exemplified by the global expansion of the Internet, which has boosted opportunities for the remote supply of services (including across borders), such as professional, business, audiovisual, education, distribution, financial and health-related services.

Figure 6.
Growth in world exports of goods and commercial services, 2005-2022
(Index 2005 = 100)



Source: WTO Stats, available at https://stats.wto.org, and WTO estimates.

Figure 7.
Growth in exports of commercial services, by groups of economies, 2005-2022
(Index 2005 = 100)



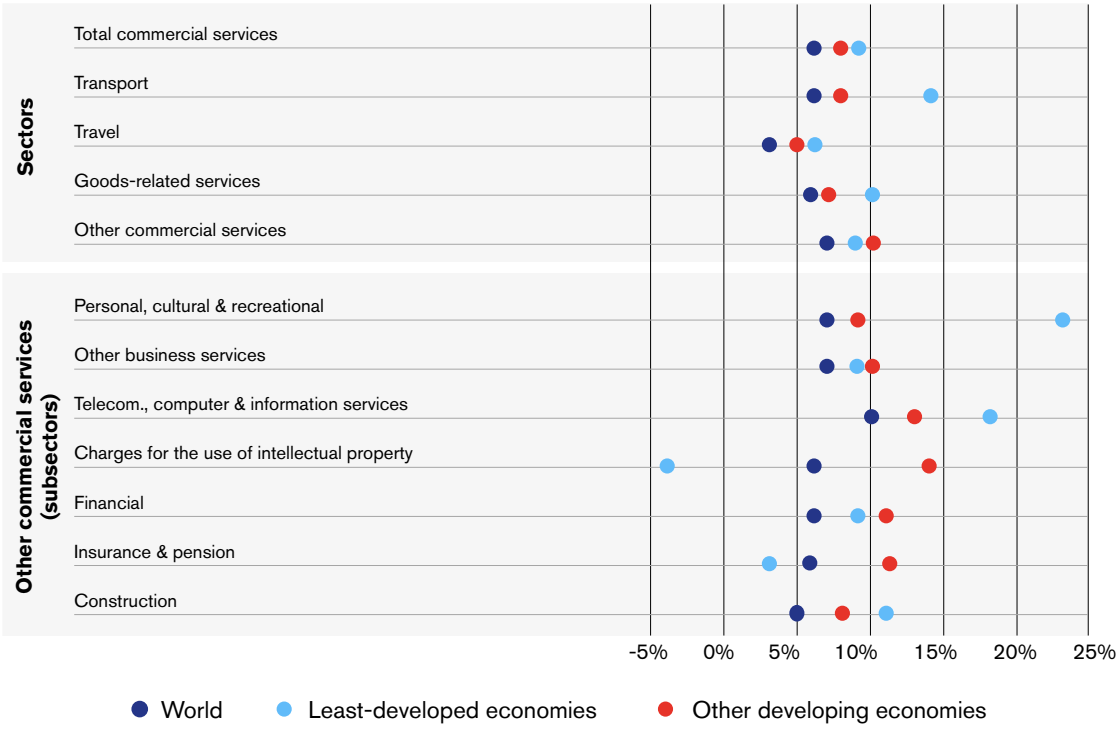
Source: WTO Stats, available at https://stats.wto.org, and WTO estimates.

Growth of exports of 'other commercial services'

Trade has grown more rapidly in less traditional sectors such as ICT services when compared to transport, travel and goods-related services (see Figure 8). BOP statistics reveal that these 'other commercial services'[10], which include many digitally delivered services, have expanded at a much faster rate between 2005 and 2022 than more traditional sectors such as transport (6 per cent) and travel (3 per cent), which were greatly affected by the COVID-19 pandemic. Within 'other commercial services', telecommunications, computer and information services had the fastest annual growth from 2005 to 2022 (10 per cent), followed by personal, cultural and recreational services (7 per cent) and other business services (7 per cent).

Figure 8 also contrasts the services trade growth across different economies and underscores that the expansion of developing economy exports is increasingly tied to less traditional services that can be more readily supplied across borders through digital means. Least-developed economies experienced strong growth in more traditional sectors such as transport (14 per cent) and construction services (11 per cent), as well as in personal, cultural and recreational services (23 per cent) and telecommunications, computer and information services (18 per cent).

Figure 8.
Average annual growth rate of exports in selected services sectors, by groups of economies, 2005-2022



Source: WTO Stats, available at https://stats.wto.org, and WTO estimates.

> The growth of developing economy exports is increasingly in services supplied digitally.

Growth in computer services exports

Bangladesh

2019-2022

+31%

Pakistan

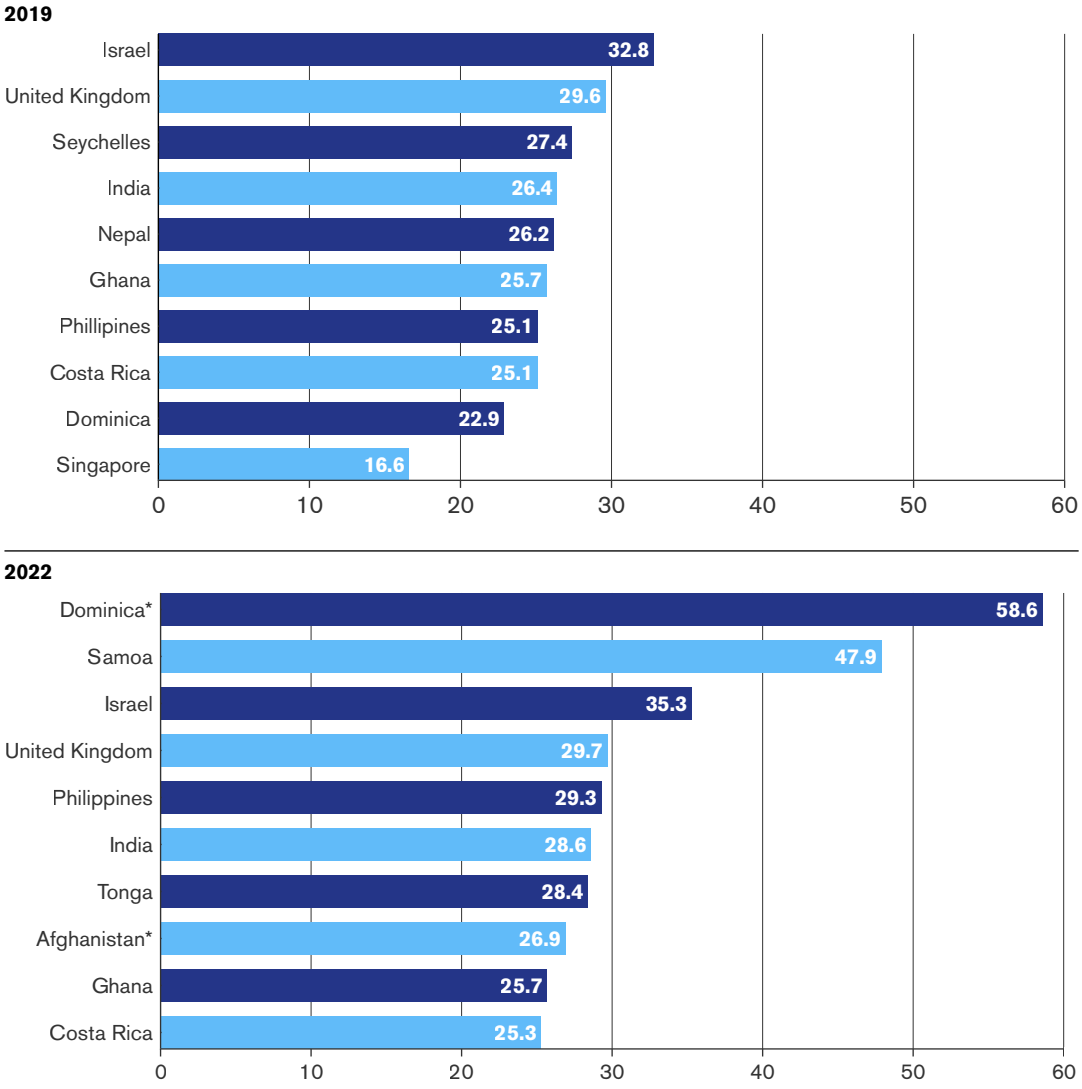
2021

+45%

The growth of sectors such as telecommunications, computer and information services have been particularly strong in developing economies in recent years. For instance, computer services exports in Pakistan grew by 14 per cent in 2022, following a 45 per cent rise in 2021, and increased on average by 31 per cent in Bangladesh from 2019 to 2022. The experience of India and the Philippines as global leaders of trade in computer services and in business process outsourcing services illustrates the growth potential of trade in non-traditional services, as well as the benefits for female employment (see Box 1).

Export growth in less traditional services has helped to diversify the export baskets of many developing economies. Figure 9 shows that, for a number of developing economies, ICT, finance and other business services, which are predominantly exported digitally, accounted for over 15 per cent of total exports of goods and services in 2022 as well as before the COVID-19 pandemic in 2019. Those services featured prominently in the total exports of developing economies before, as well as during, the pandemic (7 per cent of total exports of goods and services in 2022), which, in certain cases, transformed export profiles, notably by lessening the share of tourism-related services.

Figure 9.
Share of telecommunication, computer and information services, other business services, and finance, 2019 and 2022 (Top 10 WTO members, in per cent)



Source: WTO Stats, available at https://stats.wto.org, and WTO estimates.
Note: European Union counted as one. *Data from 2021.

Box 1. Computer services and business process outsourcing: India and the Philippines

India is deeply integrated into the global value chains (GVCs) of the software industry. Starting in the 1990s, it became a leading destination for multinational corporations to outsource their labour-intensive software and business process outsourcing (BPO) services. The export of computer-related services has significantly contributed to India's economic growth.

Similarly, the Philippines has become a global leader in BPO and is now considered the call centre capital of the world. The country specializes in outsourcing customer services and back-office services, such as call centre activities, computer-related services, medical transcription and animated films and cartoon productions, mainly to overseas corporations.

Job creation

Services value chains are a major contributor to economic growth and sources of foreign exchange for both countries. In India, no other industry has generated as many well-paid jobs over the past decade as the IT industry.

Similarly, the IT and business process management sector in the Philippines is the largest employment generator. In 2021, it created 1.23 million direct jobs and 4.08 million indirect jobs and generated US$ 24.7 billion in revenues.

Women's empowerment

The contribution of BPO services goes beyond growth and employment. They also make important contributions to skills upgrading, higher education attainment and social inclusion – boosting the participation of women in the workforce.

In the Philippines, approximately 54 per cent of the BPO sector's workforce are women. Call centres are the largest employers in the BPO sector and the majority of the workforce are also women (55 per cent). In India, 34 per cent of the IT workforce are women. Female workforce participation in the BPO industry is much higher than the national average, which is 46 per cent in the Philippines and 21 per cent in India.

Government intervention

The two countries' boom in BPO services exports is mostly due to comparative advantages and the implementation of government initiatives and policies that created an enabling environment for BPO companies. Both India and the Philippines have a large, young workforce with strong English language capabilities and familiarity with digital and distance communication – mainly facilitated by the mass emigration Indian and Filipino workers.

The Indian diaspora played an important role in shaping policies in the IT sector in India. The government, for example, created bilateral programmes for expatriates to connect with the IT sector in India through several channels to promote knowledge transfers, consultancies, the creation of alumni networks for government-funded institutions in the sector, honorary fellowships at Indian universities, and government advisory panels with the participation of non-resident Indian IT professionals.

Government interventions played an important role in helping develop the sector and attracting foreign investment. For instance, liberalization of the telecommunication sector in the 1990s in both countries helped foster the digital infrastructure needed for the BPO sector industry to flourish.

In addition, both countries implemented intellectual property rights legislation and cybercrime regulations. Government incentives in the form of duty-free imports for equipment and supplies, tax exemptions, 100 per cent foreign ownership, and industrial parks, as well as reforms that facilitated business operations, such as one-stop-shop services for business registration, all contributed to strengthening both countries' comparative advantage in the sector.

Future investment

To keep pace with rapidly changing technology and still remain competitive and progress up the value chain, India and the Philippines will need to continually upskill and reskill their workforces and invest in the development of their domestic services sectors – particularly in terms of R&D. An important concern for both countries is that their participation

in services GVCs arguably still involves a too high share of largely routine low value-adding tasks.

BPO firms in the Philippines are now integrating cloud technology and robotic automation into processes and applications, which is helping to increase productivity and business model sophistication.

These investments are supporting BPO firms in the Philippines to move towards more specialized and knowledge-based BPOs to cover fraud analytics, data integration, project management, R&D, mergers and acquisitions valuation and product profitability analyses.

Source: Nano and Stolzenburg (2021).

> India and the Philippines have become global leaders in computer services and business process outsourcing.

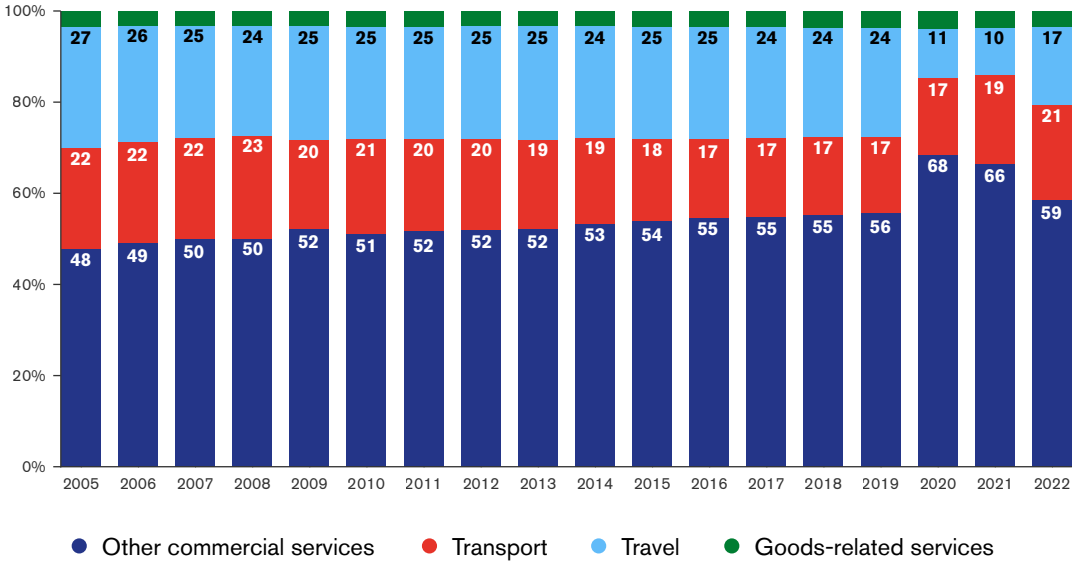
Structure of commercial services trade

Reflecting differing cross-sectoral trajectories, the structure of trade in commercial services has changed significantly at the global level since the COVID-19 pandemic. The share of travel and transport services in world services trade has declined markedly, while that of services that can be more readily supplied electronically has increased. Indeed, the share of 'other commercial services' in global commercial services exports increased steadily from 48 per cent in 2005 to 56 per cent in 2019, and then rose to 66 per cent in 2021, falling back to 59 per cent in 2022, reflecting a COVID-induced boost and the relative contraction of other sectors due to pandemic-related restrictions (see Figure 10). Meanwhile, the aggregate share of travel, transport and goods-related services dropped from 52 per cent to 41 per cent between 2005 and 2022.

For developing and least-developed economies, changes in the composition of services trade have been more pronounced. The share of 'other commercial services' in their total commercial services exports rose from 34 per cent to 48 per cent between 2005 and 2022. While the pandemic had a strong impact on the structure of world trade, particularly in light of the steep decline in travel-related receipts, the relative expansion of 'other commercial services' at the expense of more traditional sectors had already started beforehand.

Subsectors which have seen the strongest growth in their relative importance for developing economy exports include the telecommunications, computer and information services subsector (from 7 per cent of total developing country exports of commercial services in 2005 to 14 per cent in 2022), other business services (from 19 per cent to 23 per cent), and insurance and pension services (from 1.4 per cent to 2.6 per cent). In contrast, the share of transport and travel decreased from 62 per cent to 49 per cent between 2005 and 2022, and the pandemic further encouraged this shift.

Figure 10.
Structure of global exports of commercial services, 2005-2022



Source: WTO Stats, available at https://stats.wto.org.
Note: Goods-related services cover the BOP categories of 'manufacturing services on physical inputs owned by others' and 'maintenance and repair services not included elsewhere'.

Share of 'other commercial services' exports in developing economies

2005 **34%** → 2022 **48%**

As a share of total commercial services exports.

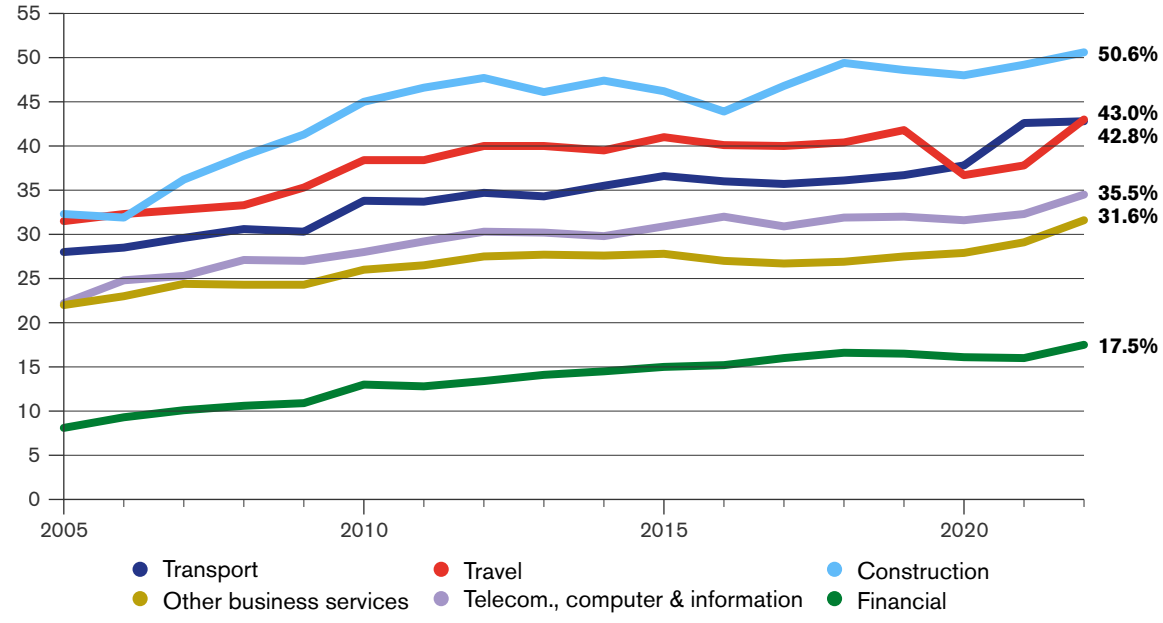
The composition of services trade has changed across all regions, producing broad-based development gains. The share of 'other commercial services' in total commercial services exports increased in all regions between 2005 and 2022, most notably in Africa (from 21 per cent to 27 per cent), Asia (39 per cent to 61 per cent), as well as in Latin America and the Caribbean (29 per cent to 39 per cent).

The share of 'other commercial services' in total imports of commercial services also increased over the same period in each of the above regions – except for Africa, where it declined from 40 per cent to 37 per cent. As a result, the sector accounts for a smaller share of Africa's total services imports than is the case in other regions.[11]

The qualitative changes at play should not be underestimated. Not only do less traditional services account for a growing share of developing economies' services exports, but these economies also account for increasing shares of world exports in these sectors (see Figure 11). This is so even as their share of world trade in traditional services still remains relatively more important (with 49 per cent of world exports for transport and 45 per cent for travel in 2022).

Developing economies' share of world exports of 'other commercial services' grew from 17 per cent to 28 per cent between 2005 and 2022. Their share of world exports of business and computer services also increased noticeably.[12]

Figure 11.
Developing economies' share of global commercial services exports, by selected main sectors, 2005-2022
(As a share of global exports for each sector, in per cent)



Source: WTO estimates.
Note: Developing economies here include least-developed ones.

Digitally delivered services exports, 2022

US$ **3.82** trillion

54 % share of global services exports

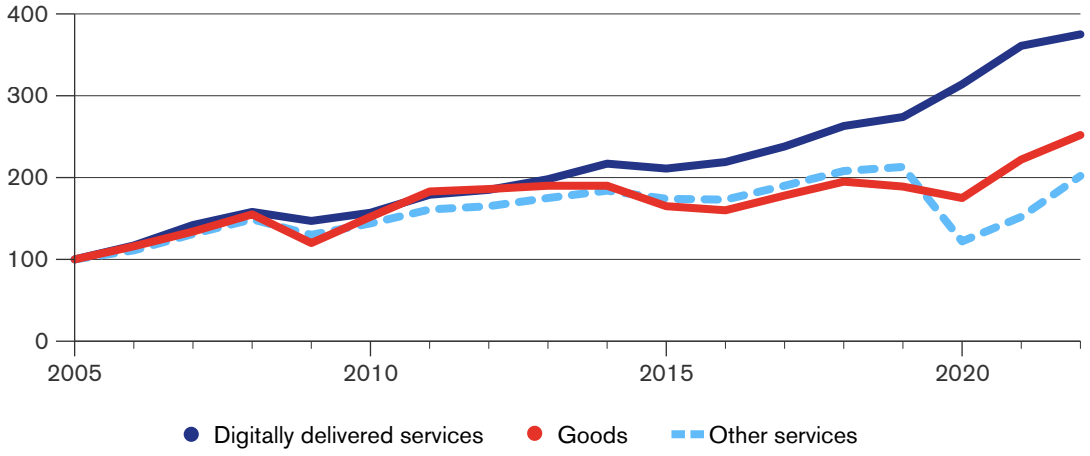
Digitally delivered services

The rapid expansion of services trade, especially of less traditional services, mirrors the strong recent growth of digitally delivered services. Services are central to digital trade – not only because a broad range of services can now be supplied online, but also because they provide the basic enabling infrastructure for digital supply, digital transactions and e-commerce more generally.

According to the latest WTO (2023) estimates, global exports of digitally delivered services more than tripled since 2005, growing 8.1 per cent per year on average during 2005-2022, outpacing the growth in exports of both goods (5.6 per cent) and other services (4.2 per cent) (see Figure 12). While tourism and other services requiring cross-border mobility of people fell in this period, digitally delivered services exports continued to rise, reaching US$ 3.82 trillion in 2022, and representing a 54 per cent share of total global services exports.

Boosted during the pandemic by remote working, learning and entertaining, the year-on-year growth of digitally delivered services exports was 14 per cent in 2020 and 15 per cent in 2021. Digitally delivered services exports in 2022 were recorded 37 per cent above 2019.

Figure 12.
Growth of digitally delivered services exports, 2005-2022
(Index 2005 = 100)



Source: WTO estimates (WTO, 2023).
Note: 'Digitally delivered services' comprise mode 1 exports of the following BOP categories: financial services, insurance and pension services, charges for the use of intellectual property not included elsewhere, telecommunication, computer and information services, and selected categories in business services and personal, cultural and recreational services.

Digitally delivered services exports under mode 1 (cross-border supply) have grown rapidly across all regions in recent years (see Box 2 for information on modes of supply). Europe accounts for more than half of global exports of digitally delivered services. Asia's exports have been rising faster than the rest of the world.

In 2022, almost 25 per cent of digitally delivered services originated from Asia and 19 per cent from North America. Latin America and the Caribbean as well as the Middle East saw an acceleration in growth in 2022. However, growth in Africa and in least-developed economies continued to lag, with Africa holding less than a 1 per cent share of digitally delivered services exports in 2022.

The expansion of services trade in developing economies also encompasses health and education services. While trade in these sectors has offered important export growth opportunities – including, but not exclusively, as a result of digitalization – it has also helped advance a range of non-trade objectives, discussed in Boxes 3 and 4.

Box 2. Services trade: four modes of supply

The WTO's General Agreement on Trade in Services (GATS) categorizes services trade according to four modes of supply.

MODE 1: cross-border supply
Services are supplied from the territory of one WTO member into the territory of any other member (e.g. through the Internet).

MODE 2: consumption abroad
Services are provided in the territory of one member to a consumer of any other member (e.g. tourism).

MODE 3: commercial presence
Services are delivered by a supplier of one member through its commercial presence in the territory of any other member (e.g. establishing a subsidiary in a foreign country to serve the local market).

MODE 4: presence of natural persons
A supplier of one member provides services through the presence of natural persons in the territory of another member (e.g. consultants).

Box 3. Developing export-oriented medical services

Trade in medical services through all four modes of supply was estimated at US$78.6 billion in 2019. It has been an important element in the fight against the COVID-19 pandemic. However, pandemic-related restrictions resulted in a contraction of trade in medical services by 9 per cent.

Trade in medical services holds the potential to improve the accessibility and quality of domestic healthcare in both exporting and importing countries.

For instance, trade in health services can help developing countries address their physical and human capital deficiencies in the healthcare industry. However, the impact of trade on health systems will depend on a number of factors, including the structure of the domestic health system and the formulation of accompanying regulations and policies.

> Trade in medical services was US$ 78.6 billion in 2019.

Mode 1: telemedicine

Telemedicine has been growing in recent years, with the COVID-19 pandemic rapidly accelerating this trend. Telemedicine can bring many benefits for developing countries, especially in terms of alleviating human and infrastructure constraints in remote and underserved areas and expanding access to quality medical services. The availability of telemedicine services is heavily reliant on the quality of internet connectivity and telecommunications infrastructure. Prospects for cross-border telemedicine may be also hampered by the absence of strong legislative frameworks for telemedicine, digital trade and data protection.

Mode 2: medical tourism

Medical and wellness tourism has expanded significantly in recent decades, propelled by improved telecommunications and transport services. Countries such as Brazil, Cuba, India, Jordan, Malaysia, the Republic of Korea, Singapore, Thailand and the United Arab Emirates have become major medical hubs, receiving foreign patients from both developed and developing countries. For example, India has become a popular destination for medical travel, and hosted around 3.5 million foreign patients from 2009 to 2019. Foreign patients from developed countries such as the United Kingdom and the United States, as well as from developing countries such as Bangladesh, Nepal and Sri Lanka, go to India in search of less costly, high-quality treatment.

Thailand is another popular destination for medical tourism. It has developed a large medical tourism sector geared towards foreign patients, with 61 hospitals bearing the Gold Seal of Approval from the Joint Commission International, an organization which assesses hospital standards around the world. In 2019, Thailand received 172,265 international medical tourists, according to estimates by its National Statistical Office. In order to mitigate the internal brain drain risk caused by the expansion of an industry geared towards attracting international tourists, doctors and nurses are required to serve three years in the public system, including in rural areas, prior to working in private hospitals, in return for public funding of their education. The government has also increased the salaries of physicians, nurses and dentists in all community hospitals to encourage these professionals to stay in the public health sector and maintain the quality of public healthcare services.

Mode 3: foreign commercial presence

Foreign investment in the health services sector has the potential to bring medical technologies and innovation through improved access to, and the transfer and the upgrading of, medical technologies, know-how and other strategic assets, while also helping to eliminate pre-existing shortages. This is particularly attractive for developing countries with health infrastructures in need of improvement, as it lowers the pressure imposed on limited public finances while improving access to medical services. Increased capacity can also make available inexistent or scarce health services (e.g. specialized treatments), helping to reduce the need to import such services.

Foreign investment in health services creates spillovers reaching far beyond the health sector, including indirect effects on growth, income and employment as well as in other sectors such as construction, transport, telecommunications and a host of business services. Foreign firms often have better access to technologies and strategic assets, often outperforming domestic institutions but also helping improve quality and competition between health services providers.

In India, HLL Lifecare Limited (a state-owned enterprise) and the Acumen Fund (a non-profit impact investment fund based in the United States) created a joint venture to provide high quality and more affordable (30-50 per cent cheaper) maternity hospital care to low-income and underserved communities in India. The joint venture has expanded to nine hospitals since 2008, becoming the largest chain of maternity hospitals in southern India and providing services to more than 300,000 patients.

Source: Gillson and Muramatsu (2020) and World Bank and WTO (2022).
Note: For background information on the development of trade in health services in developing countries, see Cattaneo (2009).

Box 4. Digital trade partnerships in health and education services in Africa

Pan-African e-Network Project

Digital services trade plays an important role in facilitating access to health and education. The Pan-African e-Network Project – launched and funded by the Government of India in partnership with the African Union – has become one of the largest telemedicine and online education projects in Africa. The project's aim is to connect major universities and centres of excellence in Africa and India, extending quality higher education opportunities for thousands of African students.

The project also aims to connect major African hospitals to highly specialized hospitals in India for medical training, online medical consultations and other medical services. The project would connect 53 learning centres, 53 remote hospitals, five regional universities and five regional hospitals in Africa to 12 highly specialized hospitals and seven leading Indian universities.

The project is now in its second phase, and 47 African states have already joined the initiative. As part of this phase, the Government of India launched the e-VidyaBharati (tele-education) and e-ArogyaBharati (telemedicine) Network Project (e-VBAB) in October 2019. The project now features an online education portal (www.ilearn.gov.in), providing students and professionals in Africa with access to over 500 courses in a variety of fields, such as engineering, science, pedagogy, mathematics and humanities.

The portal also offers 15,000 scholarships to African students to further their education through undergraduate and postgraduate courses from leading private universities in India. In the medical field, the project offers telemedicine for patients and continuing medical education for African doctors and paramedics.

African Digital Health Library

Another digital health services partnerships in Africa is the initiative between the University of Florida and an online medical library in Zambia. The aim is to disseminate medical information to doctors in Southern Africa.

Africa Teledermatology Project

The Africa Teledermatology Project provides support to dermatology professionals and patients in Africa through a range of services such as:

- online consultation services;
- discussions pertaining to diagnosis and management of patients with skin diseases;
- links to education resources;
- access to a dermatologic curriculum designed specifically for African sites.

African states participating in this project include Botswana, Burkina Faso, Eswatini, Lesotho, Malawi and Uganda, and is funded by the American Academy of Dermatology, the Austrian Academy of Sciences and the Commission for Development Studies.

Virtual University of Uganda

Several other online educational initiatives are underway. The Virtual University of Uganda is the first online university in the country to be licensed by the Uganda National Council for Higher Education. The university offers online education and provides students access to an e-library, which contains more than 50 million open-access items, including resources from internationally renowned universities such as the Massachusetts Institute of Technology and Johns Hopkins University.

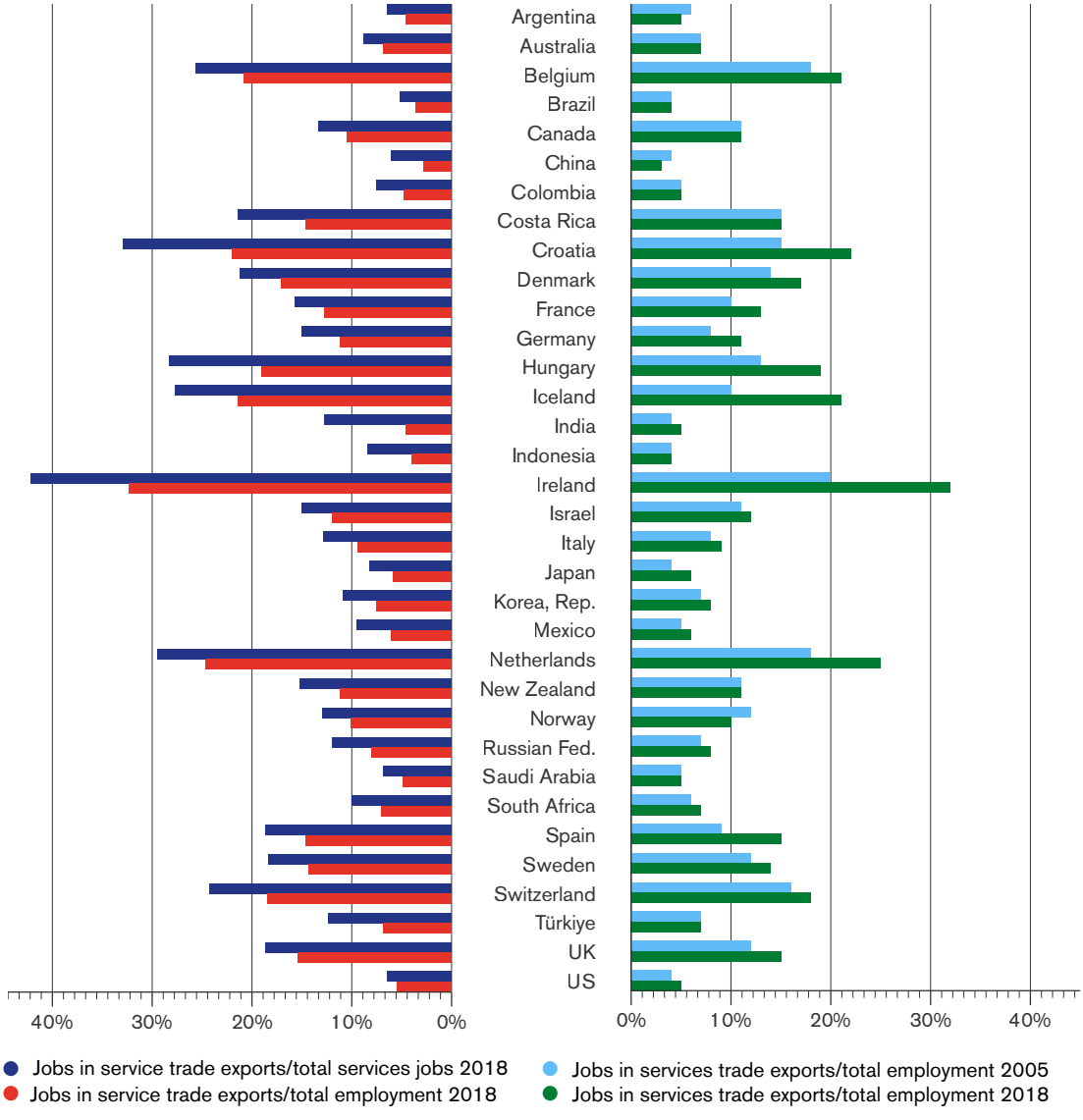
The university recruits local and international staff and students. Its foreign student body features students from Burundi, the Democratic Republic of the Congo, Rwanda, Somalia and South Sudan.

Source: Africa Teledermatology Project, the Government of India, and iLearn.
Note: For background information on the development of trade in health services in developing countries, see Dihel and Goswami (2016).

(b) Expansion of jobs linked to services exports

The growth of cross-border services trade has resulted in an increasing number of jobs linked to services exports, including in developing economies. These jobs represent a large and rising share of many countries' total services jobs and, in some countries, of total employment. In India, South Africa and Türkiye, jobs directly linked to cross-border services exports account for more than 10 per cent of total services sector jobs. Figure 13 highlights that, for some countries, cross-border services exports account for over 20 per cent of total jobs (e.g. Ireland, Netherlands, Costa Rica). The share of jobs linked to services exports has, overall, tended to increase, outpacing the growth of total jobs in developed and developing economies alike.

Figure 13.
Proportion of jobs linked to cross-border exports of services (2005 and 2018)



Source: OECD Trade in Employment (TiM) Database, available at https://stats.oecd.org/Index.aspx?DataSetCode=TIM_2021#.

(c) Key role of micro, small and medium-sized enterprises in services trade

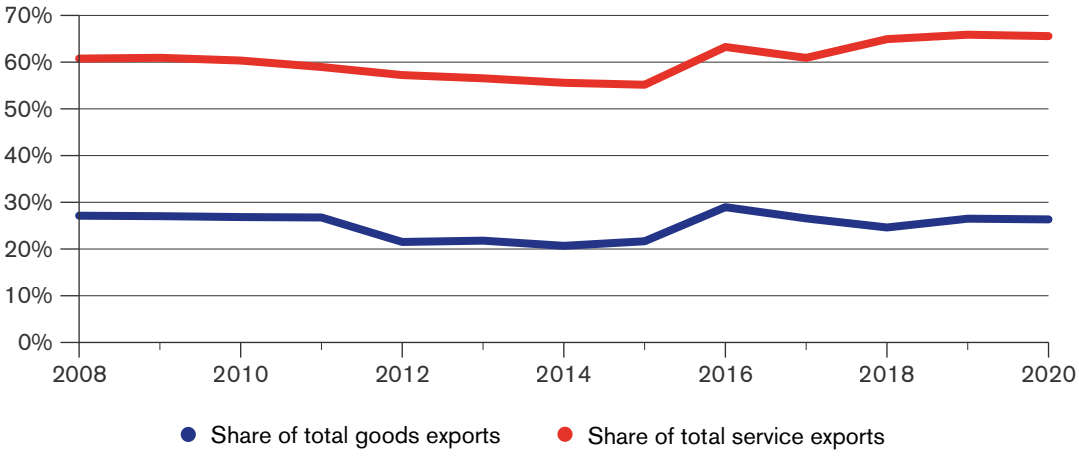
MSMEs play a key role in services trade and account for the greater share of total cross-border services exports (67 per cent) in a range of developed and developing economies (see Figure 14). The WTO (2019) finds that a rise in services trade is less likely to be biased towards larger firms than is observed for manufacturing trade. Indeed, when total global exports are considered (i.e. goods and services), large enterprises account for the greater part of exports, with the contribution of MSMEs dropping to 38 per cent.

A study by the ITC (2022) finds that the gap in export propensity between small and large enterprises is much less pronounced in services than in manufacturing – 28 per cent of MSMEs in manufacturing export, compared to 77 per cent of firms with at least 100 workers. This 49 percentage point gap is more than twice as large as the 22 percentage point gap in services, where 16 per cent of MSMEs export compared to 38 per cent of large companies.

At the WTO, work carried out within the Informal Group on Micro, Small and Medium-sized Enterprises aims at enhancing the participation of smaller firms in services trade and the inclusion of developing economies in the international trading system (see Box 5).

"The WTO's Informal Group on Micro, Small and Medium-sized Enterprises aims to enhance the participation of smaller firms in services trade and the inclusion of developing economies in the international trading system."

Figure 14.
Average share of goods and services exports by MSMEs, selected economies, 2008-2020



Source: OECD Trade by Enterprise Characteristics (TEC) database, available at https://www.oecd.org/sdd/its/trade-by-enterprise-characteristics.htm.
Note: MSMEs are here defined as firms with fewer than 250 employees. Selected economies comprise 34 OECD members and 7 non-OECD members.

Box 5. WTO's Informal Working Group on Micro, Small and Medium-sized Enterprises

The Informal Working Group on Micro, Small and Medium-sized Enterprises* was established at the end of 2017 and includes 98 WTO members from all regions and levels of development, including four least-developed countries (Afghanistan, The Gambia, Lao People's Democratic Republic, Myanmar).

Today, 95 per cent of companies across the globe are MSMEs, accounting for 60 per cent of the world's total employment. However, MSMEs face a number of obstacles when seeking to participate in international trade. The Group aims to support the internationalization of small firms through soft law and the development of concrete tools.

In December 2020, the Group finalized a package of six recommendations and declarations relating to:

- transparency;
- access to information;
- trade facilitation;
- MSME participation in regulatory developments;
- access to finance;
- cross-border payments.

In December 2021, it launched the Trade4MSMEs platform (https://trade4msmes.org). The platform aims to support MSMEs and policymakers by bringing trade-related information together in one place and linking to reliable information resources for would-be traders or officials looking to increase their trade policy inclusivity. It features a series of short guides on international trade to assist MSMEs and policymakers.

* See https://www.wto.org/english/tratop_e/msmes_e/msmes_e.htm.

(d) Transformative impacts of the COVID-19 pandemic

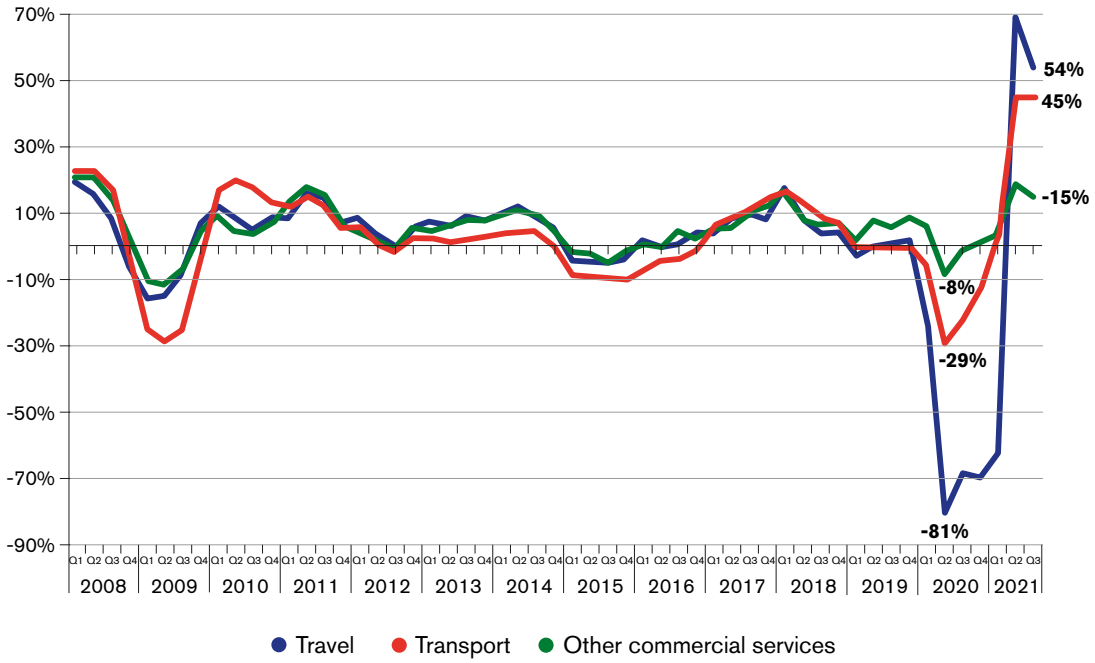
The COVID-19 pandemic caused a steep collapse in cross-border services trade, which further reinforced and accelerated the structural changes already underway, boosting the relative importance of services that can be more readily supplied digitally (see Figure 15). The drop in services exports in 2020-2021 was significant across all regions, and deeper than for the trade in goods. It was led by declines in travel receipts, first and foremost, but also by a marked contraction in transport services.

Not surprisingly, trade under modes 2 (consumption abroad) and 4 (movement of natural persons) was most impacted, owing to health-motivated mobility restrictions (WTO, 2020a). Digitally deliverable services were less affected by the trade downturn at the height of the pandemic and played a critical mitigating role, as ICT services allowed economic activities to be sustained, such as through online retailing, in addition to enabling teleworking and online schooling.

The pandemic also provided an opportunity to accelerate the adoption of IT solutions and to expand the scale of remotely supplied services.

Beyond their lead role in pandemic mitigation, digitally delivered services also led the first phases of recovery in global services trade. As services trade posted a 25 per cent year-on-year increase in the third quarter of 2021, digitally deliverable services such as computer, financial and business services were the main drivers of trade growth alongside transport boosted by surging shipping rates. There was rapid growth in computer services exports in both developed and developing economies (e.g. Bangladesh, Ireland, Mauritius, Ukraine, United States). Pakistan's ICT services exports also boomed during the pandemic (see Box 6).

Figure 15.
Year-on-year change in global trade in commercial services, by sector



Source: On the basis of estimates from the ITC, the United Nations Conference on Trade and Development and the WTO.
Note: Average of global exports and imports.

Rapid growth in computer services exports in 2021

Bangladesh
+68%

Ireland
+51%

Mauritius
+42%

Ukraine
+63%

United States
+29%

Greater digital connectivity proved fundamental for resilience during the COVID-19 pandemic. The Asian Development Bank (2021a) finds that countries with better ICT infrastructure recorded lower drops in economic activity. At the same time, the pandemic produced a connectivity boost, bringing an estimated additional 782 million people online between 2019 and 2021 (ITU, 2021a), forming new digital habits and spurring investments in the digital economy.

However, the pandemic also exposed significant digital divides, both within and across countries, revealing how shortcomings in digital connectivity could exacerbate social inequalities (see WTO, 2022a).

Box 6. The ICT boom in Pakistan

Since the onset of the COVID-19 pandemic, the ICT services exports of Pakistan experienced sustained growth. With social-distancing measures and border closures in place, the demand for digital services surged, propelling ICT services as the top contributor to the economy among all service subsectors. Exports increased in almost all subsectors: software consultancy, call centres and telecommunication services.

Even before the COVID-19 pandemic, Pakistan's technology ecosystem was buoyant, with a growing number of new startups, support organizations and angel investors. Both the public and private sectors play an important role in supporting the boom in the tech startup ecosystem, with several accelerator and innovation incubator programmes in place, such as Invest2Innovate and Nest I/O, which have supported over 19 startups.

Facebook partnered with the government to launch its first innovation laboratory in April 2019, and Google regularly organizes events in Pakistan's major cities. In 2019, Pakistan had the second highest number of tech hubs in South Asia – at 35 – behind only India, with over 250.

Human and physical capital are supporting the growth of the country's ICT ecosystem. More than 20,000 engineers and IT professionals graduate in Pakistan each year, mostly of whom can speak English. There is also a growing number of high-quality freelance professionals in the sector.

Pakistan has a good digital infrastructure with improved telecommunication services, Internet access, and 14 IT parks available. Such attributes form important drivers of Pakistan's business process outsourcing industry.

According to the Pakistan Software Houses Association, 53.8 per cent of the ICT sector's revenue in 2019 came from exports – mostly to the United States (52.1 per cent), the United Arab Emirates (8.8 per cent) and the United Kingdom (7.0 per cent).

Source: Saez *et al.* (2020).

(e) Trade by mode of supply and the contribution of services supplied through a commercial presence

While BOP statistics capture the growing importance of cross-border trade in services in modes 1, 2 and 4, they still significantly underestimate global services trade as defined in GATS. Most notably, BOP data generally do not cover the supply of services by foreign-owned companies (mode 3), by far the most economically important mode of service supply.[13]

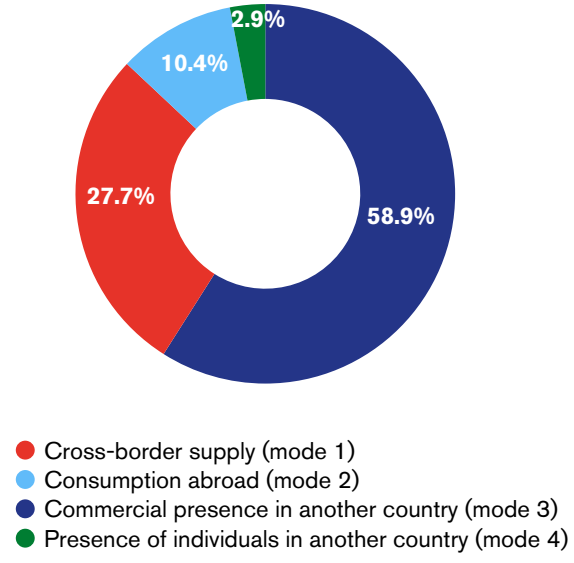
When services sold through a foreign supplier's commercial presence are taken into account, the services share of world trade is around 20 percentage points higher than traditionally estimated, representing 43 per cent of total trade in goods and services.[14] Figure 16 shows the relative share of each of the four modes of service supply in global services trade. With a value of US$ 7.8 trillion, sales through the establishment of foreign- affiliates worldwide (mode 3) dwarf other modes, accounting for 58.9 per cent of global services trade.[15] This is more than twice the second most important mode – cross-border supply (mode 1, including through electronic means), which accounted for 27.7 per cent of the total services trade at latest count. The 2.9 per cent share of trade involving the temporary movement of service suppliers reflects the restrictive policy stance governing mode 4 trade.

When measuring trade in services under the four modes of supply,[16] the share of developing economies (excluding least-developed) in global services trade increased by 10 percentage points since 2005, from 14.7 per cent to 25.2 per cent at the latest count. While the share of least-developed economy exports also increased, it only accounted for 0.3 per cent of global services exports and 0.9 per cent of imports. With respect to least-developed economies, their services exports have been rising by an annual average of almost 11 per cent since 2005, albeit from a very low base, with growth led by tourism boosted by greater intra-regional arrivals prior to the pandemic.

The developing economies' impressive trade performance under this expanded measure of trade in services is largely due to four economies that rank as leading services exporters and importers (China; Hong Kong, China; Singapore; India). A large part of their combined exports occurs through mode 3. For other developing economies, cross-border supply remains the predominant mode of services exports, slightly ahead of commercial presence (WTO, 2019).

TiSMoS underscores that mode 4 accounts for a similarly small share of services exports for different groups of WTO members – developing and developed economies, as well as least developed. Mode 4 is nevertheless relatively more important for certain sectors. On the basis of the TiSMoS dataset, 9.8 per cent of global exports of 'other business services' were supplied under mode 4 in 2017.

Figure 16.
World trade in commercial services by mode of supply (2017)



Source: Trade in Services data by Mode of Supply (TiSMoS), WTO Secretariat.

(f) The role of services in supply chains

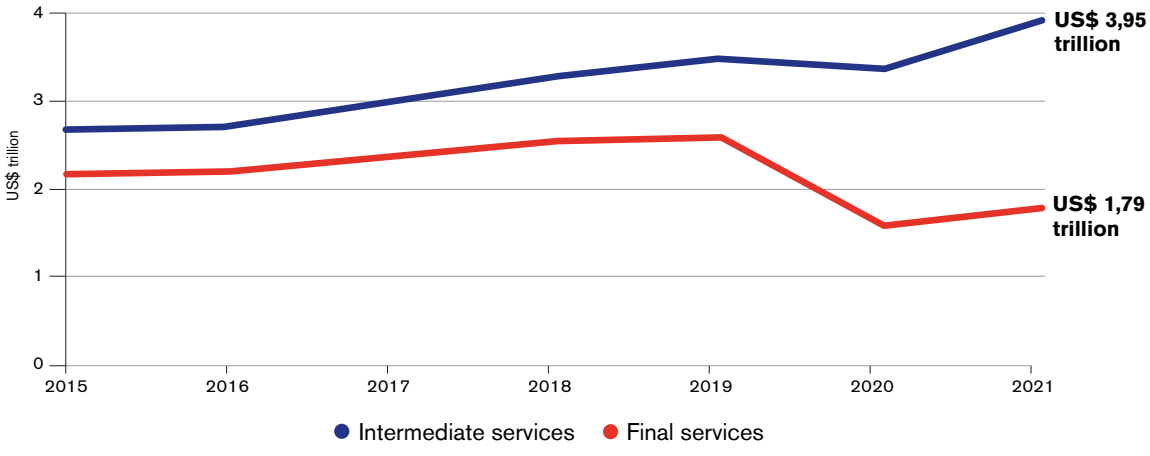
Frequently dubbed as the "glue" that enables cross-border production networks, services have played a critical role in enabling the emergence of global and regional value chains. The deployment of these chains has been made possible by improvements in the efficiency, quality and costs of services that enable the coordination of geographically dispersed yet interlinked production processes – from transport and logistics to communication and business services.[17]

In addition to linking different production stages across borders, services have also become important inputs at all stages in the production process of goods and other services. Services inputs, whether imported or locally produced by foreign or domestically owned enterprises, are increasingly used in the production of manufactured products that are subsequently exported. Services value-added content embodied in exported goods has grown in importance and represents an increasingly significant way for services firms in developing countries to join GVCs and reach international markets. In addition, services increasingly form their own value chains, with fragmentation in the supply of different inputs in different stages and locations (Nano and Stolzenburg, 2021).

The critical role of services as inputs and in supply chains is reflected in the fact that over two-thirds (69 per cent) of global services trade (on a BOP basis) consists of trade in intermediates, compared to trade in services for final consumption (see Figure 17). The COVID-19 pandemic and the resulting drop in tourism services has increased the relative importance of intermediate services. However, even before the pandemic, trade in intermediate services accounted for over 57 per cent of global services trade, a higher proportion than trade in intermediates plays in manufacturing.

The role of services in global value chains is also highlighted through data that capture the valued added by a country in the production of any good or service that is then exported. Measuring trade in value-added terms reveals that the role of services in world trade is far more significant than implied by gross flows. Indeed, services value-added accounted for 50 per cent of the value of world trade in goods

Figure 17.
Trade in intermediate and final services, 2015-2021



Source: WTO estimates (based on the conversion table EBOPS 2010-CPC 2.1-BEC Rev.5).
Note: Trade as average of exports and imports.

and services in 2018, compared to 16 per cent for agriculture and 34 per cent for industry (see Figure 18).[18] In comparison, the share of services value-added stood at 30 per cent in 1980 and at 45 per cent in 2005 (Heuser and Mattoo, 2017).

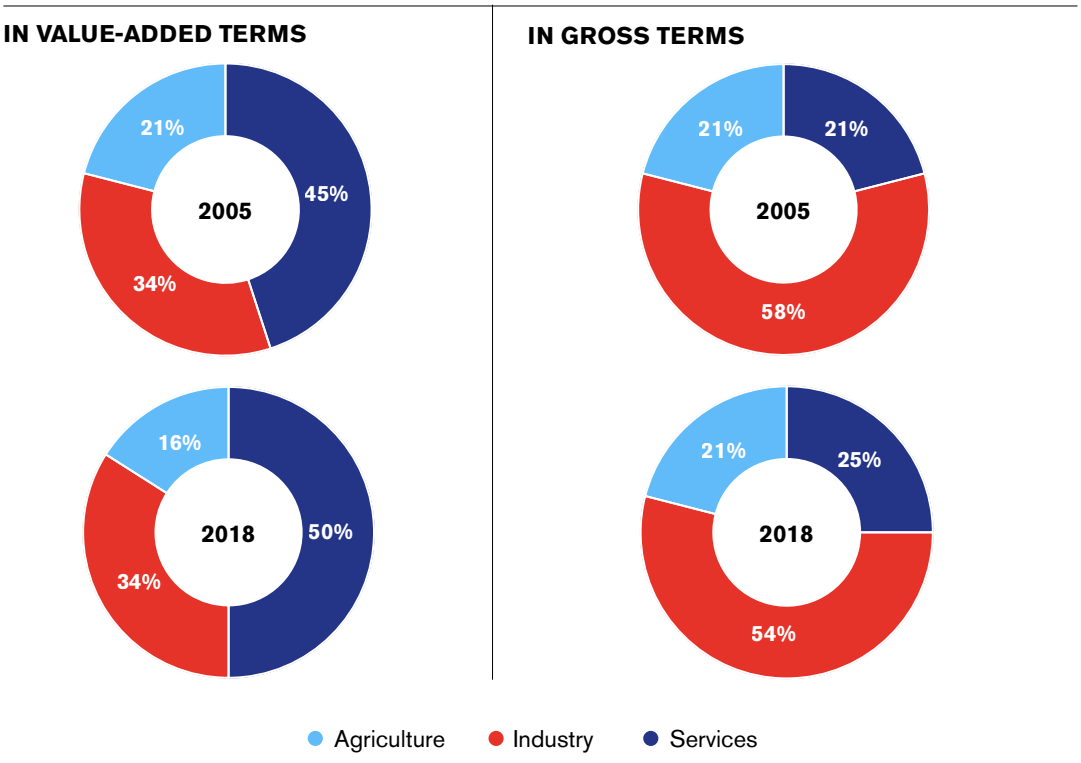
The rising share of services inputs in total trade also reflects major structural changes in the fabric of economic activity, with production processes making increasing use of services and manufacturing components. In this so-called servicification of industrial production, manufacturing firms increasingly rely on services, procure services inputs – from home and abroad – and also supply services themselves (e.g. transport, R&D, IT, professional services, repair and maintenance and other after-sales services) (WTO, 2020a).

Services value-added represents a large and increasing share of total exports, reaching 54 per cent on average for OECD members, and 41 per cent for non-OECD members in 2018 (see Figure 19). However, the share of services content in total exports increased the most in non-OECD members since 2005.

Services value-added accounted for over 51 per cent of India's total exports in 2018. In the same year, it reached a higher share than the non-OECD average for countries such as the Philippines (50 per cent), Brazil (45 per cent) and Morocco (45 per cent).

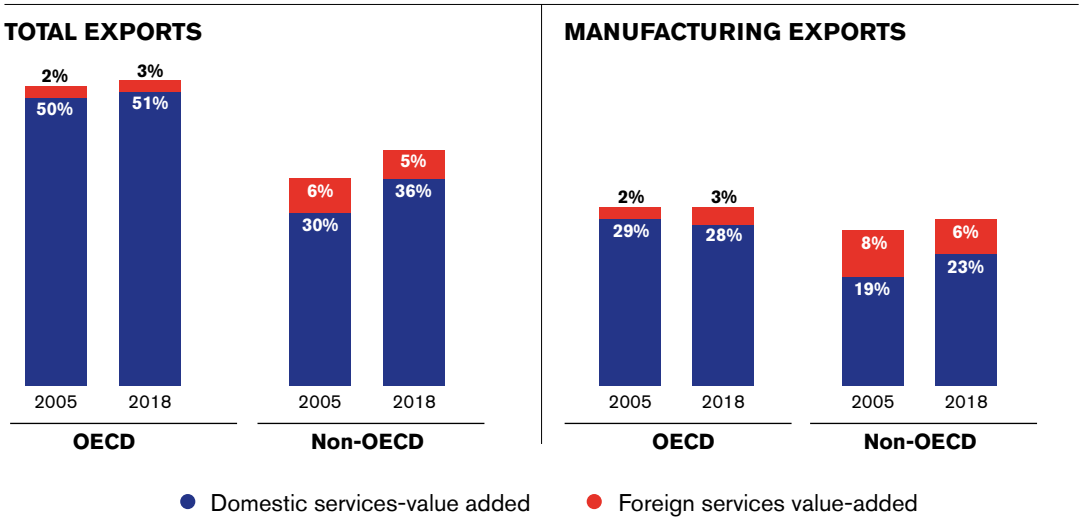
Figure 19 also shows that services value-added accounted, on average, for 31 per cent of manufacturing exports for OECD members, and only slightly less for non-OECD members, at 29 per cent. This significant share underscores the importance of efficient and quality services for the productivity of manufacturing activities and their international competitiveness and export

Figure 18.
Structure of world trade, 2005 and 2018



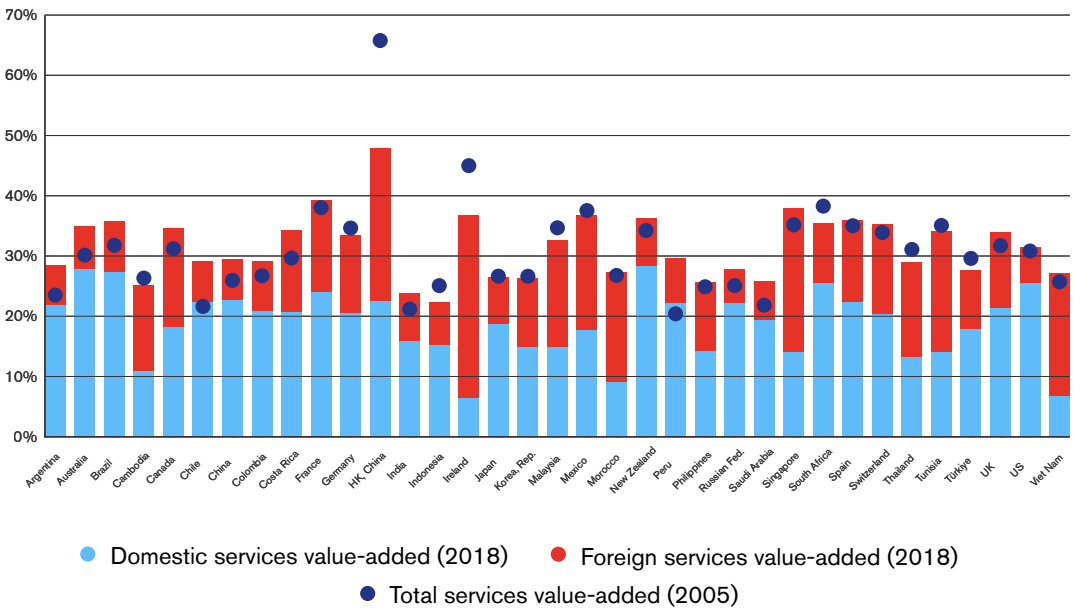
Source: Trade in Value Added (TiVA) Database, OECD, and WTO Trade in Services annual dataset, available at https://stats.wto.org.

Figure 19.
Services value-added in total exports and in manufacturing exports, domestic and foreign, 2005 and 2018



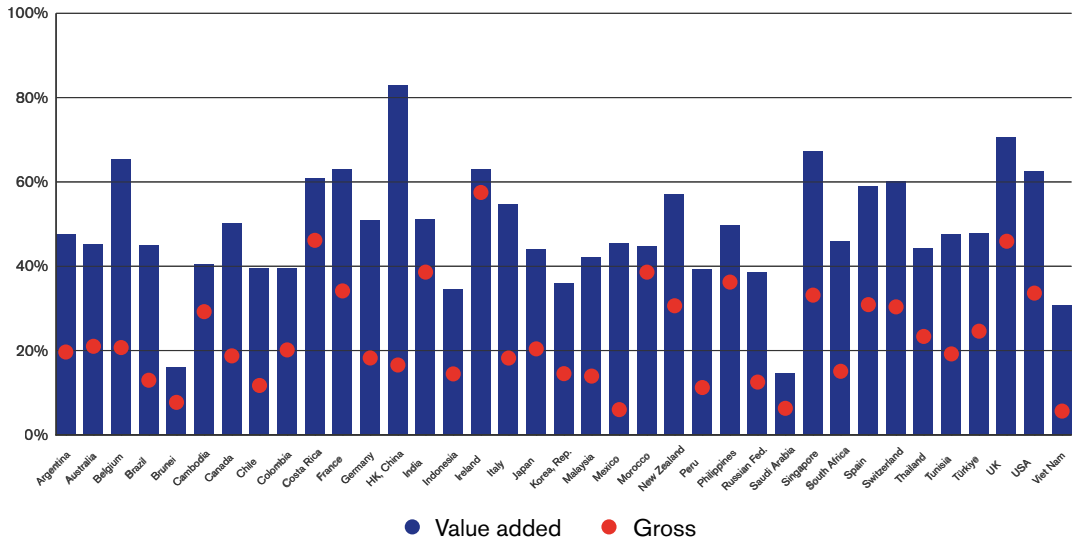
Source: Trade in Value Added (TiVA) database, OECD.
Note: This includes data from 38 OECD and 28 non-OECD economies. OECD and non-OECD aggregates include intra-trade flows as domestic ones.

Figure 20.
Share of services value added in manufacturing exports, selected economies, 2005 and 2018



Source: OECD Trade in Value Added (TiVA) Database.

Figure 21.
Share of services in total exports, in gross and value-added terms, selected economies, 2018



Source: OECD Trade in Value Added (TiVA) Database.

potential. The cost and quality of the underlying services affect the performance of the economy as a whole and are essential for connectivity and the competitiveness of goods exports.

Looking at selected economies, Figure 20 shows that services value-added represented between 25 per cent to 40 per cent of the content of manufacturing exports for a wide range of economies at different levels of development, and that in many cases a significant proportion was foreign services value-added. The share of total services value-added The share of total services value added was relatively high for a number of developing economies, including Brazil (36 per cent), Chile (29 per cent), Mexico (37 per cent), South Africa (35 per cent) and Turkey (28 per cent). For the majority of economies covered in Figure 20, the share of services value-added in manufacturing exports increased between 2005 and 2018, in particular for Peru and Chile.

The OECD TiVA database reveals not only the key role of services in manufacturing competitiveness and exports, but also the contribution of imported services to such exports. For a number of economies, such as Belgium, Ireland and Morocco, the foreign share of services value-added is greater than the domestic one.

Figure 21 underscores that even in economies where services represented a small proportion of total exports in gross terms, services value-added often accounted for a significantly larger share of total exports. For example, services accounted for 6 per cent of Mexico's total exports in gross terms in 2018, but the proportion jumped to 45 per cent in value-added terms. Similarly for Argentina, services as a share of total exports went from 20 per cent to 48 per cent. Hong Kong, China showed the strongest share of services value-added in total exports at 83 per cent.

Looking at trade in value-added terms shows that economies at different levels of development may enjoy comparative advantages in some services even if, in gross terms, they tend to export more goods than services.[19]

However, TiVA statistics may yet underestimate the share of services in world trade because they do not capture the services value added provided by manufacturing companies. TiVA statistics capture services bought as inputs by enterprises in other sectors, but manufacturing companies also undertake services activities 'in-house' which are not captured in TiVA statistics as services value added of manufacturing exports.

Endnotes

1 The many reasons for the declining importance of manufacturing for most economies include the fact that manufacturing activities have become more technology, skill and capital intensive and create fewer jobs (Ghani and O'Connell, 2014), and demand for services has changed in step with rising incomes and demographic shifts.

2 For background information, see Amirapu and Subramanian (2015) and Rodrik (2015). Similar concerns are expressed about the impact widespread adoption of artificial intelligence and machine learning technologies will have on employment in services (see Baldwin, 2019).

3 For background information, see Ghani and O'Connell (2014).

4 See the ILO World Employment and Social Outlook (WESO) Data Finder, available at https://www.ilo.org/wesodata.

5 For an historical context, see Baumol (1967) and Kaldor (1966).

6 For background information, see Cali *et al*. (2008), Eichengreen and Gupta (2013), Jensen and Kletzer (2005), Jones and Kierzkowski (1988), Riddle (1986) and Schettkat and Yocarini (2006).

7 For background information, see Hoekman and Shepherd (2017) and Nordås and Kim (2013).

8 Trade in commercial services in the BOP is total services trade minus exports/imports of government services not included elsewhere.

9 BOP statistics generally do not cover trade in services through commercial presence (mode 3). For more information on the modes of supply, see Box 2.

10 Other commercial services are total commercial services less the categories of travel, transport and goods-related services. Other commercial services include construction, financial services, insurance and pension services, telecommunications, computer and information services, charges for the use of intellectual property not included elsewhere, other business services, and personal, cultural and recreational services.

11 For example, other commercial services amounted to 40.4 per cent of total commercial services imports in the Middle East in 2022, compared to 35.8 per cent in 2005. In the case of Latin America and the Caribbean, the share of other commercial services imports went from 38.3 per cent in 2005 to 42.3 per cent in 2022.

12 From a regional perspective, the share of global exports of other commercial services from Asia and the Middle East increased between 2005 and 2022 (from 16.0 per cent to 23.5 per cent and from 2.0 per cent to 3.3 per cent, respectively). The shares of Europe and North America declined between 2005 and 2022 and those of other regions remained broadly unchanged.

13 Since a foreign-owned affiliate is resident in the host country, its services sold in the country are not recorded in BOP statistics, which are only concerned with transactions between residents and non-residents.

14 The WTO's Trade in Services data by Mode of Supply (TiSMoS) provides an aggregate picture of services trade covering the four modes of supply as defined in GATS. It covers 200 individual economies for the period 2005-2017.

15 Financial services and distribution services together account for around half of this value.

16 TiSMoS available at https://www.wto.org/english/res_e/statis_e/trade_datasets_e.htm#TISMOS.

17 For further information, see Díaz-Mora *et al*. (2018), Heuser and Mattoo (2017), Low and Pasadilla (2015) and World Bank (2020a).

18 The most recent update of Organisation for Economic Co-operation and Development (OECD) Trade in Value Added (TiVA) statistics was released in 2021, with coverage up to 2018.

19 However, TiVA statistics may yet underestimate the share of services in world trade because they do not capture the services value-added provided by manufacturing companies. TiVA statistics capture services bought as inputs by enterprises in other sectors, but manufacturing companies also undertake services activities 'in-house' which are not captured in TiVA statistics as services value-added of manufacturing exports. With data for a sample of countries that are mostly OECD economies, Miroudot and Cadestin (2017a) find that services inputs account for 37 per cent of the value of manufacturing exports, but this share increases to 53 per cent when adding services activities taking place within manufacturing firms.


154
WTO OMC
WORLD TRADE ORGANIZATION
ORGANISATION MONDIALE DU COMMERCE
ORGANIZACIÓN MUNDIAL DEL COMERCIO

2 The contribution of services trade policies

Key points

- The high degree of regulatory scrutiny attached to the supply of services, both within and across borders, focuses attention on how the policy choices of governments matter for services trade. Services facilitate market integration by supplying the basic infrastructure for trade. Despite continued efforts to reform, barriers to trade in services remain high overall, increasing trade costs with damaging economy-wide consequences.

- Higher services trade restrictions are associated with lower shares of services value-added within global value chains (GVCs). They can also adversely affect the productivity of manufactured exports, hindering efforts at moving up the value chain.

- Because services supplied through a commercial presence remain the most powerful driver of services sector internationalization, important signalling benefits can be associated to binding commitments and to steps taken to facilitate the entry and operation of foreign established services providers.

- Lowering barriers to trade and investment in services may strengthen resilience and promote adaptation to climate change, while reducing the cost of environmental protection measures. Doing so also promises important advances in inclusiveness, given the favourable impacts of trade in services for female and young workers and entrepreneurs, and micro, small and medium-sized enterprise (MSMEs).

- Not only do services trade barriers impose significant costs, uncertainty stemming from the absence or relative paucity of binding commitments also carries additional costs. Current international commitments on services, particularly at the WTO, provide for limited predictability and transparency and offer only partial protection against policy reversals.

- Considerable scope exists for closing the widening gap between commitments made under the latest generation of preferential trade agreements and those scheduled under the General Agreement on Trade in Services (GATS).

1. The multifaceted impact of services trade policies[1]

The increasing and complex role of services in economies and international trade has raised the significance of both national and international policy regimes governing trade in services. Recent research based on improved data on services trade and services policies sheds further light on their impact on sectoral and economy-wide performance (Roy, 2019; WTO, 2020a). How governments design and implement services trade policies is central to their development trajectories and to prospects for deepened integration.

(a) Effects on economic, trade and investment performance

Impact of services trade openness on economy-wide productivity and the performance of key services sectors

Impediments to trade and investment in services shield domestic suppliers from competition, leading to higher prices and reduced incentives to invest, innovate or otherwise improve services quality. Sectors facing lower trade costs – which are themselves generally associated with lower services restrictions – tend to be more productive and enjoy higher productivity growth than those with higher trade costs.[2]

In developed economies, services policies, particularly those restricting mode 3 trade, have been found to explain differences in total factor productivity, which in turn largely mirror differences in productivity growth.[3]

Services trade restrictions negatively affect performance in a number of important services sectors, as measured by comparable indicators across a broad range of countries. For example, countries that impose more trade-restrictive policies in commercial banking have less-developed credit markets.[4]

How trade-facilitating services policies impact physical connectivity and goods trade

Services impact physical connectivity and trade integration by providing the basic infrastructure that underpins trade in goods. Without efficient services, goods cannot be successfully traded, effectively taxing countries regardless of the source of their comparative advantages.

A wide basket of services comes in play in bringing final goods from their place of production to final consumers across borders, including transport services (maritime, air, road), logistics services (freight forwarders, customs brokers, storage, warehousing, metrology), express delivery services, advertising and distribution services (wholesale and retail).

A study by the International Trade Centre (ITC, 2022) based on enterprise surveys confirms that access to high-quality logistics and transport services is positively linked to competitiveness and to improved performance across a range of indicators. Firms making use of high-quality logistics services perform better in inventory management as well as in on-time delivery, two key elements of successful exporting.

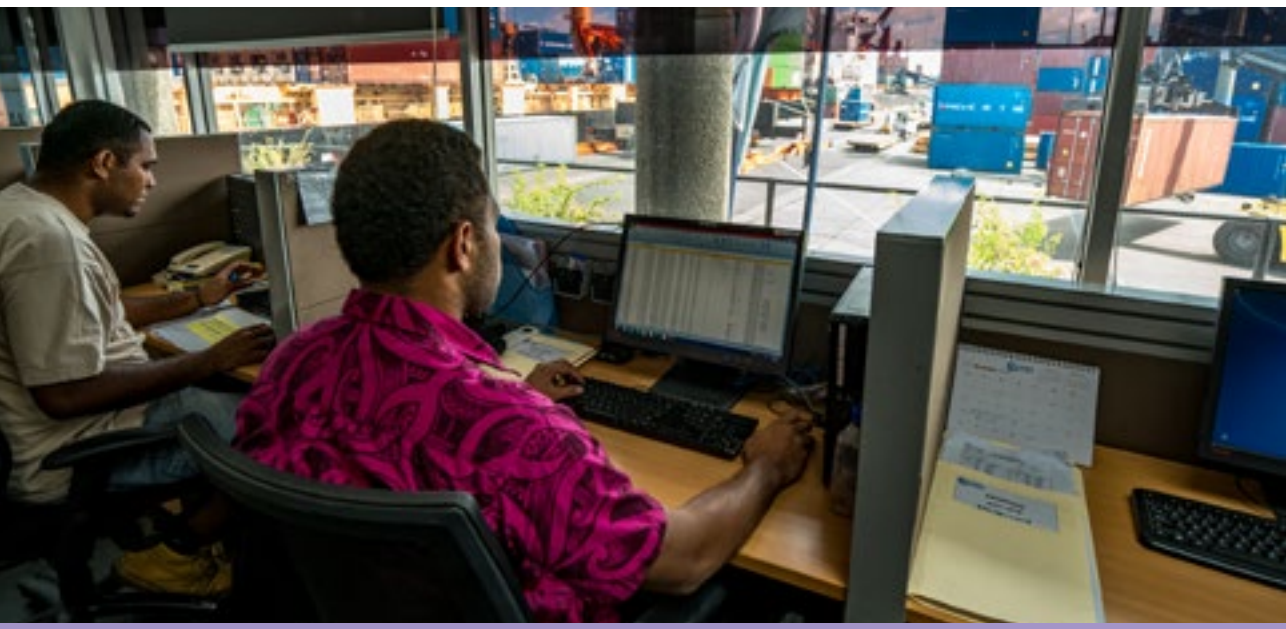
In Chile, measures which began in the 20th century to increase competition in transport services have resulted in greater GVC participation and facilitated the country's goods exports in key sectors. The experience also underscores how a reduction of barriers to trade in goods and the expansion of goods exports creates a demand for services liberalization in order to maximize positive returns from liberalizing trade in goods (see Box 7).

Pro-competitive regulation can exert a strong influence on the efficiency of services markets. Services trade policies impact physical connectivity, as higher levels of services trade restrictiveness in logistics, maritime and road transport result in higher trade costs.[5] Focusing more specifically on the transport of containerized cargo on liner vessels, Bertho *et al.* (2016) find that government restrictions in the shipping sector, especially those limiting foreign direct investment (FDI), significantly inflate maritime transport costs, with adverse impacts on the flow of goods trade.[6]

Similar impacts have been shown for road transport. Reforms aimed at facilitating market entry in trucking in Rwanda resulted in nominal price declines of close to a third and were associated with an expansion of the domestic trucking fleet.[7]

This contrasts with the experience in other countries of Africa's Great Lakes region, where restrictive entry regulations, quotas and other measures have reduced competition, raising the costs of road transport services and negatively impacting agricultural exports.

Source: ITC (2022).



> Services provide the basic infrastructure that underpins trade in goods.

Box 7. Impact of liberalizing transport policies in Chile

Chile's experience not only highlights the strong impact that the liberalization of transport services can have on supply chains and goods exports, but also how lowering barriers to goods trade generates demand for services liberalization.

Efficient transport is one of the most important services required to compete in the global economy. Chile's challenging geography further underscores the essential role of transport services – domestic and international – in shaping the performance of global value chains (GVCs) and in exporting products to foreign markets.

From the late 1980s to the mid-1990s, Chile undertook significant steps to liberalize its transport sector:

- Authorities ended the state monopoly on harbour services and introduced concessions for port terminals by private companies.
- The government negotiated an increasing number of open skies' agreements, providing greater access to the sector for foreign services providers.
- The government attracted foreign direct investment through public-private partnerships to build and maintain the road network.
- Authorities opened the sector to foreign participation.

Overall, Chile's transport services is relatively low, as measured by the World Bank–WTO's Services Trade Restrictiveness Index (STRI).

Trade in value-added statistics showed that sectors such as the wood and wood products and the chemicals sectors are intensive users of transport services, absorbing high value-added from that sector in Chile. Transport services value-added is also integrated into exported goods. The country's agribusiness and printing industries are the leading sectors embodying transport services value-added in their exports.

> Competitive transport markets have been a significant factor in Chile's successful development of its agribusiness sector through GVCs.

Liberalization measures have significantly impacted Chile's agribusiness sector, with the country becoming one of the world's largest cherry exporters despite its distance from world markets and the perishable nature of its exports.

The industry exports 80 per cent of its production and offers a clear example of competitive agribusiness expansion. This trend has largely been made possible through expansion to overseas market opportunities enabled by export-oriented policies – a number of which are tied to Chile's extensive web of preferential trade ties with key partners.

High import and export volumes for goods, combined with a liberalized transportation sector, have fostered competition among logistics providers, which have helped to reduce costs.

The modernization of Chilean ports following their privatization significantly contributed to the extent exporters in Chile were able to take advantage of reduced tariffs abroad to export large quantities of products.

Reduced barriers in the transport sector have been associated with better value chain performance, as reflected in the significant increase in domestic value-added, after controlling for other factors. Competitive transport markets have been a significant factor in Chile's successful development of its agribusiness sectors through GVCs.

Source: See Bamber and Fernandez-Stark (2015) for a full account of the cherry industry in Chile and Shepherd and van der Marel (2016) for details on the liberalization of transport services.

Services policies as key determinants of foreign direct investment

Governments increasingly focus on attracting FDI to create quality local jobs, promote linkages with domestic suppliers and improve access to foreign markets. This motivation is linked to the productivity enhancing gains that FDI can produce by exposing local firms and workers to new technologies and know-how and to enhanced competition.

FDI, including in services, can also help domestic firms to participate in GVCs by becoming suppliers of foreign affiliates or by sourcing from them (Hoekman and Sanfilippo, 2022). Globally, the services sector attracts most FDI,[8] but it is also the sector where foreign investment remains most restricted when compared to manufacturing or the primary sector.[9]

Various studies have found that services trade restrictions are associated with both reduced foreign investment inflows and lower output of foreign affiliates. Countries with lower levels of FDI restrictiveness are significantly likelier to attract foreign investment in services than countries with more trade-restrictive policy regimes.[10]

Mistura and Roulet (2019) analyse 60 developed and developing countries between 1997 and 2016 and quantify the impacts that FDI liberalization could have on bilateral FDI stocks, taking into account factors such as market size and growth potential, factor endowments and levels of corporate taxation. They find the deterring effects of barriers to FDI to be larger in the services sector.

Key FDI restrictions that limit foreign investment include foreign equity limitations and discriminatory or unduly onerous screening mechanisms – limitations which often apply to the services sector.

FDI is not only affected by explicitly discriminatory measures but also by the predictability and transparency of the policy and regulatory environment. The World Bank (2020a), drawing on a dataset of over 14,000 parent companies investing in over 28,000 projects across 168 host countries, shows that investor confidence and FDI flows increased with reduced regulatory risk. The report finds that the impact of regulatory risk on FDI is sizable and comparable in magnitude to other economic and policy factors.

Such findings are of particular relevance for services, given that most subsectors are highly regulated (e.g. finance). The importance of regulatory transparency and predictability stands out in the World Bank's Global Investment Competitiveness surveys, which find that the legal and regulatory environment is one of the top three factors shaping investment entry decisions, along with political and macro-economic stability (World Bank, 2020a).

In addition, high-quality services, including in such infrastructure services as transport, logistics and telecommunications, is a key component of a conducive business environment and an important factor in FDI attractiveness in services and other sectors (OECD, 2023; Ta *et al.*, 2021).

> Greater services trade openness can increase both the level and quality of an economy's goods export basket.

Impact of openness in FDI and trade in services on manufacturing and GVC participation

Achieving a reduction in trade costs for goods greatly depends on improving the performance of the services used by goods-producing enterprises. Country-specific research demonstrates that openness in services trade increases the productivity of manufacturing industries.[11]

Research also underscores how lower services barriers are associated with greater manufacturing exports, given the key intermediation role of services inputs. Hoekman and Shepherd (2017) find that a 10 per cent increase in services trade restrictiveness levels results in a 5 per cent decrease in bilateral trade in manufactured products.

Trade and investment restrictions on transport and retailing services are seen to exert the largest impacts on merchandise exports. Wolfmayr (2012) finds that services inputs, in particular imported services, have a positive and significant effect on the manufacturing export shares of European countries.

Focusing on business and financial services, Liu *et al.* (2020) find that the level of development of these sectors enhances the revealed comparative advantage of manufacturing sectors that use these services intensively. Using a sample of 63 developed and developing economies, Díaz-Mora *et al.* (2018) find that a greater share of foreign services value-added in manufacturing exports contribute to more resilient and stable export relationships.

Recent research also find that services trade restrictiveness negatively impacts the sophistication of manufacturing exports, suggesting that greater services trade openness can increase both the level and quality of an economy's goods export basket.[12]

Other studies further emphasize that restrictions on inward FDI in services have a particularly strong negative impact on manufacturing exports.[13] This is consistent with earlier research suggesting that investment openness can be a more important determinant of a country's participation in GVCs than tariff barriers.[14]

"Reducing trade costs for goods greatly depends on improving the performance of the services used by goods-producing enterprises."

The experience of India highlights how reforms to facilitate FDI in services can ignite positive growth dynamics by boosting participation in foreign manufacturing value chains. In the 1990s, policy changes bringing about better regulation and greater openness to FDI in services provided manufacturing firms in India with access to better, more reliable and more diverse business services.

This allowed manufacturing firms to invest in new business opportunities and better technology to organize production more effectively and reap economies of scale, and to manage inventories and coordinate with consumers and suppliers more efficiently.

Empirical studies lend support to the positive impact of liberalizing services FDI on manufacturing value chains. In the Czech Republic, for example, services reforms generating greater FDI inflows were seen to result in productivity gains of domestic firms involved in downstream manufacturing.[15]

How restrictions limit cross-border trade in services

Policy restrictiveness in services trade raises costs for foreign exporters, thereby limiting cross-border trade in services – including for services supplied over digital networks. Such restrictions also limit the services exports of the country imposing the measures.[16]

By limiting competition, restrictive measures hinder the performance of domestic suppliers, reducing incentives to improve efficiency through innovation, financial investment and the adoption of new technologies. This in turn affects the capacity of domestic suppliers to compete in international markets.

Services firms, like producers of manufactured goods, use inputs from services subsectors, so raising the cost of imported inputs can make the firms less competitive and limit their export potential.[17]

Services trade restrictiveness and services value-added in exports

Higher services trade restrictions are associated with lower shares of services value-added within GVCs.[18] Trade barriers in both exporting and importing countries exert an overall negative impact on services value-added flows. Services barriers in exporting countries are seen to exert greater impacts, as they reduce competition in domestic services markets, leading to less efficiency and lower performance, thereby limiting the services value-added contribution to exports.

> Trade barriers in both exporting and importing countries exert an overall negative impact on services value-added flows.

(b) Services trade and efforts to bridge the digital divide and harness opportunities in digital trade

Services trade policies play a critical role in the development of the backbone infrastructure enabling digital trade. Sectors such as telecommunication and computer services in particular, but also financial and logistics services, are key enablers not only for the sale of goods online, but also for the digital supply of an increasingly wide range of services.

Telecommunication services, which encompass the Internet, mobile telephony and data transmission services, provide the basic infrastructure and transport capacity that allows a range of services to be supplied digitally, in addition to also permitting goods to be offered and purchased over business to business and business to consumer networks.

Indeed, the Internet is one of the most important business platforms for companies, domestically and internationally, and promotes efficiency by making transactions quicker, cheaper and more convenient to carry out.[19]

Suppliers of telecommunication and computer services (e.g. cloud computing and other data storage and processing services) also enable data flows across borders, which underpin the international operations of firms in different sectors. In addition, information and communications technology (ICT) services, combined with innovation and regulatory adaptation in the financial sector, have made significant advances in payment solutions possible, particularly with mobile devices.[20]

Over the past 25 years, a growing number of countries have moved from monopolistic market structures to pro-competitive regulatory environments. They have done so by reducing barriers to entry and often through privatization of state-owned incumbents.[21] These changes have enhanced the affordability, quality and diversity of telecommunication services.[22]

Countries that introduce effective pro-competition regulation have greater success in stimulating market growth and digital readiness (ITU, 2023, 2017). A study of mobile networks in 165 countries shows that mobile broadband penetration was 26.5 per cent higher in countries with competitive markets (ITU/UNESCO, 2013, 2019).

Higher levels of services trade restrictiveness in telecommunication services are associated with lower penetration rates for fixed, mobile and broadband Internet (Nordås and Rouzet, 2016; Borchert *et al.*, 2017). Studies have also found that markets characterized by more intense competition achieved greater price decreases and better services, and that liberalization of the telecommunications sector can lead to higher GDP growth and to sectoral and economy-wide productivity gains.[23]

Digital technologies are bringing down trade costs for services and, as noted in the preceding sections, are offering new trade opportunities. Digital technologies are also rejuvenating exports in traditional services sectors, such as tourism and agriculture.

The Organisation for Economic Co-operation and Development (OECD, 2022a) estimates that trade costs for financial, communication and business services fell by between 30 per cent and 70 per cent from 2000 to 2019. The greater ease of trading and reduced impact of geographical distance on cross-border services trade was driven, in large measure, by the adoption of ICT, which accounted for one quarter of the drop in trade costs in these sectors (OECD, 2022a).

A negative correlation has also been found between entry barriers and restrictive regulations on services and investment in digital technologies and ICT.[24] This suggests that barriers to entry and competition in services sectors reduce the incentive of suppliers to invest in digitalization (e.g. investment in the use of cloud facilities by transport companies, the supply of online services by professional services firms or the use of the Internet by retailers). The example of East Africa highlights how the policy framework is key to attracting investment in connectivity-boosting infrastructure (see Box 8).

Box 8. Digital integration in East Africa

The East Africa region is home to approximately 384 million people, of which over one third live below the poverty line, 72 per cent of the population live in rural areas and a third is under the age of 24. More than half of the countries in the region are considered fragile and affected by prolonged periods of civil war. These conditions have led to many refugees, internally displaced people and migration, especially in borderlands.

The adoption of digital technologies holds the potential to expand the services sector, boost services trade, and support regional and international integration in East Africa. Deepened regional integration within the East African Community could boost GDP in the region by up to US$ 2.6 billion and create up to 4.5 million new jobs. Countries in the region can also benefit from economies of scale and network effects created by a more extensive regional digital market.

However, investing in an integrated digital market requires building the foundations for a digital economy to flourish. This includes investments in digital physical and human capital, removal of cross-border barriers and efforts at regulatory harmonization at the regional level.

The East Africa region has significant disparities in connectivity levels that affect the development of a regional digital market. Diverse degrees of information and communications technology (ICT) infrastructure development among East African countries drive differences in price, performance and broadband penetration levels – which range from 5 per cent in South Sudan to 48 per cent in Kenya.

Rural areas are also underserved in terms of ICT infrastructure. For instance, Kenya has network coverage of about 94 per cent, but northern Kenya remains underserved. Access to ICT networks is essential, especially in border areas, where greater volumes of cross-border trade, including via e-commerce, occur.

Gender gaps in access to digital technology and skills are also common in many countries, such as Ethiopia, Somalia and South Sudan. Disparities in the development of the ICT regulatory frameworks in many East African countries also affect broadband market growth. For instance, Somalia, Ethiopia and Djibouti have only recently created an ICT industry regulator, while Kenya is much more advanced, having one since the 1990s.

There is also a need to both strengthen the current policy, legal and regulatory environments to enhance competition and create a level playing field throughout the region to attract greater investment in connectivity infrastructure and create a more integrated digital market. For instance, data must be able to move more freely and securely across borders to support digital trade.

Similarly, cybersecurity will be critical to boost cross-border trade in digital services. However, there are significant disparities in data governance regimes and in cybersecurity preparedness throughout the region. While Tanzania, Kenya and Rwanda stand above the global average in terms of cybersecurity preparedness, many other countries, such as Burundi, Djibouti, Eritrea and South Sudan, are still significantly below the global average.

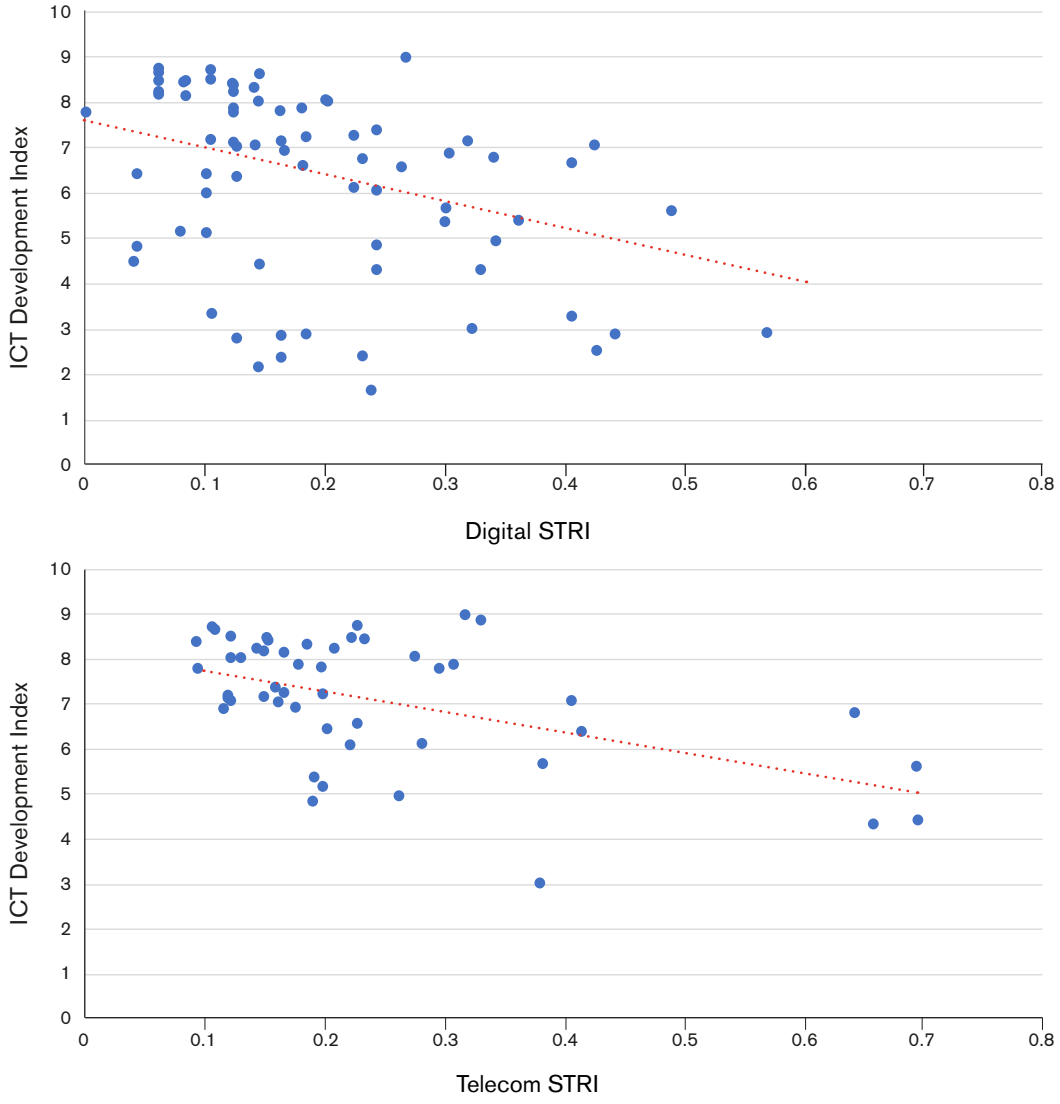
There are also disparities in the level of development of financial services, with both national and regional payment frameworks still underdeveloped and lacking in interconnectedness, further affecting trade in the region. Currently, e-commerce and intra-regional trade levels in East Africa are still relatively low.

Therefore, accelerating regional integration will necessitate a comprehensive approach towards digital development and require building key foundational blocks, such as data governance, financial services and digital capital to enable the digital economy to grow. This will also require efforts at policy and regulatory harmonization throughout the region.

Note: For further information, see the World Bank's Eastern Africa Regional Digital Integration Project, available at https://projects.worldbank.org/en/projects-operations/project-detail/P176181. East Africa includes Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania and Uganda. Further background information can be found in World Bank (2018).

Measures that restrict trade in services show a strong inverse correlation with different indicators of performance in the telecommunications sector. Services trade restrictiveness in telecommunications is associated with higher prices for broadband and lower subscriber density for broadband (adjusted for income per capita) (Nordås, 2020). Figure 22 shows the strong correlation between the services trade restrictiveness for digital services and telecommunication services with an economy's levels of ICT development.

Figure 22.
Relationship between services trade restrictiveness and ICT development



Source: ICT Development Index available at https://www.itu.int/en/ITU-D/Statistics/Pages/IDI/default.aspx; digital Services Trade Restrictiveness Index (STRI) available at https://goingdigital.oecd.org/en/indicator/73; telecommunications STRI available at http://i-tip.wto.org/services/default.aspx.
Note: Data for the ICT development index and the digital STRI are for 2017. Data for the telecommunications STRI are from 2016.

Data policies and trade in services

Greater adoption of digital technologies and the spread of ICT services like broadband Internet and cloud computing have boosted not only trade in digital services, but also cross-border data flows. This has brought closer scrutiny to bear on government measures that restrict data flows.

A recent study examining the level of restrictiveness of data policies across a sample of 64 economies finds that restrictive measures are significantly associated with lower imports of data-intensive services (van der Marel and Ferracane, 2021). Since data-intensive services serve as inputs to an increasing range of economic activities, reducing imports through restrictive data policies and localization requirements can negatively impact user industries and limit the productivity gains generally associated to digitalization.

(c) Services trade policies and women's economic empowerment

Since levels of female employment are significantly higher in services, women may be expected to benefit more from services than from manufacturing exports. A recent study on India suggests that opening up services has helped to close gender education gaps by raising education levels among women more than those among men (Nano *et al.*, 2021).

Boosting trade in areas such as tourism, education and distribution services has a positive impact on women's economic empowerment. Government policies that provide an enabling environment for these sectors to grow, including by freeing up mode 3 (commercial presence) trade, can generate considerable employment opportunities for female workers.[25]

(d) Services trade policies and climate change mitigation and adaptation

Trade in environmental services can play an essential role in helping economies transition to a low-carbon economy. Such services are often embodied in environmental goods, as they are typically integral to transferring and using low-carbon technologies. Examples of environmental services include: construction, operation and maintenance of renewable energy generation and distribution products; advisory services on reducing emissions from vehicles; application of clean technologies in manufacturing; advisory services on land-use management and agricultural practices; and services relating to the inspection, certification and testing of products and services produced with low-carbon technologies.

Most trade in environmental services occurs through mode 3, followed by mode 4 (temporary movement of services suppliers). As in all other sectors, technological advances are increasing the range of environmental services that can be supplied remotely via mode 1 (cross-border supply) trade (APEC, 2021).[26]

Despite its growing importance, restrictive measures still affect trade in environmental services, inflating the costs of environmental projects in which they are used. For example, restrictions on the provision of environmental services can affect engineering and consulting activities, which in turn affect several other environmental project components dependent on these types of services for their operations, such as renewable energy, smart agriculture and water treatment.

Additional restrictions on services supporting trade in environmental goods and services can also negatively affect access to such products. Enhanced access to ICT services can play an essential role in the transfer and implementation of new environmental technologies.

Services illustrate how trade can be both a contributing factor and potential solution to climate change. Nowhere is this more palpable than in the transport sector (see Box 9).

Climate change can affect trade by altering comparative advantages as a result of climate-induced productivity losses. The greater recurrence of extreme heat episodes has been found to reduce productivity levels to a lesser extent in services and manufacturing than in agriculture. As noted in WTO (2022b), a one degree rise in a country's temperature translates into reduced export growth for agriculture and light manufacturing.[27]

Climate change will increasingly entice countries faced with rising temperatures to shift resources towards activities with a lesser environmental or carbon footprint. Many such activities will be in the services sector. Actions taken to reduce services trade costs can facilitate more orderly and properly sequenced adjustments in production structures.

Lack of diversification and high commodity dependence can exacerbate vulnerabilities to climate change. Services offer important opportunities for diversification by being generally less sensitive to the impacts of climate change than, for example, sectors with a greater reliance on land use and other natural resources.

Agricultural yields in Sub-Saharan Africa and South Asia are expected to experience the most significant negative impacts from climate change, with far reaching impacts on employment, particularly of poorer workers and households (Brenton and Chemutai, 2021).

Countries with greater openness to trade are found to have greater capacity to adjust to climate-induced shocks to productive structures (WTO, 2022a).

Enhanced trade allows countries to access to the most efficient and highest quality environmental goods and services, thereby reducing the costs of environmental protection, while new investments help to upgrade infrastructure. Environmental services are *sine qua non* to the appropriate functioning of environmental goods. As such, taking measures to increase trade in them should happen in tandem.

Box 9. The challenge of decarbonizing transport services

The transportation of goods and people around the world using various modes of transport is responsible for an estimated 7 per cent of all CO_2 emissions. Although transportation is often the part of a good's supply chain that is less emission intensive, significant industry efforts are being directed to lowering the transport sector's carbon footprint.

Arguably the most climate friendly cargo transportation mode, the almost 1 billion tonnes of CO_2 emitted annually by the shipping industry is still significant and several initiatives are underway to make it less so – for instance by reducing vessel speeds and developing carbon-neutral fuels, among others.

Use of carbon-efficient fuels such as methanol are also under development. However, this raises the issue that the infrastructure needed to support a whole new shipping industry reliant on methanol will need to be built all over the world – an important infrastructural challenge that will require significant investment.

Aviation, for both freight and passengers, is also under pressure to reduce emissions, as illustrated by the "flight shame" consumer phenomenon and no-fly campaigns. The International Civil Aviation Organization has adopted a mitigation policy based on technological improvements, including setting emissions standards and introducing biofuels, supporting operational improvements through fuel efficiency monitoring and more direct flight paths, making airports more fuel-efficient and capping CO_2 emissions through the Carbon Offsetting and Reduction Scheme for International Aviation – CORSIA.

The costs of emerging mitigation measures in international transport are not easy to assess, as policy measures and new business models are still under discussion, new technologies still under development, and travel habits – particularly business travel – appear to have been durably altered in the pandemic's wake.

Source: Brenton and Chemutai (2021).

Meanwhile, foreign investment can help to support the diffusion of mitigation technologies, increase the availability and accessibility of related services globally, and help to scale activities and initiatives necessary for achieving climate goals. This is particularly important for developing economies confronted with technological and institutional capacity shortfalls in climate change mitigation. Box 10 illustrates Gabon's commitment to curbing carbon emissions and the role played by environmental services in this regard.

> Enhanced access to ICT services can play an essential role in the transfer and implementation of new environmental technologies.

Box 10. How can services trade help Gabon decarbonize and diversify its economy?

The economy of Gabon is still overly dependent on natural resources, such as oil, for growth, exports and fiscal revenue – all heavily reliant on extractive activities. However, lower oil prices and a drop in production have led to a gradual decline in the share of the oil sector.

As a result, the services sector has become one of the main drivers of the economy, accounting for a significant portion of aggregate output and employment. Nonetheless, services export levels remain very low, showing untapped potential to grow the sector.

Recent work by the World Bank has identified several services subsectors with the potential to help Gabon increase its services trade levels and diversify its economy, including ecotourism, environmental and information and communications technology (ICT) services.

Ecotourism

Gabon's forests are home to remarkable biodiversity, making Gabon a promising ecotourism destination. Gabon also has a large share of national parks and protected areas. In addition, before the COVID-19 pandemic, ecotourism already accounted for the second largest source of services trade receipts.

Yet, despite several subsidy programmes, the sector is still in its infancy, with a dearth of hotels that are inadequately serviced by transportation links and an underdeveloped road network.

As the pandemic progressively fades away, there is potential to revive the sector and invest in branding efforts to help Gabon be internationally recognized as a prime ecotourism destination. Developing the industry will also require improvements in adjacent services subsectors such as air transport services. One way that Gabon can improve transportation services is through greater air transport connections with airlines from leading source countries.

Environmental services

Gabon faces three challenges in its environmental trajectory: mitigating the adverse effects of climate change; decarbonizing its product and export basket; and utilizing the economic potential of its abundant natural resources, particularly its rainforests.

Gabon has demonstrated a firm commitment to protecting its forests and biodiversity, curbing carbon emissions and addressing climate risks. However, achieving such aims requires a sophisticated environmental services industry. Gabon is still highly dependent on the import of specialized environmental technical services. Therefore, there is potential for Gabon to develop its environmental services industry. This will help Gabon achieve its environmental commitments while also diversifying its export basket by developing a capacity to sell its expertise in the region.

ICT services

The *Plan Stratégique Gabon Émergent* and the *Plan Gabon Digital* state Gabon's commitment to investing in digital services.* Despite progress, however, there is still potential to further develop Gabon's digital economy and increase trade in ICT services. Developing the local digital industry could help to expand job opportunities, especially for the country's youth, contribute to economic and social recovery, and promote trade diversification. Increased participation in the African Continental Free Trade Area and WTO discussions on services and digital trade will be necessary for efforts in this direction.

In order to develop its services economy, Gabon will need to address several other constraints to the sector's growth. This includes improving transport services to boost connectivity via air, maritime and land. The country's weak transport infrastructure affects as well as trade in goods. In addition, poor logistics and trade facilities in Gabon limit the country's ability to export and import goods that are critical to those sectors, driving up trade costs in the process.

Source: World Bank (2022).
* See https://www.cafi.org/sites/default/files/2021-02/Gabon_2015_SM%20A_PlanStrategiqueGabonEmergent.pdf.

(e) Services trade linkages to agriculture

Access to efficient services, through trade and investment, increasingly matters for agriculture production and exports. A wide range of services intervene at all stages of the food value chain, from financial services, transport, distribution and logistics services to more specialized services and technologies (e.g. veterinary services, soil analysis, metrology).

Greenville *et al.* (2019) find that services sector inputs account for 30 per cent of the final value of agri-food products in high-income economies and 23 per cent in middle-income and low-income economies. In exports, they estimate that the share of services value-added amounts to 23 per cent of the average export value of food products and 14 per cent of the export value of agricultural products, although with significant cross-country differences.

The contribution of services to agricultural production and exports is increasingly linked to digital services that are making agriculture "smarter" (i.e. more productive and sustainable all at once). Agriculture is increasingly moving away from manual tools, animal traction and motorized mechanization to the expanding use of digital technologies.

"Agriculture is moving away from manual tools, animal traction and motorized mechanization to the expanding use of digital technologies.

For example, digital services include shared-asset services, which connect owners of technology (tractors, drones) with farmers in need of such equipment (FAO, 2022).[28] Many of these technologies rely on applications operated through a smartphone or via call messaging.

ICT services provide farmers access to better and more timely information on soil properties, temperature and weather conditions, crop growth, livestock feed levels and market conditions, thereby reducing information and coordination costs.[29] Equipment monitoring solutions offer another example of the rising digitalization of agriculture.

Such services can automate the operation of a range of equipment, such as irrigation pumps, or can be used to track the movement of equipment and animals. Technologies which improve productivity while reducing input use and maximizing resource management and environmental sustainability form part of what has come to be referred to as "precision agriculture".

Digital services are also reshaping downstream value chains, through transport, logistics, distribution and retail activities. These are producing lower costs, reduced delivery times and enhanced traceability of products along the whole value chain, thus better balancing supply and demand and contributing to improved food safety.

Efficient services markets can facilitate the adoption of better agricultural practices that contribute to productivity growth and help to build resilience and to improve product quality and the efficient use of resources (FAO, 2019). The adoption of digital technologies and related services depends in part on governments' agriculture policies and – at its core – an enabling environment that facilitates access to connected services (see also OECD, 2022b).

(f) The contribution of services trade policies to diversification efforts

Sustained diversification relies on the contribution of services to economy-wide gains in productivity and allocative efficiency. Sound services trade regimes are key components of a policy framework and business climate that facilitates competition and investment in new activities, boosts private sector expansion and speeds up the reallocation of resources towards higher productivity activities, resulting in a broader base of economic activities (World Bank, 2019).

Work by the United Nations Conference on Trade and Development (UNCTAD, 2022) underscores that leveraging digital, business and financial services is key to driving structural transformation and diversification in countries in Africa – many of whose economies remain unduly dependent on commodity exports, which is associated with low growth and economic vulnerability. The case of Gabon (see Box 10) highlights the role that services can play in diversifying economies dependent on extractive industries. Similarly, a recent report by the Asian Development Bank (ADB, 2021b) stresses the critical need for greater economic diversification in Central Asia, underscoring the importance of policies supportive of services trade in such efforts (see Box 11).

Tourism services, in addition to being the leading source of MSME exports and the largest employer of female workers (WTO, 2019), also offer important potential for export diversification. The case of Gabon also draws attention to the opportunities linked to new trends towards sustainable and green tourism.

Tourism value chains have strong backward and forward linkages with other services sectors (e.g. transport, retail, entertainment and cultural services, conference management, construction services, handicrafts), as well as with agribusiness and manufacturing, further contributing to economic diversification (UNCTAD, 2022).

Box 11. Harnessing services for economic diversification in Central Asia

Production and exports in many economies of the Central Asia Regional Economic Cooperation (CAREC) Program are dominated by resource intensive and primary commodities such as crude oil, metals and agricultural products. CAREC members* need economic diversification to grow faster, raise incomes, and increase productivity.

Services have made a significant contribution to the economic growth of CAREC members. The growth rate of gross value-added in the services sector is much faster than in agriculture in all CAREC members as well as in the manufacturing sector in most of them.

However, the services inputs needed to support economic diversification are lacking, and there remains a high concentration of natural resource-dependent manufacturing economies. CAREC members could further foster growth of their services sector, especially of services subsectors that are critical to economic diversification and sustainable development. These include:

- telecommunications and information services;
- financial services;
- education and R&D services;
- tourism services;
- freight transport and storage services;
- quality testing and certification services;
- other agriculture services.

Most of these services subsectors are producer services (i.e. they are inputs into other economic activities). The efficient functioning of these services subsectors is a precondition for the strong performance of the rest of the economy. The quality of the institutions that are the interface of the government and the economy is also a factor in how well – and to what extent – services promote a country's growth and advancement.

CAREC members need to adopt a coherent and comprehensive approach to the balanced development of interdependent services sectors. Establishing and maintaining favourable legal and regulatory frameworks will deliver the greatest net benefit.

Liberalizing trade in services – by lowering barriers to foreign direct investment, for example – is an effective way to enhance competition in services sectors. However, market opening needs to be carried out carefully to effectively manage adjustment costs. As countries liberalize their services trade regimes, they also need to strengthen labour market institutions and vocational training. Equally crucial is to build and upgrade the physical infrastructure required to nurture the development of the services sector.

Source: ADB (2021b).
* Afghanistan, Azerbaijan, China, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.

(g) The contribution of services trade to achieving the Sustainable Development Goals

Policies affecting trade in services offer important means of securing compliance with the United Nations Sustainable Development Goals (SDGs), several of which depend on improved services sector performance and scaled up trade and investment in a range of key sectors.

The role assigned to trade in implementing the 2030 Agenda for Sustainable Development (United Nations, 2015) is expressly articulated in SDG 17 and its call for increased exports by developing and least-developed countries. Services are key to achieving this objective given their growing presence in the export baskets of developing economies and in light of the potential they hold for future growth. This is particularly true for digitally delivered services because of the considerable scope that exists to lower currently high services trade barriers.

Beyond SDG 17, services trade matters to the achievement of several other SDGs because of their central contribution to economic growth, poverty alleviation and job creation. Services trade and investment also matter because of their impacts on women's economic empowerment

and the contribution of services to climate change mitigation and adaptation, as discussed above.

By enhancing overall allocative efficiency and sectoral performance, more open and well-regulated services markets can help to advance SDG aims by improving access to and use of services on which the achievement of many SDGs rests.

Indeed, many SDGs explicitly refer to, or involve, specific services sectors, including health, education, sanitation, water distribution, environmental, financial, ICT, transport, and energy services. This underscores how achieving the SDGs is – to a significant extent – a services agenda, such that boosting services capacity and the productivity of various services, and their increased tradability, assume considerable importance.

A prime example, much in evidence during the COVID-19 pandemic, concerns the strong growth in online education, including across borders. Such trade proved instrumental to sustaining access to education and strengthening human capital (SDG 4) (WTO, 2022c).

Fiorini and Hoekman (2018) empirically document how improved access to services that are relevant to the achievement of various SDGs, notably financial, ICT and transport services, are associated with less restrictive services trade policies. Policy initiatives taken to facilitate trade in services and reduce trade costs by tackling barriers to trade in services are key to improving the performance of, and access to, services that are central to achieving SDGs.

2. Raising the bar on services trade policy regimes

Despite the economic shift towards services and the growing role of services in world trade, greater policy attention needs to be paid to the sector – especially its trade and investment dimensions. Doing so could significantly heighten the contribution that services trade can make to development, overall productivity and trade performance, diversification and inclusiveness.

(a) Services trade barriers remain high

The services trade restrictions indices, developed by both the World Bank and the WTO Secretariat and also the OECD, suggest that, despite continued efforts at unilateral pro-competitive policy reforms in many countries, barriers to trade and investment in services trade remain high in overall terms, albeit with significant variations across sectors, modes of supply, regions and levels of development. Sectors such as professional and transport services, for example, tend to be more restricted than telecommunications or distribution services (see Figure 23). Economies of lower income levels have, on average, higher levels of restrictiveness in all sectors covered.

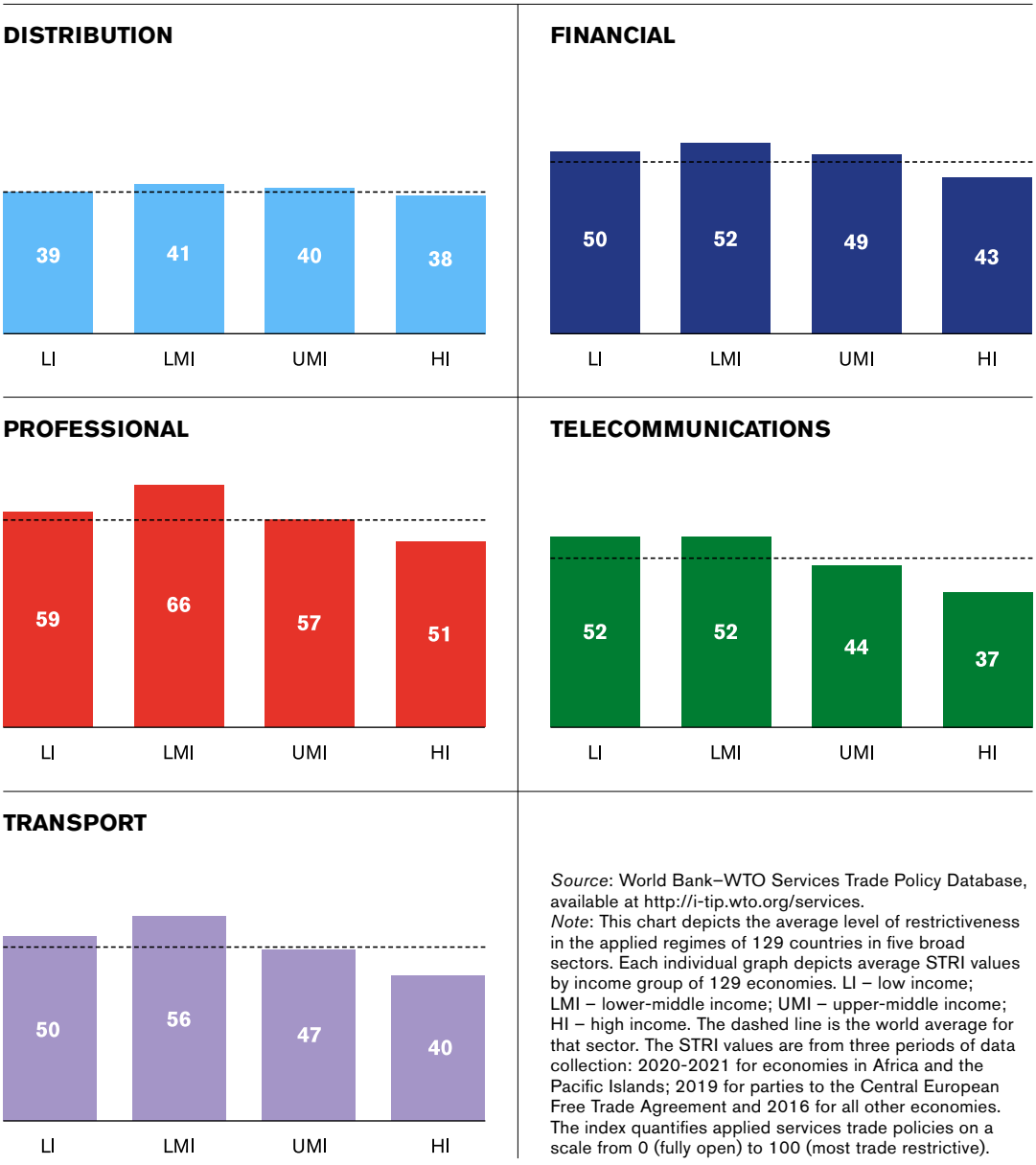
STRI data also show the extent to which services sectors particularly crucial to greater trade integration are subject to trade restrictions around the world. Sectors fundamental to the movement of goods within and across borders, such as transport services, face significant restrictions in a large number of economies.

Similarly, despite the role of telecommunications as a critical enabler of electronic supply of services and e-commerce more generally, a number of countries restrict the sector's trade via mode 3. Barriers to trade in services that are important sources of value-added in manufacturing exports, such as professional services, are also high.

Nevertheless, Borchert *et al.* (2020) show that the overall level of services trade restrictiveness had been decreasing globally between 2008 and 2016, albeit with different patterns across

sectors. Looking at more recent policy changes across 46 countries, the OECD (2022a) finds that services trade restrictiveness tightened during the pandemic, especially in sectors that enable digital trade, such as computer and telecommunications services, as well as a result of mounting restrictions affecting the supply of services through mode 3.

Figure 23.
Services trade restrictiveness levels, by sector and income levels
(STRI values)



Source: World Bank–WTO Services Trade Policy Database, available at http://i-tip.wto.org/services.
Note: This chart depicts the average level of restrictiveness in the applied regimes of 129 countries in five broad sectors. Each individual graph depicts average STRI values by income group of 129 economies. LI – low income; LMI – lower-middle income; UMI – upper-middle income; HI – high income. The dashed line is the world average for that sector. The STRI values are from three periods of data collection: 2020-2021 for economies in Africa and the Pacific Islands; 2019 for parties to the Central European Free Trade Agreement and 2016 for all other economies. The index quantifies applied services trade policies on a scale from 0 (fully open) to 100 (most trade restrictive).

(b) Limited multilateral commitments on trade in services

Barriers to trade in services are higher than for trade in goods and, at the multilateral level, market access commitments are also more limited than for goods, with many sectors left unbound (i.e. free to limit both market access or national treatment) by a number of WTO members – and especially by original WTO members.

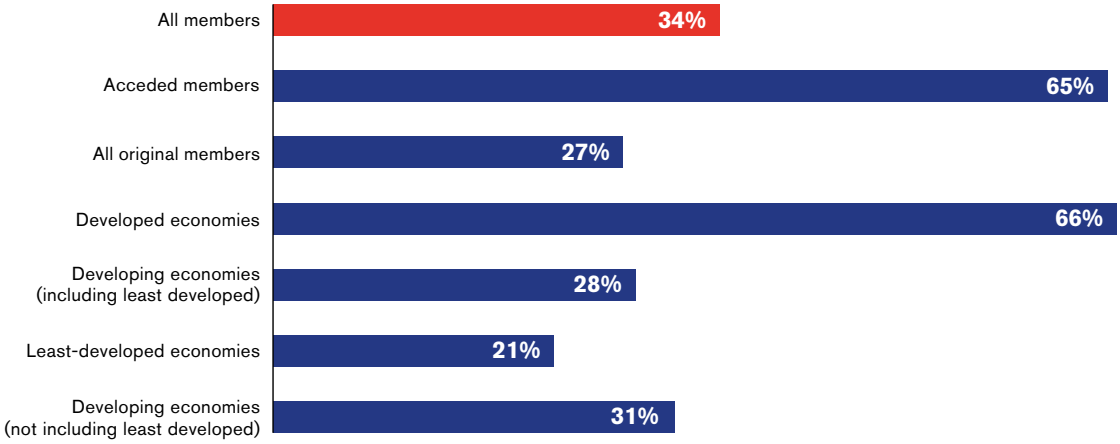
As a whole, WTO members have so far made limited use of GATS to encourage lower services trade restrictiveness or to guarantee existing levels of access so as to ensure greater policy predictability and to circumscribe recourse to trade- and investment-restrictive measures.

Since the conclusion of extended (i.e. post Uruguay Round) negotiations in telecommunications and financial services in 1997, WTO members have not collectively improved their market access commitments through negotiations. The only improvements that have been registered have resulted from the commitments scheduled by newly acceding members.

Most WTO members have not scheduled commitments in a majority of sectors covered by GATS. On average, schedules of WTO members have specific commitments in roughly a third of all services subsectors (see Figure 24). Sectoral coverage varies significantly across the membership, with developed economies having on average more commitments than developing economies (66 per cent compared to 31 per cent), which in turn have more than least-developed economies (21 per cent).

In sectors where market access commitments are scheduled, many remain unbound for certain modes of supply or allow for the continued use of existing restrictive measures (limitations). With the notable exception of members that acceded to the WTO after its creation, GATS commitments tend not to bind the existing level of openness. This implies that the level of policy restrictiveness allowed by the GATS far exceeds, on average, the restrictiveness of applied services trade policy regimes.[30]

Figure 24.
Average proportion of services subsectors subject to specific commitments under GATS, selected WTO member groupings



Source: WTO Secretariat.

(c) Preferential trade agreements secure deeper commitments, widening the gap with multilateral bindings

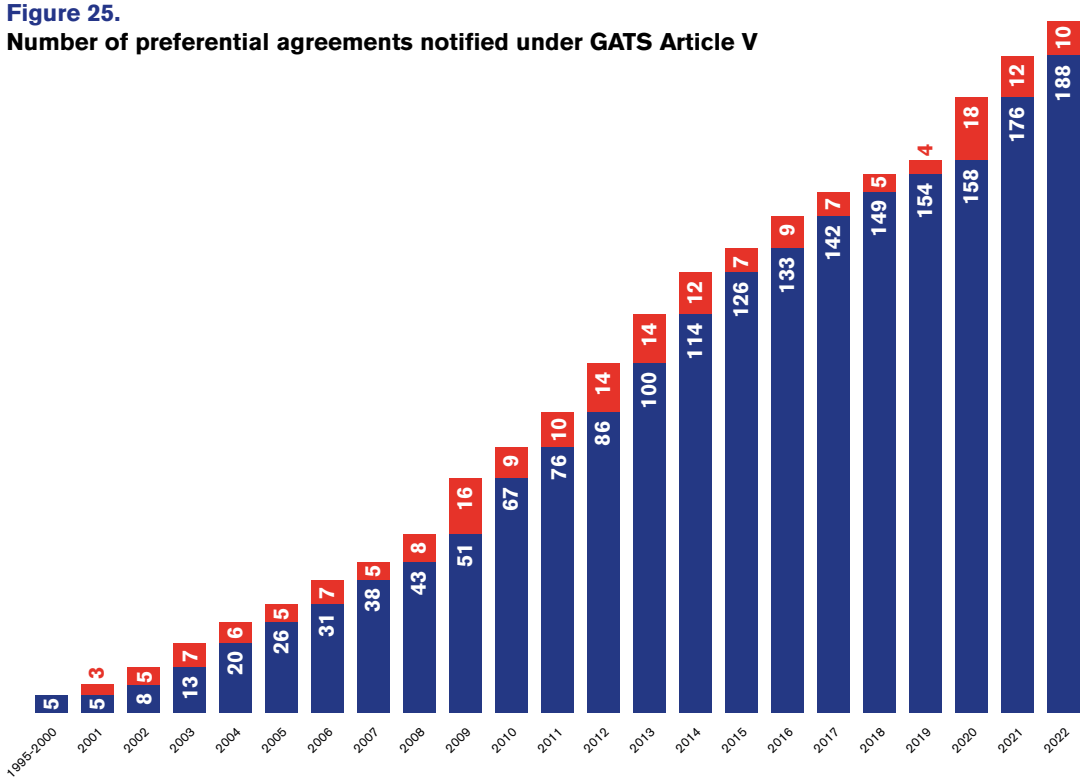
The scheduled commitments outlined above contrast with commitments undertaken in preferential trade agreements (PTAs) covering services, whose number has grown at a fast pace since the WTO was established (see Figure 25) and where parties have undertaken, on average, significantly higher levels of commitments than at the multilateral level (see Figure 26).[31]

While services PTAs, unlike goods agreements, typically result in marginal *de novo* liberalization in practice[32], most such agreements nonetheless manage to bind existing levels of discriminatory and market access impeding measures to a much greater extent than is the case under GATS.[33]

However, despite the substantial increase in the number of services PTAs since 2000, these agreements cover only part of all trading relationships among WTO members, and largely fail to include trade with and among its poorer members.

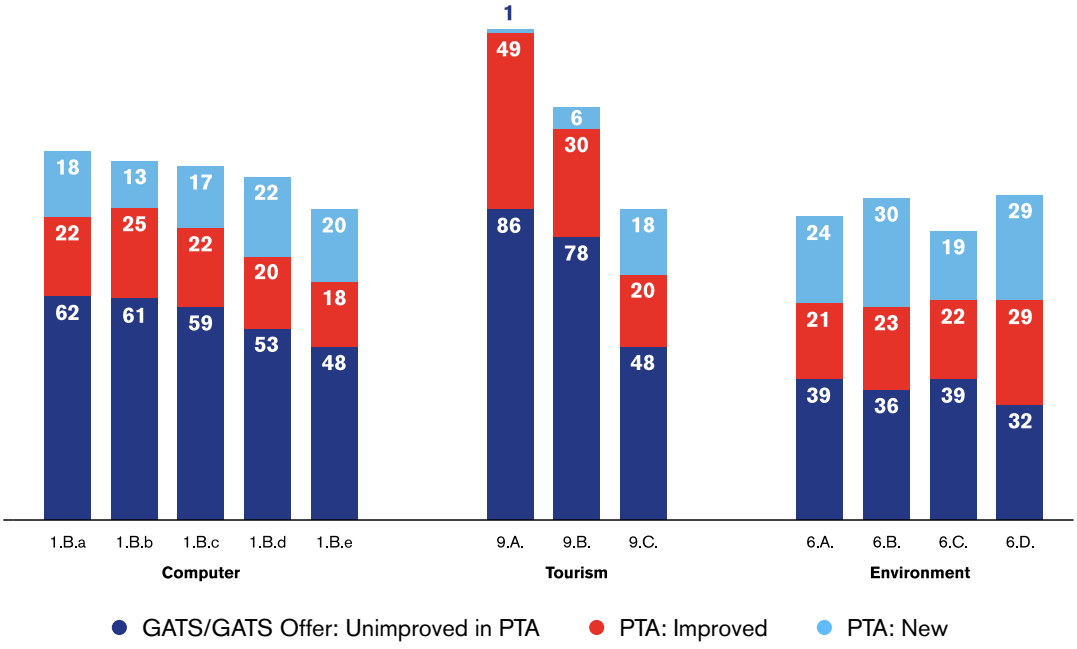
Research suggests that services PTAs promote GVC participation through both backward and forward linkages. Lee (2019) finds that services PTAs increase GVC-related exports in manufacturing from developing to developed countries, as well as between developing countries. The effect of services PTAs on gross exports is twice that of PTAs that cover only trade in goods. Díaz-Mora *et al.* (2022) show that services PTAs boost the services value-added from partner countries that is embodied in manufacturing exports, with larger impacts from deeper agreements covering a broader set of behind the border issues (such as investment and intellectual property-related matters).

Figure 25.
Number of preferential agreements notified under GATS Article V



Source: WTO Secretariat, computed from http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx.
Note: New Article V agreements notified in each year are illustrated in orange, while those notified in previous years are in blue.

Figure 26.
GATS+ commitments in selected sectors in preferential trade agreements



Source: Roy and Sauvé (forthcoming).
Note: On the basis of 142 of the 193 regional trade agreements notified under GATS Article V as of 1 March 2023. Counting EU-25 as one. "GATS/GATS offer: Unimproved in PTA" means the number of members that have GATS commitments or that have made an offer in the WTO services negotiations in the relevant subsector, and that have not taken better commitments in RTAs. "PTA: Improved" means the number of members that have undertaken a commitment in RTAs that improve a GATS commitment or offer. "PTA: New" means the number of members that have undertaken a commitment in PTAs, where no commitment or offer had been made under the GATS. The subsector 1.B Computer and related services falls under the sector 1 Business Services, with the following categories: 1.B.a Consultancy services related to the installation of computer hardware; 1.B.b Software implementation services; 1.B.c Data processing services; 1.B.d Data base services; and 1.B.e Other computer services. The sector 6 Environmental services includes: 6.A Sewage services; 6.B Refuse disposal services; 6.C Sanitation and similar services; and 6.D Other environmental services. The sector 9. Tourism and travel related services includes: 9.A Hotels and restaurants; 9.B Travel agencies and tour operators services; and 9.C Tourist guides services.

(d) The value of binding existing levels of openness in services trade agreements

While trade barriers impose costs, uncertainty stemming from the absence of, or relatively limited, multilateral commitments carries additional costs. As in the case of FDI, research underscores that the predictability of market access conditions underpinned by WTO commitments has commercial value in itself. In the case of goods, trade policy uncertainty – measured as the gap between bound and applied tariffs (also known as "water" in the tariff) – is considered as a significant impediment to trade.[34]

Recent studies corroborate that commitments scheduled under the GATS and in PTAs also exert positive impacts on services trade and investment, even when controlling for applied levels of openness. Moreover, services commitments that bind the regulatory status quo have been found to generate more trade than commitments that have "water" in them (Ciuriak *et al.*, 2020; Lamprecht and Miroudot, 2018).

Endnotes

1 Because trade in services extends, for example, to the presence of foreign-owned suppliers or the movement of natural persons, services trade policies cover a wide range of government measures that have a deep impact on the functioning of services markets and, also, on domestic enterprises. Barriers to trade in services most typically involve government measures that discriminate between foreign and domestic services or suppliers in different modes of supply (GATS Article XVII: National Treatment). Services trade barriers can also take the form of discriminatory or non-discriminatory measures that limit the total number of services suppliers, operations, value of transactions, number of natural persons employed, or that limit foreign ownership, or restrict the type of legal entity through which a supplier may provide a service (as spelled out in GATS Article XVI: Market Access). Taken together, market access and national treatment measures largely determine the extent to which there is international contestability and competition in a country's services market.

2 See the methodology described in Miroudot *et al.* (2013).

3 For further information on what determines total factor productivity growth in services, see van der Marel (2012).

4 See Nordås and Rouzet (2016).

5 See Nordås and Rouzet (2016) and Raballand and Macchi (2009).

6 Restrictions were found to increase shipping costs by 26-68 per cent and to reduce trade flows by 48-77 per cent.

7 For a full account, see Teravaninthorn and Raballand (2009).

8 United Nations Conference on Trade and Development (UNCTAD) data on greenfield FDI projects shows that the services sector accounted for 60 per cent of the value of confirmed projects in 2020-2021, up from 42 per cent in 2003-2004. The services sector also hosts the largest value of greenfield FDI projects targeting developing countries (52 per cent in 2021, compared to just 25 per cent in 2003). And greenfield FDI that originates in developing countries also increasingly concerns the services sector (47 per cent in 2021).

9 For background information, see Thomsen and Mistura (2017) and UNCTAD (2006).

10 For further research in this area, see Andrenelli *et al.* (2018) and Rouzet *et al.* (2017).

11 See Arnold *et al.* (2008, 2011, 2016) and Duggan *et al.* (2013). The positive impact of services trade is also linked to the quality of institutions and regulatory frameworks. Beverelli *et al.* (2017) find that the impact of services trade openness on a country's manufacturing productivity is larger for countries with stronger institutions. Similarly, Fiorini and Hoekman (2020) find that the impact of openness to trade under mode 3 on manufacturing productivity is greater when accompanied by quality (pro-competitive) domestic economic regulation (see also Fiorini and Hoekman, 2018a).

12 Export sophistication captures the productivity level of a country's export basket. A country is considered a more sophisticated exporter if it exports more goods of higher productivity (Su et al., 2019). See also Hausman *et al.* (2007).

13 See Díaz-Mora *et al*. (2018), Liu *et al*. (2020) and Wolfmayr (2012). Further, the positive impact of services trade is linked to the quality of institutions and regulatory frameworks. Beverelli *et al.* (2017) find that the impact of services trade openness on a country's manufacturing productivity is larger for countries with stronger institutions. In a similar vein, Fiorini and Hoekman (2020) find that the impact of openness to trade under mode 3 on manufacturing productivity is greater when accompanied by quality (pro-competitive) domestic economic regulation. See also Fiorini and Hoekman (2018a).

14 This is consistent with earlier research in Kowalski *et al.* (2015) and OECD/WTO (2015).

15 For further information, see: Fernandes and Paunov (2012) for Chile; Arnold *et al.* (2011) for the Czech Republic; and Arnold *et al.* (2016), Francois and Hoekman (2010) and Heuser and Mattoo (2017) for India.

16 See Nordås and Rouzet (2016).

17 See the research by Nordås and Rouzet, (2016). The negative impact of higher levels of services trade restrictiveness on exports may be due, at least in part, to the fact that services trade barriers are not always discriminatory but rather include behind-the-border measures that impose costs on domestic suppliers as well.

18 For further information, see Miroudot and Cadestin (2017a).

19 For background information, see World Bank (2016) and OECD/WTO (2015).

20 Information on challenges in e-commerce and connectivity in the context of Aid for Trade can be found in Marchetti (2018) and Roy (2017), respectively.

21 For an account, see ITU (2016).

22 For further information on the liberalization of telecommunications, see Lestage *et al.* (2013).

22 See Borchert *et al.* (2017) and Nordås and Rouzet (2016).

23 For background information, see Balchin *et al.* (2016), Djiofack-Zebaze and Keck (2009), Eschenbach and Hoekman (2006), Mattoo *et al.* (2006) and Nordås (2020).

24 For background information, see World Bank (2016).

25 See Lan and Shepherd (2019) and Sauvé (2019).

26 See also *Trade in Services Related to the Environment,* OECD document COM/TAD/ENV/JWPTE(2015)61/FINAL, 27 March 2017.

27 Jones and Olken (2010) find that export growth of agricultural products and light manufacturing from least-developed countries decreases on average by 2-5.7 per cent in response to a rise in the country's temperature by 1°C (see also Dell *et al.*, 2012).

28 One such example is Hello Tractor, which operates in Bangladesh, India and Pakistan, as well as in seven African countries (FAO, 2022).

29 For background information on ICT in agriculture, see FAO (2017).

30 For background information on bound level of trade restrictiveness, see Miroudot and Pertel (2015).

31 For background information, see, for example, Roy (2014), Roy *et al.* (2007) and van der Marel and Miroudot (2014).

32 There are nevertheless some important exceptions (see Roy *et al.*, 2007).

33 While a number of PTAs following the GATS positive-list modality to schedule commitments have yielded greater commitments than at the multilateral level, PTAs have innovated by using negative-list modalities that, among other things, bind existing levels of trade openness across all sectors, unless provided otherwise. Such standstill provisions, which are used by an increasing number of countries in PTAs, aim to foster greater transparency and predictability, providing services suppliers with certainty on basic "rules of the game" allowing them to plan and develop business operations in the long term (Echandi, forthcoming). In contrast, in positive-list agreements, liberalization obligations only apply to sectors explicitly listed.

34 In a study covering 149 countries, Osnago *et al.* (2015) find that the elimination of "water" in tariffs (i.e. the difference between bound and applied tariffs) increased the probability of exporting by 12 per cent. A 1 per cent decrease in water increases export volumes by 1 per cent. The study also finds that, on average, trade policy uncertainty is equivalent to a level of tariffs between 1.7 per cent and 8.7 per cent.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3 Fostering economic development through services trade

Key points

- Despite challenges linked to characteristics intrinsic to services and the heterogeneity of services markets, a deepened commitment to supportive domestic business environments and to trade openness in services form indissociable parts of a comprehensive growth-enhancing policy agenda.

- Deepened international cooperation directed to increasing the predictability of policy regimes and of commitments made in trade agreements, lowering barriers to trade in services, and promoting the adoption of trade-facilitating regulatory practices, are all key to realizing the development promise of expanded services trade.

- While a significant share of the gains from services sector reforms are typically secured through the unilateral actions of governments, trade agreements can play a useful complementary role. Disciplines on domestic regulation in trade agreements are also important by helping ensure that regulatory objectives are pursued in ways that limit adverse effects on trade.

- Aid for Trade support which targets efforts to enhance international cooperation, reduce trade costs and improve the transparency and predictability of trading conditions could spur progress on the services trade agenda – particularly at the WTO. Aid for Trade could be a useful component in addressing the challenges many developing and least-developed economies face in services trade negotiations, implementing negotiated outcomes and exporting services to the global market.

- A Trade in Services for Development initiative could help to mobilize more technical assistance and capacity building in five key areas with the aim to:

  (i) improve data and information sources on services trade;
  (ii) facilitate the participation of developing economies in international negotiations and discussions on trade in services;
  (iii) strengthen services-related regulatory frameworks and institutions;
  (iv) help developing economies seize the services trade opportunities offered by accelerating the pace of digitalization;
  (v) boost supply capacities and skill sets in developing economies to increase and diversify their services exports.

1. Deepening international cooperation in services trade

A number of challenges, not least those arising from the sheer diversity of the services economy (see Box 11), confront governments as they enact policies aimed at harnessing the potential contribution of services trade to inclusive economic growth and development. Deepened international cooperation directed to increasing the predictability and credibility of domestic policy regimes, scaling up commitments made in trade agreements, lowering barriers to trade and investment in services, and promoting the adoption of trade-facilitating regulatory practices are all key to fulfilling this potential. In many instances, a conducive domestic environment will be a key determinant of the gains from expanded services trade.

(a) Increasing policy predictability and lowering barriers to services trade

Trade agreements can play a useful complementary role in securing the gains from services sector reforms, even though reform is typically secured through the unilateral actions of governments. Negotiations on services trade are worth pursuing for several reasons.

Demonstrating credibility

Services trade agreements provide governments the opportunity to reap the benefits of locking-in enacted domestic reforms. Binding commitments demonstrate the credibility of domestic reforms and signal a commitment to improved business and investment climates. The credibility enhancing properties of multilateral commitments rank among the most important features of the General Agreement on Trade in Services (GATS) and, more broadly, of WTO rule making. Similar considerations also apply to the binding commitments assumed under preferential trade agreements (Ciuriak *et al.*, 2020).

Services trade agreements offer the possibility of committing to future policy reforms, which can instil a greater sense of urgency about necessary domestic regulatory reforms while also promoting an orderly adjustment path.[1] A scheduled commitment to future market opening may be more credible than an unbound domestic reform announcement, particularly for countries saddled with higher risk premiums demanded by investors.

Reciprocal liberalization

Unilateral liberalization in services, while widespread, is far from uniform across regions, countries, sectors and modes of supply. Important barriers remain, including in areas of particular interest to several developing economies, such as the movement of natural persons or professional services for example. However enlightened, unilateral domestic reforms are not designed to address barriers in foreign markets. The only feasible means of doing so is to pursue reciprocal liberalization opportunities with key trading partners.

Reciprocity-based bargaining can help governments overcome domestic resistance to change. Reform can be easier if a government can demonstrate that its exporters will benefit from expanded market access opportunities, including those brokered in other areas of a trade negotiation.

Services diversification

Trade negotiations offer scope to diversify services exports and identify export potential that could gain from improved transparency and policy predictability at home and abroad. Expanded two-way trade in services can yield important gains by stimulating competition and diffusing international best practices, particularly in matters of domestic regulation, skills, technologies and investment capital.

Attracting investment

The entry of foreign providers can supply better services to domestic consumers, improve the competitiveness of domestic firms confronting more contestable market conditions and, given that a predominant share of trade in services occurs through foreign direct investment, bring much-needed capital to host countries. Affording easier entry conditions to foreign suppliers can also help to stimulate investment in infrastructure – an area that is often stifled by public-sector budgetary constraints or limited access to international capital markets.

Box 11. Differentiation matters: Contending with the diverse nature of services

Opening services markets to foreign competition confronts policy-makers with a host of challenges linked to the high degree of differentiation characterizing the services economy.* The sector's sheer diversity suggests that policy reforms need to pay close attention to – and be informed by – differences in the nature and roles that various services play, in the multiple ways they are traded, in the intensity of the regulatory scrutiny they command, in the broad range of public policy aims their supply pursues and in the political economy forces they put in play.

Services further differ in their skill and capital intensity, the degree to which they are connected to other sectors, their propensity to be supplied by micro, small and medium-sized enterprises or by large multinational firms, and the degree to which they can be remotely supplied. Such differentiation explains why services-sector governance rarely – if ever – proceeds on a one-size-fits-all basis. It also explains why domestic reforms anchored in trade agreements typically proceed in a progressive manner.

Services such as maritime, air and land transport, wholesale trade, logistics and express delivery are all central to the production and facilitation of goods trade and to the operation and resilience of cross-border production networks. A host of services, ranging from energy, telecommunications, banking, insurance, business and professional services to transportation are embedded in all products – goods and services – that economies produce, trade and invest in.

Tourism-related activities represent the leading source of export earnings for a large number of developing economies, including many least-developed economies. Across the world, a vast array of information and communication services provide the backbone to e-commerce.

Education and healthcare services, with their important public good characteristics, are key to a healthy, skilled and productive workforce. While the healthcare sector traditionally has a strong public sector presence in many countries and is among the lesser committed sectors in trade agreements, trade in both areas has experienced rapid growth in recent years and produced major export gains in a rising number of developing economies.

The high degree of regulatory scrutiny services command reflects the ubiquity of instances in which services markets might fail to produce socially optimal outcomes in the absence of regulatory measures pursuing legitimate public policy aims, such as consumer protection, the prevention of systemic risks in financial markets, environmental degradation or undue market concentration in network industries.
All are factors to take into account in the context of international cooperation.

Differentiation is also central theme in services trade negotiations, which typically involve a broad and complex set of policies and regulations, ministries covering the leading sectors, regulatory agencies and diverse stakeholders – domestic and foreign, public and private. Care is thus needed when assessing the nature, pace and sequence of regulatory reform and market opening of services if they are to maximize an economy's growth and development prospects.

The conduct of services sector reforms, whether pursued autonomously or in the context of trade agreements, can therefore prove more challenging than in other sectors (see Sáez *et al.*, 2014). This suggests that a strong development payoff can be expected from stepped up levels of Aid for Trade targeting the nexus between domestic reforms and trade negotiations in the sector.

* For a fuller discussion of the differentiated nature of services, see Nayyar and Davies (2023).

Global value chains

Services trade negotiations can help countries secure greater value from their participation in cross-border production networks by boosting the competitiveness of services involved in backward and forward global value chain (GVC) linkages.

Technical and financial assistance

Developing economies can leverage binding commitments in trade agreements to benefit from increased technical and financial assistance to implement services sector commitments. Experience under the WTO's Trade Facilitation Agreement has shown the usefulness of tying the scheduling of commitments to economies' capacity to implement them – with technical and financial assistance to support implementation efforts. A similar approach is contemplated under ongoing plurilateral negotiations on Investment Facilitation for Development (see Box 12).

(b) Promoting the adoption of trade-facilitating regulatory practices

Since services are subject to a high degree of regulatory intensity, improved capacity to regulate services markets is of critical importance for enhanced competitiveness. A sound domestic regulatory environment is essential to reaping the benefits of expanded services trade and investment.

Measures taken to promote greater market contestability in services bring greater rewards when rooted in and accompanied by sound regulation and strengthened regulatory enforcement capacity.[2] Technical support directed at building or strengthening domestic regulatory capacity is therefore needed, including in sectors where liberalization is undertaken autonomously by developing economies.

Disciplines on domestic regulation contained in trade agreements play a significant role in promoting and consolidating domestic reform efforts in services markets and in ensuring that regulatory objectives pursuing key public policy objectives are achieved in an economically efficient manner. Such disciplines can also equip developing-economy exporters with the means to address regulatory barriers to their own exports in foreign markets.

As recurring bouts of financial market instability have shown, inadequate domestic regulation can give rise to serious internal distortions, which in turn can entail equally severe social dislocation with third-country ramifications, given the interconnected nature of financial markets. Inadequacies in domestic regulation, for example in the field of professional licensing, can also legitimize external barriers to trade, to the detriment of developing-economy exporters (OECD, 2023).

The establishment of an appropriate regulatory framework can enable a country to take advantage of potential export opportunities by promoting the emergence of competitive domestic suppliers that meet world standards of services provision. For example, by facilitating the development of a safe and reliable healthcare system, a sound regulatory framework can enable a country to take advantage of new opportunities to offer health and wellness-related tourism services.

Box 12. Negotiations on Investment Facilitation for Development

Investment facilitation at the WTO aims to promote more transparent, efficient and investment-friendly business climates by making it easier for investors to invest, conduct their day-to-day business and expand their existing investments, as well as for host and home governments to work cooperatively to facilitate greater volumes of sustainable investment.

Following two years of preparatory work, participants (currently more than 110 WTO members) formally launched negotiations on the Investment Facilitation for Development (IFD Agreement) in September 2020.

An IFD Agreement could complement and reinforce members' existing efforts to facilitate investment by:

- creating clear and consistent global benchmarks for investment facilitation, thus ensuring that (minimum) common standards are applied across economies, reducing regulatory uncertainty, minimizing transaction costs, and making it easier for investors to invest;
- anchoring domestic investment facilitation reforms in shared international commitments, thus reducing policy uncertainty, strengthening members' reform efforts and sending a positive signal to investors;
- providing a global forum to promote best investment facilitation practices, thus enhancing cross-border regulatory cooperation and improving information exchanges;
- supporting and strengthening the capacity of developing and least-developed economies to implement investment facilitation measures through technical assistance and capacity building.

An IFD Agreement would also include a section on sustainable investment, which contains provisions to encourage the uptake of responsible business conduct principles and standards by investors and enterprises, as well as the adoption of anti-corruption measures. An IFD Agreement would apply to investment facilitation in services and non-services sectors, but would not cover market access, investment protection and investor–state dispute settlement.

Providing special and differential treatment, including technical assistance and support for capacity building, to developing and least-developed economies is also a key component of a prospective IFD Agreement. Echoing an approach pioneered in the WTO's Trade Facilitation Agreement, developing and least-developed economies would be allowed to designate the provisions of a future IFD Agreement under one of the three categories (A, B, C) and request additional time or technical assistance and capacity building for implementation.

Three key pillars are sections on

Transparency of investment measures

Accelerating and streamlining investment administrative procedures

Enhancing international cooperation, information sharing and exchange of best practices

Source: See https://www.wto.org/english/tratop_e/invfac_public_e/factsheet_ifd.pdf.

While an increasing number of developing countries have been undertaking reforms to improve their domestic business and regulatory environments, technical support directed to improving regulatory design and enforcement capabilities could further enhance their competitiveness at the international level.

The *Reference Paper on Services Domestic Regulation*[3], which a group of 69 WTO members agreed to in 2021, addresses transparency and procedural aspects linked with the permission to supply services across different services sectors (see Box 13).

"A sound domestic regulatory environment is essential to reaping the benefits of expanded services trade and investment."

The reference paper disciplines build on and consolidate important developments in the field of good regulatory practice and drafting trends in preferential trade agreements adopted over the past two decades. They also represent an important building block for countries that want to engage in more substantive regulatory co-operation.

2. A Trade in Services for Development initiative: Aid for Trade priorities in services

In addressing the deficits in negotiating, enforcement and supply-side capacities that many developing economies face in services negotiations, a practical Aid for Trade component could usefully underpin domestic reform efforts and complement trade agreements by forming part of negotiated outcomes. This was the case in the WTO's Trade Facilitation Agreement, where donor support has proven key to both reaching consensus on the accord and supporting the generally rapid pace of its implementation.

Similar approaches aimed at tying technical assistance to the implementation of agreed negotiated outcomes is today at play in the recently concluded agreements on harmful fisheries subsidies and services domestic regulation and is being discussed in other negotiating initiatives, notably in the area of investment facilitation for development.

Box 14 offers insights on the nature of Aid for Trade disbursements directed to supporting services-related activities. The figures reveal that, with the exception of Aid for Trade disbursements directed to banking and financial services, aid disbursements in all other areas relevant to services trade have either remained largely unchanged or decreased over the last 15 years, with the largest drop registered in Aid for Trade spending directed to business and other commercial services.

Just as trade agreements can be viewed as complements to domestic reform efforts in services markets, so too must Aid for Trade linked to heightened engagement in services negotiations complement efforts at improving the quality of domestic regulatory and policy-making environments that are independent from trade policy considerations.

Box 13. Tackling regulatory barriers to trade in services: The outcome on services domestic regulation

At the end of 2021, a group of WTO members representing 92.5 per cent of the world's services trade agreed on a set of disciplines on services domestic regulation to mitigate the unintended trade-restrictive effects of measures relating to licensing and qualification requirements and procedures, and technical standards. Several business associations around the world welcomed this WTO outcome as a concrete answer to the challenges that suppliers – and especially micro, small and medium-sized enterprises and women entrepreneurs – regularly face in services markets.

By focusing on procedural aspects of obtaining authorization to supply services, the disciplines aim to ensure that existing market access conditions are not in practice nullified by opaque and complex procedures that services suppliers have to navigate when seeking authorization to supply services.

While preserving WTO members' space to regulate services in accordance with their national policy objectives, the disciplines align closely to good regulatory practice developed at the international level under three key objectives: transparency, certainty and predictability of procedures, and regulatory quality and facilitation.

One of the novel disciplines that has been agreed requires that authorization procedures for services suppliers do not discriminate against women. Based on the recognition that many economies still maintain barriers for women to operate in services markets, which do not find correspondence for men, this discipline seeks to provide a concrete avenue to support women's participation in international trade in services.

Recent findings by the Organisation for Economic Co-operation and Development and the WTO suggest that the benefits from implementing the disciplines on services domestic regulation would result in significant reductions in trade costs, particularly in important backbone services sectors, such as commercial banking, telecommunications and insurance, as well as computer and professional services (OECD/WTO, 2021).

Implementation is likely also to generate broader trade benefits for the economy as whole, such as an increase in services trade by all modes of supply, as well as greater level of entrepreneurship and more active involvement in global value chains (Baiker *et al.*, 2021).

Three key objectives

Transparency

Certainty and predictability of procedures

Regulatory quality and facilitation

Source: See https://www.wto.org/english/tratop_e/serv_e/sdr_factsheet_jul22_e.pdf.

Box 14. Documenting Aid for Trade in services

The Synthesis Report annexed to the G20's 2020 Ministerial Communiqué* underscored that Aid for Trade needs to be mobilized to provide new trade opportunities, reduce trade costs in services, and enhance connectivity by providing an enabling environment for services markets.

A significant part of Aid for Trade disbursements – totalling US$ 48.7 billion in 2020 – interact with services, as suggested by the breakdown of broad categories of disbursements (see table below). Of the total, however, 54 per cent of Aid for Trade disbursements relate to transport and storage and energy generation and supply. Both categories concern the hard infrastructure of services markets (physical installations such as roads, airports or energy grids) rather than "soft infrastructure" at play in services negotiations (e.g. policy formulation, competitiveness diagnostics, institutional strengthening and services sector regulation).

Indeed, classification of Aid for Trade data does not provide sufficiently disaggregated information to capture the extent to which development assistance qualitatively improves trade negotiating capacities, strengthens regulatory institutions and improves services trade policy formulation and implementation. Other categories, such as communications, business and other services or tourism, account for a relatively small – and sometimes diminishing – share of total Aid for Trade disbursements directed to the services.

Aid for Trade disbursements, 2006-2020

(Value in US$ million and per cent of total)

	US$ million				In per cent			
Categories	**2006**	**2010**	**2015**	**2020**	**2006**	**2010**	**2015**	**2020**
Trade policy and admin. management	383.3	636.9	447.5	681.4	1.85	1.99	1.03	1.40
Trade facilitation	71.9	354.9	446.8	362.1	0.35	1.11	1.03	0.74
Regional trade agreements	60.2	108.2	102.0	48.8	0.29	0.34	0.24	0.10
Multilateral trade negotiations	18.4	29.9	17.0	7.9	0.09	0.09	0.04	0.02
Trade-related adjustment	0.0	66.3	14.3	2.7	0.00	0.21	0.03	0.01
Trade education/ training	9.7	35.2	34.2	25.1	0.05	0.11	0.08	0.05
Transport and storage	5,835.1	9,463.6	11,893.7	11,053.2	28.22	29.54	27.43	22.68
Communications	511.2	538.7	478.3	874.3	2.47	1.68	1.10	1.79
Energy generation and storage	4,178.0	6,988.6	10,394.5	11,784.7	20.21	21.81	23.97	24.18
Business and other services	1,703.2	1,646.2	2,136.7	2,307.8	8.24	5.14	4.93	4.74
Banking and financial services	1,527.9	2,498.7	5,999.1	7,354.2	7.39	7.80	13.84	15.09
Agriculture	3,466.1	6,817.2	7,804.1	8,737.3	16.76	21.28	18.00	17.93
Forestry	504.5	758.9	801.4	1,159.9	2.44	2.37	1.85	2.38
Fishing	221.4	322.9	240.8	448.1	1.07	1.01	0.56	0.92
Industry	1,215.8	1444.2	1,904.3	2,685.4	5.88	4.51	4.39	5.51
Mineral resources and mining	914.7	173.9	471.2	1,029.0	4.42	0.54	1.09	2.11
Tourism	55.6	153.7	175.8	169.9	0.27	0.48	0.41	0.35
Aid for Trade total	20,677.1	32,038.0	43,361.6	48,731.7				

Source: OECD/WTO (2019, 2022).

* See https://www.g20.org/content/dam/gtwenty/gtwenty_new/about_g20/previous-summit-documents/2020/Final%20G20%20FMCBG%20Communiqu%C3%A9%20-%20July%202020.pdf.

Note: In the 2019 WTO-OECD Aid for Trade Monitoring and Evaluation exercise, most donor countries (66 per cent) and recipient countries (88 per cent) identified services as the sector where future support for economic diversification would be most required.

Moreover, any call for increased Aid for Trade must feature a parallel call for its rigorous monitoring and evaluation. The question of aid effectiveness in services trade remains an area where important information gaps remain and to which empirical attention could usefully be directed.

A trade services for development initiative could aim to:

- improve data and information sources on services trade;
- facilitate the participation of developing economies in international negotiations and discussions on trade in services;
- strengthen services-related regulatory frameworks and institutions;
- help developing economies seize the services trade opportunities offered by the accelerating pace of digitalization;
- boost supply capacities and skill sets in developing economies to increase and diversify their services exports, as called for by GATS Article IV (Increasing Participation of Developing Countries) and as recently reaffirmed by the outcome document of the WTO's 12th Ministerial Conference.[4]

(a) Improving the availability of services-related data and policy-relevant information

The first area where increased efforts at international cooperation can improve policy design and lend direct support to services trade negotiations is addressing the often acute deficits of data, information, analytical capacity and expertise limiting the ability of developing and least-developed economies to engage meaningfully in services trade policy formulation and negotiations at the national, regional and global levels. This concerns, for example, a lack of information on existing national policies that may be affected by the rules and commitments scheduled in different sectors and modes of supply.

Some developing economies also have limited capacity to diagnose sources of comparative advantage in services, identify the policy mix best able to boost productive capacity or assess the distributional impacts of various policy choices (Engel *et al*., 2021). Also common are weaknesses in domestic institutional architectures for inter-agency coordination and external stakeholder consultations given the large number of public and private sector actors at play in services trade policy.[5] All are areas in which technical assistance directed at strengthening negotiating and analytical capacities in services can yield important benefits.[6]

Informed policy-making in services needs to be underpinned by credible data. Despite marked improvements in the availability of services trade data relative to the situation prevailing during the Uruguay Round, the statistical landscape governing services trade continues to exhibit important shortcomings. For instance, too few developing economies gather, compile and publish data on bilateral services trade (on a balance of payments basis), on the activities of foreign affiliates and on investment flows in the services sector.

Such data inadequacies force recourse to mirror data to approximate the value of transactions, which is far from optimal given the many gaps in reported bilateral data. Many developing economies also confront a dearth of disaggregated data on services traded at the product level, on the value of services trade by modes of supply, on digital trade as well as on domestic services output.

Initiatives to broaden the availability of the above statistical sources in developing economies – in particular least-developed economies, call for more funding directed to technical assistance and statistical capacity building. In response to these data gaps, the OECD, the World Bank and the WTO have developed experimental trade in services datasets.

WTO–OECD Balanced Trade in Services dataset

The WTO–OECD Balanced Trade in Services (BaTiS) dataset is a comprehensive and consistent matrix of trade in services statistics (on a balance of payments basis) for 200 reporters and partners covering 12 services subsectors combining available national data with a range of estimations and adjustment procedures.

Trade in Services by Mode of Supply dataset

The Trade in Services by Mode of Supply (TiSMoS) dataset was produced by the WTO and funded by the Directorate-General for Trade of the European Commission. Covering 200 economies, it provides an overall picture of international trade in services across the four modes of supply defined by GATS.

Trade in Value-Added dataset

Efforts are being made to better understand the flows of goods and services in GVCs, since such flows and interactions between economies are not reflected in conventional measures of international trade. The development of Trade in Value-Added (TiVA) estimates by the OECD addresses this information gap. However, such data are rarely available for developing economies, given the lack of underlying official statistics necessary to compile TiVA data – in particular supply-use or input–output tables, national accounts data by type of activity and detailed bilateral trade in services statistics.

Services Trade Policy Database and Services Trade Restrictions Index

The World Bank and the WTO have jointly developed the Services Trade Policy Database (STPD), a services regulatory database, and the associated Services Trade Restrictions Index (STRI), which quantifies levels of applied policy restrictiveness in services markets (see Box 15).

Improving data coverage

While the above statistical advances significantly improve countries' understanding of key trends and the policies driving them, all require deeper country coverage (particularly of poorer countries) and regular updates to serve useful diagnostic and analytical purposes. This in turn implies the need for continued donor support for the various international organizations to cover the recurring costs involved in collecting and analysing such data.

Moving in this direction can be expected to produce the twin benefit of ensuring that policy choices rest on rigorous analysis and that the comfort level required to engage more deeply in services sector reforms and negotiations is raised.

(b) Strengthening developing-economy participation in international discussions on services trade

Much capacity-building effort in services has so far focused on helping trade negotiators and policy officials master the legal provisions of services agreements, such as GATS. For many poorer economies, this remains an important challenge, particularly where services expertise is scarce in trade and foreign ministries and even more so in relevant line ministries and regulatory agencies. Short-term training activities directed to overcoming such knowledge gaps retains its salience in many poorer settings.

However, equally important needs include:

- acquiring the analytical tools to assess alternative domestic reform scenarios;
- developing government-wide negotiating processes;
- strengthening public–private dialogue on services-related reforms and negotiations;
- helping domestic services providers take full advantage of the market access opportunities arising from regional and multilateral liberalization efforts.

Box 15. WTO–World Bank Services Trade Policy Database and Services Trade Restrictions Index

Since 2013, the World Bank and the WTO have been developing the joint Services Trade Policy Database (STPD) and the associated joint Services Trade Restrictions Index (STRI). This cooperation builds upon earlier work on services trade policies by the World Bank in 2008-2011. The STPD, inaugurated in 2019 (Borchert *et al*., 2019, 2020), comprises two components: a regulatory database and the STRI.

Originally, the database covered 76 economies and the following services (with some of the listed sectors disaggregated into more detailed subsectors):

- professional services (accounting, auditing, legal);
- distribution;
- financial (banking, insurance);
- telecommunications;
- transport services (air, rail, road, maritime).

The database was significantly expanded between 2020 and 2022 to cover 54 African economies (all parties to the African Continental Free Trade Area) and six Pacific Islands. Sectoral coverage was also increased (adding architecture, engineering, computer, postal and courier, audiovisual, construction, health, tourism). Again, there was additional subsector detail in some cases.

As of May 2023, the STPD covers 129 economies and is in the process of being expanded to cover new ones. The database provides regulatory information on around 500 measures affecting services supply in each economy through the various modes of supply. The regulatory information is displayed and organized according to a classification of policies jointly developed by the WTO and the World Bank that comprises five broad categories:

(i) conditions on market entry;
(ii) conditions on operations;
(iii) measures affecting competition;
(iv) administrative procedures and regulatory transparency;
(v) miscellaneous measures not covered by the previous four categories (see table 1 of Borchert *et al*., 2020).

Based on the regulatory information collected, the restrictiveness of countries' policies in each of the subsectors is quantified by means of the STRI – an index that quantifies a country's applied policies on trade in services on a scale from 0 (fully open) to 1 (completely closed to foreign services or services suppliers).

Drawing from the STPD regulatory information at the individual measure level, all key restrictions affecting trade in services are individually given a score from a six-level scale of restrictiveness that ranges from 0 to 1. All measures thus scored at the country-subsector-model level are then combined and aggregated using an algorithm that is based on a constant elasticity of substitution function.

The STRI summarizes policy restrictiveness in an accessible and compact way that is impossible to achieve with text-based measures. It thus facilitates a comparison of regulatory stances across sectors, countries and potentially over time, and it serves as crucial input into a wide range of quantitative analyses.

Source: World Bank and WTO (forthcoming).

Note: The regulatory information is collected in two ways: information for OECD economies is from the OECD STRI regulatory database. For other economies, the data are collected through primary surveys completed by local law firms or consultants.

Mastering such skills can strengthen developing economies' capabilities to fully take advantage of services trade.

Benefits could also be derived from having roadmaps in place for services sector development in the context of national development strategies. Efforts directed at helping governments craft a strategic roadmap for their services sector and the role that trade policy and trade agreements can play in pursuit of the sector's development are especially important. This would help many developing economies to better define their interests when negotiating on services in trade agreements at the bilateral, regional or multilateral levels[7] and ensure their alignment with ongoing domestic reforms.

Equally important are efforts directed at strengthening in-country capacity – within governments, policy research institutions and academia – to produce the data and analysis needed to inform trade policy formulation and implementation.

Defining national interests in services requires detailed information about the full range of measures that prevent effective access to the markets of key trading partners. The breadth of services trade and the diversity of sectors render information gathering a complex task that challenges many developing economies, even larger ones.

Trade-related technical assistance can provide services suppliers in developing economies with greater economic information on, among other things:

- market access conditions and opportunities in export markets;
- access to distribution channels;
- information on product standards;
- business-to-business dialogue;
- networking.

Support given to mapping the landscape of competitive domestic services suppliers, the majority of which are micro, small and medium-sized enterprises (MSMEs), can promote heightened insertion in both regional and global value chains and closer linkages with the lead investor firms that typically drive GVCs.

Technical assistance and discussions on services-related analytical tools deserve greater attention from multilateral agencies and the donor community. Such support could build on South–South learning and involve dissemination of best practices by developed and developing economies that have been successful reformers.

(c) Conducting regulatory audits on services trade

As a significant part of services trade policy comprises behind-the-border measures, much of the work involved in developing a services strategy will need to focus on the domestic regulatory regime.

An inventory or trade-related audit of key existing domestic measures "affecting trade in services" can be very useful and pursued even in the absence of trade negotiations. This will strengthen the process of information sharing and inter-agency coordination and help to promote a healthy dialogue between officials involved in domestic and external policy matters, while also favouring a culture of regulatory reform and periodic regulatory impact assessment and review (see Box 16).

Trade negotiations offer opportunities for engaging in such an exercise and building trade-related capacity among regulatory officials about international agreements, trade and investment law, and international negotiating processes. Such an exercise can also improve knowledge among trade officials of the underlying policy rationale of sectoral regulatory issues and policy reform challenges and the impacts they hold for the nature and sequencing of commitments scheduled in trade agreements.

Examining the domestic regulatory regime

- **How is it framed?**
- **What objectives does it pursue and with what degree of efficiency?**
- **How rooted in international standards or international best practice are domestic regulatory requirements?**
- **How user friendly are domestic rules and administrative procedures?**
- **How are domestic regulations applied and who applies them?**
- **How trade and investment friendly are domestic regulatory regimes?**
- **Can domestic regulatory objectives be attained in ways that are less trade or investment restrictive?**

Box 16. Regulatory Assessment of Services Trade and Investment

The World Bank has developed the Regulatory Assessment of Services Trade and Investment (RASTI) toolkit to help policy-makers assess regulations consistently, streamline regulatory frameworks to improve efficiency and establish a sound process for introducing new regulations.

Filling information gaps

The first objective of RASTI is to fill information gaps on the regulatory framework for services trade. Many developing countries have only recently embarked on services sector reforms. In some cases, market opening predates regulatory reform. This can pose sequencing problems and add to the challenge of regulating the domestic services market.

RASTI provides comprehensive information on the features of the regulatory framework for all services sectors. It identifies institutional weaknesses and regulatory deficiencies that can impair services trade and the development of an enabling services sector.

Supporting regulatory reforms

Identifying laws and regulations that restrict services trade and investment is the key first step in the process of regulatory reform. Where data are available, a quantitative analysis presents additional information on how regulatory restrictions affect services sectors. This information can be used to identify the measures and sectors that are most restrictive.

Policy-makers can then consider alternative paths towards improved regulatory frameworks for services. RASTI can be conducted as part of a broader policy to attract foreign investment, as the

“Identifying laws and regulations that restrict services trade and investment is the key first step in the process of regulatory reform.

streamlining of regulatory frameworks can identify and eliminate unnecessary hurdles.

Supporting trade negotiations

Countries engaged in international trade negotiations can use RASTI to identify potential inconsistencies with international disciplines that may affect the negotiation process or compliance with agreed commitments. RASTI can also help to identify regulations that serve legitimate policy objectives and should not be affected by international trade agreements.

A detailed mapping of regulatory frameworks gives trade negotiators an accurate picture of the sectors and measures requiring attention. It can, for instance, inform trade negotiators of sensitive sectors and measures that may conflict with a proposed agreement. Once an agreement enters into force, a RASTI can support implementation by identifying inconsistent laws and regulations or sectors in need of new regulations aligned to new international obligations.

Assessing regulatory performance

Analysis of the governance framework assesses regulatory institutions' ability to develop a regulatory framework that stimulates the services sector while achieving policy goals. It also identifies administrative practices that impair the services sector, such as excessively burdensome registration requirements, non-transparent licensing procedures, and weak regulation monitoring and enforcement practices.

Note: For background information, see Molinuevo and Sáez (2014).

(d) Strengthening regulatory capacities and facilitating the mobility of capital and labour

Technical assistance relating to the services sector can make an important contribution in strengthening regulatory capacity – both of the institutions and their officials – in developing and least-developed economies. Regulatory institutions are costly to establish and maintain and require staff with sophisticated legal and economic skills. However, sound domestic regulation is critical to realizing the full benefits of open services markets, correcting market failures and addressing potential distributional impacts.

An important step in enhancing regulatory governance in services was secured by the recently agreed disciplines on services domestic regulation reached by a group of WTO members, whose provisions are intended to apply to all WTO members on a most-favoured-nation treatment basis (see Box 13).

Assistance directed at enhancing the economy's investment climate may also be particularly important in strengthening the competitiveness of the services sector, given the predominance of commercial presence as a mode of supplying services.

Assistance can also be directed at facilitating and reducing the costs attached to the cross-border mobility of services suppliers, including via mode 4 trade, where barriers remain significant. This can be done by sharing best practices in the design and operation of trade-facilitating mutual recognition agreements, as well as from initiatives aimed at reducing the costs of complying with temporary entry requirements.

Developing economies also stand to benefit from enhanced assistance in designing reforms that properly factor the distributional impacts that services trade may exert on poorer households, women, the youth or disabled workers by improving access to essential services, running the gamut from sanitation to transport, telecommunications, banking, trade finance, education and vocational training – particularly digital literacy – as well as health.

(e) Accelerating the pace of digitalization

Digitalization and the related shift to services is reshaping the geography of trade in ways that present important opportunities for developing economies. Digital trade opens new opportunities for firms of all sizes, anywhere in the world, to gain access to new and larger markets.

Digital services do not require the usual scale or capital intensity characteristic of manufacturing. Successful digitalization strategies require not only investments in information and communications technology (ICT) hardware, software and digital literacy but also a conducive legal, regulatory and institutional enabling environment for ICT services (see Box 17).

Services supplied remotely over digital networks and platforms is growing in importance. To boost cross-border trade in services, there needs to be:

- greater regulatory convergence;
- development and adoption of international or regional standards;
- adoption of measures governing issues such as data privacy and network interoperability.

Technical assistance for all these areas is being provided by international organizations to help economies narrow digital divides, improve the digital regulatory environment and strengthen their participation in digital trade negotiations (see Box 18).

Beyond efforts aimed at boosting digital readiness at the national level, a set of international rules for digital commerce is also needed to underpin the orderly growth of cross-border digital trade. Negotiating such rules will once more require more international cooperation and enhanced policy-making expertise (see Box 19).

Box 17. Digital Economy for Africa Initiative

Together with development partners and sector stakeholders, the World Bank Group's Digital Economy for Africa (DE4A) Initiative* supports the African Union's Digital Transformation Strategy for Africa** in identifying the key policy reforms and investments needed at the national and regional level for the countries in Africa to achieve their digital development ambitions.

The DE4A Initiative supports policy reforms and leverages public and private investments to build digital economies in Africa. This commitment has been accompanied by a call for countries in Africa to increase their spending on the digital economy and prioritize critical reforms.

The DE4A Initiative includes the development of "Digital Economy Scorecards" across the five key pillars of the digital economy to track objectives.

Country diagnostics offer a snapshot of the state of the digital economy at the country level across each of the five pillars. As of March 2023, 40 country diagnostics had been completed.

Digital Economy Scorecard

1. Digital infrastructure
2. Digital public platforms
3. Digital financial services
4. Digital businesses
5. Digital skills

* See https://www.worldbank.org/en/programs/all-africa-digital-transformation.
** Available at https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030.

> Services supplied remotely over digital networks and platforms are growing in importance.

Box 18. Digital Advisory and Trade Assistance Fund

The Digital Advisory and Trade Assistance (DATA) Fund* is a pilot programme managed by the World Bank as part of the Umbrella Facility for Trade**, a multi-donor trust fund. With contributions from Australia and Switzerland under the E-Commerce Capacity Building Framework***, the DATA Fund was established to advance technical assistance in digital trade and to support developing economies' participation by improving the domestic regulatory and business conditions for engaging in global digital markets. It will also support capacity building in drafting international rules on digital matters through specialized training for policy-makers and other stakeholders.

The main focus of the DATA Fund is on projects that have a direct impact on the benefit trade in digital services and e-commerce can bring to developing economies, including:

- legal, regulatory and institutional framework for digital trade;
- development and analysis of digital trade statistics;
- border management and logistics for e-commerce;
- digital skills and entrepreneurship;
- fiscal regimes for e-commerce and digital services;
- capacity building for policy-making and international negotiations.

* See https://blogs.worldbank.org/trade/digital-trade-talks-voices-least-developed-countries-are-missing.
** See https://www.worldbank.org/en/programs/umbrella-facility-for-trade.
*** See https://www.wto.org/english/tratop_e/ecom_e/jiecomcapbuild_e.htm.

Box 19. WTO Joint Statement Initiative on E-Commerce

A group of 71 WTO members agreed in 2017 to initiate exploratory work towards future WTO negotiations on trade-related aspects of e-commerce.* In January 2019, 76 WTO members confirmed in a joint statement their intention to commence these negotiations.

As of February 2023, there are 89 WTO members participating in these discussions, accounting for over 90 per cent of global trade. Four least-developed economies are participating – Benin, Burkina Faso, the Lao People's Democratic Republic and Myanmar – alongside a significant number of developing economies from most regions of the world.

The discussions aim to update the WTO rulebook on e-commerce to unlock the important opportunities that the digital economy offers for members at all levels of development, including by lowering the cost for businesses, particularly and micro, small and medium-sized enterprises, to access and participate in global markets. Participating members seek common disciplines to facilitate remote transactions and strengthen trust in digital markets, while helping to tackle digital trade barriers.

Significant progress has been achieved in the negotiations since 2019. By the end of 2022, the initiatives' co-conveners (Australia, Japan and Singapore) had issued streamlined text with convergence on ten articles:

- paperless trading;
- electronic contracts;
- electronic signatures and authentication;
- unsolicited commercial electronic messages;
- online consumer protection;
- open government data;
- open internet access;
- transparency;
- cybersecurity;
- electronic transactions framework.

Discussions are continuing on a range of additional issues, including on provisions to enable and promote the flow of data, such as on cross-border data flows, data localization and source code.

Recognizing the challenges faced by developing and least-developed economies seeking to benefit from the digital economy, Australia, Japan, Singapore and Switzerland have launched the E-Commerce Capacity Building Framework**, which aims to strengthen digital inclusion and to help harness the opportunities of digital trade. The Framework will offer a range of technical assistance, training and capacity building to support the participation of developing and least-developed economies in the e-commerce negotiations.

* See https://www.wto.org/english/tratop_e/ecom_e/xcom_e/joint_statement_e.htm.
** See https://www.wto.org/english/tratop_e/ecom_e/jiecomcapbuild_e.htm.

(f) Boosting supply capacity and the skills relevant to services trade

Strengthening productive capacity

Scaled-up support is needed to strengthen productive capacity in domestic services markets, including through improved access to technology and enhanced connectivity, both digital and physical. Aid for Trade in services needs to target the very real constraints that many exporters in developing economies face in attempting to supply newly opened markets.

Scaling-up domestic services capacity would provide benefits for employment, particularly for women given their preponderant role in many sectors. It would also speed up the pace of digitalization and allow countries to take advantage of expanded export opportunities, including in higher value-adding services activities.

Such support may prove particularly important in sustaining diversification efforts in countries characterized by high degrees of dependence

on only a few sectors (e.g. extractive industries, tourism). While the fixed costs of entering foreign markets is often lower in services than in manufacturing, they may still prove prohibitive for services suppliers in developing economies – the bulk of which are MSMEs.

Even in services sectors where developing economies export, suppliers face a number of common problems, including:

- lack of access to financing for export or business development;
- difficulties in establishing credibility with international suppliers;
- lack of access to reliable and inexpensive infrastructure;
- inadequate access to a range of formal and informal networks and institutional facilities necessary for trade.

Strengthening the performance of trade and investment promotion institutions and adapting their promotional toolkits to the specificities of services trade can be especially important in this regard (ITC, 2022).

Improving domestic services standards

Significant development gains can be made by helping developing economies improve domestic services standards, notably by strengthening their participation in regional or global standard-setting initiatives. Similar to poor compliance with technical barriers to trade and sanitary and phytosanitary standards in goods trade, weak standards and related inadequacies in domestic regulation can frustrate services providers in developing economies trying to access foreign markets.

Opening up markets

Businesses which export services also have a stake in ensuring that markets are opened up, and that such opening proves sustainable and proceeds in a stable regulatory environment. These objectives can be served by leveraging private sector support for strengthened regulatory institutions and improved services policy design, including through increased South–South dialogue and cooperation.

Capacitating private actors

On account of its central focus on the private sector, supply-side capacity building involves a different set of institutional actors from those involved in the strengthening of trade negotiating or regulatory enforcement capacities. Such differences matter for assistance design and inter-agency coordination efforts.

Greater private-sector involvement from services exporting firms and coalitions of services sectors in industrial and emerging markets could usefully complement the efforts of bilateral donors and regional and multilateral agencies such as the International Trade Centre, the United Nations Conference on Trade and Development and the World Bank, as well as regional development banks.

Improving training and skills

Boosting the capacity of suppliers to produce competitively priced services that meet the quality standards of global markets requires a parallel investment in skills, for which targeted educational expenditures alongside Aid for Trade interventions can be directed. Training and the acquisition of skills are key to sustained productivity gains by boosting the capabilities of workers.

In services, low-skilled tasks generally require only basic digital literacy (Engel *et al.*, 2021). For high-skilled tasks in the services sector, a key challenge is for tertiary education, particularly STEM subjects – science, technology, engineering and mathematics – and vocational skill development programmes to become more responsive to changing industry demands, including for ICT-related skills such as software programming and coding or complementary engineering skills that are often in short supply in developing economies.

At the same time, strengthening foundational skills such as literacy and numeracy, as well as the soft skills that foster adaptability, problem solving and initiative from an early age, also merits emphasis. Such skills can also be bolstered through less formal forms of learning, such as on-the-job training and the continued acquisition of skills through lifelong learning (World Bank, 2019).

Firms seeking to upgrade their production processes and innovate require improved managerial practices – not least because adopting new technologies can be disruptive and force managers to plan for and address change in processes. Managers also need to know how to take advantage of the potential that new technologies bring.

Targeting upskilling efforts at firms owned or managed by women and young entrepreneurs can yield important gains in inclusiveness – particularly in the digital realm, where both managerial profiles are particularly present.

> Training and the acquisition of skills are key to sustained productivity gains by boosting the capabilities of workers.

Endnotes

1 For background information, see Mattoo (1999).

2 See the work by Delimatsis (2008, 2016).

3 *Reference Paper on Services Domestic Regulation*, WTO document INF/SDR/1, 27 September 2021.

4 *MC12 Outcome Document*, WTO document, WT/MIN(22)/24 WT/L/1135, 22 June 2022.

5 For background information, see ADB/ITD (2009).

6 See the work by Sauvé and Lacey (2013).

7 For further information, see Hollweg and Sáez (2019).

Conclusion

The composition of global trade in services has changed markedly in recent years, a period that has seen developing economies register significant export gains in the services sector despite the severe impact of the COVID-19 pandemic. Such gains cover a host of non-traditional, high-value adding, services that can be more readily supplied today through digital means.

While important progress has been made in developing analytical tools to inform policy choices in services, conducting development-enhancing reforms in the sector and boosting services exports remain complex endeavours that continue to prove challenging for many poorer countries. Much more can be done through increased international cooperation to help developing economies take full advantage of the structural changes at play in the global economy and to unlock the benefits that expanded trade in services can bring.

Services have the potential to transform economies

Harnessing the benefits of services trade will require a shift in the policy attention governments pay to services, particularly with regard to international trade and investment policy. The difference that services – and services trade – can make to growth and development warrants greater policy attention.

Policies that facilitate trade and investment in services and reduce policy uncertainty at the regional and international level can go a long way towards reducing trade costs, boosting productivity – offering new paths for export growth and increasing diversification and resilience. Greater focus on services trade policies will also be instrumental in reducing prevailing digital divides, promoting inclusivity by providing jobs and business opportunities for women, youth and micro, small and medium-sized enterprises (MSMEs), including in least-developed economies, and contributing to sustainability and the fight against climate change.

Improving services trade policies through greater international cooperation

Trade in services stands to benefit through increased international cooperation targeting three key dimensions: increasing the predictability of policy and commitments made in trade agreements; promoting trade-facilitating regulatory practices and strengthening regulatory capacity; and lowering barriers to trade in services.

Increased multilateral engagement on services trade will help to maximize the potential benefits of expanded trade and investment in the sector. The deeper integration driven by preferential trade agreements can also play an important role by encouraging “learning by doing” and policy experimentation on trade issues arising from new challenges in the services sector.

Multilateral engagement will strengthen services trade governance

Greater multilateral engagement could provide a major boost to strengthening services trade governance. Digital technologies are expanding the opportunities to use trade in services for economic development. Important steps are being taken through ongoing plurilateral talks held by WTO members on services domestic regulation, e-commerce, investment facilitation and MSMEs.

Jump starting the WTO's agenda on services could result in a wider distribution of the benefits of trade in the sector – notably for poorer countries, whose participation in preferential trade agreements remains more limited. An effort to improve the transparency and predictability of commitments on services limited. An effort to improve the transparency of trading conditions could take the form of non-binding inventories of relevant measures.

Enhancing predictability of commitments on services at the WTO could focus on closing the widening gap between "best" preferential and existing multilateral commitments.

Closing the gap between preferential and existing multilateral commitments appears feasible when considering that, with few exceptions, services commitments granted preferentially tend to be implemented on a *de facto* non-discriminatory (i.e. most-favoured-nation) basis.

Meanwhile, the continued prevalence of high barriers to trade in many key services subsectors recalls the considerable scope that exists to roll back existing measures standing in the way of improved economy-wide performance and gains.

Mobilizing additional resources will be critical to strengthen services trade capacity

The changing structure of services trade and its growing importance for developing economies point to a need to rethink not only the "why" but also the "how" of deepened international cooperation in services. Mobilizing and deploying additional resources, knowledge and expertise directed to strengthening the services trade capacity of developing and least-developed economies will be critical to harnessing the rapid pace of change in services markets and overcoming the challenges associated with the sector.

The ascendant role of services in development and trade integration points to the need for increased multilateral engagement to be underpinned by scaled-up levels of Aid for Trade in the services sector.

A "Services Trade for Development" initiative could help to mobilize a coherent Aid for Trade package in services, targeting key challenges such as:

(i) addressing data gaps in services trade;

(ii) supporting greater participation of developing and least-developed economies in policy discussions on trade in services;

(iii) strengthening regulatory frameworks and institutions;

(iv) promoting diversification offered by digital services trade;

(v) addressing key supply-side constraints and improving the services-related skills of workers.

Abbreviations

BOP	balance of payments
CAREC	Central Asia Regional Economic Cooperation
FDI	foreign direct investment
GATS	General Agreement on Trade in Services
GVC	global value chain
ICT	information and communications technology
ILO	International Labour Organization
ITC	International Trade Centre
MSME	micro, small and medium-sized enterprise
OECD	Organisation for Economic Co-operation and Development
PTA	preferential trade agreement
SDG	Sustainable Development Goal
STRI	Services Trade Restrictiveness Index

Bibliography

Amirapu, A. and Subramanian, A. (2015), "Manufacturing or Services? An Indian Illustration of a Development Dilemma", *CGDEV Working Paper No. 409*, Washington, D.C.: Center for Global Development.

Andrenelli, A., Cadestin, C., De Backer, K., Miroudot, S., Rigo, D. and Ye, M. (2018), "Multinational Production and Trade in Services", *OECD Trade Policy Papers No. 212*, Paris: OECD Publishing.

Arnold, J.M., Mattoo, A. and Narciso, G. (2008), "Services Inputs and Firm Productivity in Sub-Saharan Africa: Evidence from Firm-level Data", *Journal of African Economies* 17(4): 578-99.

Arnold, J.M., Javorcik, B.S. and Mattoo, A. (2011), "Does Services Liberalization Benefit Manufacturing Firms? Evidence from the Czech Republic", *Journal of International Economics* 85(1): 136-46.

Arnold, J.M., Javorcik, B., Lipscomb, M. and Mattoo, A. (2016), "Services Reform and Manufacturing Performance: Evidence from India", *The Economic Journal* 126(590): 1-39.

Asia-Pacific Economic Cooperation (APEC) (2021), "Environmental Services in the APEC Region: Definition, Challenges and Opportunities", Singapore: APEC.

Asian Development Bank (ADB) (2021a), *Asian Development Outlook 2021: Financing a Green and Inclusive Recovery*, Manila: ADB.

Asian Development Bank (ADB) (2021b), *Developing the Services Sector for Economic Diversification in CAREC Countries*, Manila: ADB.

Asian Development Bank (ADB) and International Institute for Trade and Development (ITD) (2009), *Trade and Investment in Services: An ADB–ITD Training Module for the Greater Mekong Subregion*, Manila: ADB.

Baiker, L., Bertola, E. and Jelitto, M. (2021), "Services Domestic Regulation – Locking in Good Regulatory Practices: Analysing the Prevalence of Services Domestic Regulation Disciplines and their Potential Linkages with Economic Performance", *WTO Staff Working Paper ERSD-2021-14*, Geneva: WTO.

Balchin, N., Hoekman, B., Martin, H., Mendez-Parra, M., Papadavid, P., Primack, D. and Willem te Velde, D. (2016), *Trade in Services and Economic Transformation*, London: Overseas Development Institute.

Baldwin, R.E. (2019), *The Globotics Upheaval: Globalization, Robotics, and the Future of Work*, Oxford: Oxford University Press.

Bamber, P. and Fernandez-Stark, K. (2015), "Fresh Cherry Industry in Chile", *Services in Global Value Chains: Manufacturing-related Services*, Singapore: Asia-Pacific Economic Cooperation.

Baumol, W.J. (1967), "Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis", *The American Economic Review* 57(3): 415-426.

Bertho, F., Borchert, I. and Mattoo, A. (2016), "The Trade Reducing Effects of Restrictions on Liner Shipping", *Journal of Comparative Economics* 44(2): 231-42.

Beverelli, C., Fiorini, M. and Hoekman, B. (2017), "Services Trade Policy and Manufacturing Productivity: The Role of Institutions", *Journal of International Economics* 104(1): 166-182.

Borchert, I., Gootiiz, B., Goswami, A.G. and Mattoo, A. (2017), "Services Trade Protection and Economic Isolation", *The World Economy* 40(3): 632-652.

Borchert, I., Gootiiz, B., Magdeleine, J., Marchetti, J.A., Mattoo, A., Rubio, E. and Shannon, E. (2019), "Applied Services Trade Policy: A Guide to the Services Trade Policy Database and the Services Trade Restrictions Database", *WTO Staff Working Paper ERSD-2019-14*, Geneva: WTO.

Borchert, I., Magdeleine, J., Marchetti, J.A. and Mattoo, A. (2020), "The Evolution of Services Trade Policy since the Great Recession", *World Bank Policy Research Working Paper No. 9265*, Washington, D.C.: World Bank.

Brenton, P. and Chemutai, V. (2021), *The Trade and Climate Change Nexus: The Urgency and Opportunities for Developing Countries,* Washington, D.C.: World Bank.

Cali, M., Ellis, K., te Velde, D.W. (2008), "The Contribution of Services to Development and the Role of Trade Liberalisation and Regulation", *ODI Working Paper No. 298*, London: Overseas Development Institute.

Cattaneo, Olivier (2009), "Trade in Health Services: What's in it for Developing Countries?", *World Bank Policy Research Working Paper No. 5115*, Washington, D.C.: World Bank.

Ciuriak, D., Dadkah, A. and Lysenko, D. (2020), "The Effect of Binding Commitments on Services Trade", *World Trade Review* 19(3): 365-378.

Delimatsis, P. (2008), *International Trade in Services and Domestic Regulations: Necessity, Transparency, and Regulatory Diversity*, Oxford: Oxford University Press.

Delimatsis, P. (2016), "Standard-setting in Services: New Frontiers in Rule-making and the Role of the EU", *Research Handbook on Trade in Services*, London: Edgar Elgar.

Dell, M., Jones, B.F. and Olken, B.A. (2012), "Temperature Shocks and Economic Growth: Evidence From the Last Half Century", *American Economic Journal: Macroeconomics* 4(3): 66-95.

Díaz-Mora, C., Gandoy, R. and González-Díaz, B. (2018), "Looking into Global Value Chains: Influence of Foreign Services on Export Performance", *Review of World Economics* 154:785-814.

Díaz-Mora, C., García-López, E. and González-Díaz, B. (2022), "Bilateral Servicification in Global Value Chains and Deep Trade Agreements", *The World Economy* 45(8): 2510-2531.

Dihel, N. and Grover Goswami, A. (2015), "Internationalizing Sub-Saharan Africa's Education and Health Services", *The Unexplored Potential of Trade in Services in Africa; From Hair Stylists and Teachers to Accountants and Doctors*, Washington, D.C.: World Bank.

Djiofack-Zebaze, C. and Keck, A. (2009), "Telecommunication Services in Africa: The Impact of WTO Commitments and Unilateral Reform on Sector Performance and Economic Growth", *World Development* 37(5): 919-940.

Duggan, V., Rahardja, S. and Varela, G. (2013), "Service Sector Reform and Manufacturing Productivity: Evidence from Indonesia", *World Bank Policy Research Working Paper No. 6349*, Washington, D.C.: World Bank.

Echandi, R. (forthcoming), *How Do Trade in Services Agreements Promote Liberalization?*, Washington, D.C.: World Bank.

Eichengreen, B. and Gupta, P. (2013), "The Two Waves of Service-sector Growth", *Oxford Economic Papers* 65(1): 96-123.

Engel, J., Kokas, D., Lopez-Acevedo, G. and Maliszewska, M. (2021), *The Distributional Impacts of Trade: Empirical Innovations, Analytical Tools, and Policy Responses*, Washington, D.C.: World Bank.

Eschenbach, F. and Hoekman, B. (2006), "Services Policy Reform and Economic Growth in Transition Economies", *Review of World Economics* 142(4): 746-764.

Fernandes, A. and Paunov, C. (2012), "Foreign Direct Investment in Services and Manufacturing Productivity: Evidence for Chile", *Journal of Development Economics* 97(2): 305-21.

Fiorini, M. and Hoekman, B. (2018a), "Trade Agreements, Regulatory Institutions and Services Liberalization", *Global Policy* 9(4): 441-450.

Fiorini, M. and Hoekman, B. (2018b), "Services Trade Policy and Sustainable Development", *World Development* 112: 1-12.

Fiorini, M. and Hoekman, B. (2020), "EU Services Trade Liberalization and Economic Regulation: Complements or Substitutes?", *The Review of International Organizations* 15: 247-270.

Food and Agriculture Organization of the United Nations (FAO) (2017), *Information and Communication Technology (ICT) in Agriculture: A Report to the G20 Agricultural Deputies*, Rome: FAO.

Food and Agriculture Organization of the United Nations (FAO) (2019), *Synergy Between Agriculture and Services Trade: Enabling New Growth Opportunities – Summary*, Geneva: FAO.

Food and Agriculture Organization of the United Nations (FAO) (2022), *The State of Food and Agriculture 2022: Leveraging Automation in Agriculture for Transforming Agrifood Systems*, Rome: FAO.

Francois, J. and B. Hoekman (2010), "Services Trade and Policy", *Journal of Economic Literature* 48(3): 642-692.

Ghani, E. and O'Connell, S.D. (2014), "Can Service Be a Growth Escalator in Low Income Countries?", *World Bank Policy Research Working Paper No. 6971*, Washington, D.C.: World Bank.

Gillson, I. and Muramatsu, K. (2020), "Health Services Trade and the COVID-19 Pandemic", *Trade and COVID-19 Guidance Note*, Washington, D.C.: World Bank.

Greenville, J., Kawasaki, K. and Jouanjean, M.-A. (2019), "Value Adding Pathways in Agriculture and Food Trade: The Role of GVCs and Services", *OECD Food, Agriculture and Fisheries Papers No. 123*, Paris: OECD Publishing.

Hausmann, R., Hwang, J. and Rodrik, D. (2007), "What You Export Matters", *Journal of Economic Growth* 12(1): 1-25.

Heuser, C. and. Mattoo, A. (2017), "Services Trade and Global Value Chains", *Global Value Chain Development Report 2017: Measuring and Analyzing the Impact of GVCs on Economic Development*, Washington, D.C.: World Bank/IDE–JETRO/OECD/UIBE/WTO.

Hoekman, B. and Sanfilippo, M. (2022), "Trade and Value Chain Participation: Domestic Firms and FDI Spillovers in Africa", *AERC Working Paper No. GVC-004*, Nairobi: African Economic Research Consortium.

Hoekman, B. and Shepherd, B. (2017), "Services Productivity, Trade Policy and Manufacturing Exports", *The World Economy* 40(3): 499-516.

Hollweg, C.H. and Sáez, S. (eds) (2019), *Services for Trade Competitiveness: Country and Regional Assessments of Services Trade*, Washington, D.C.: World Bank.

International Trade Centre (ITC) (2022), *SME Competitiveness Outlook 2022: Connected Services, Competitive Businesses*, Geneva: ITC.

International Telecommunication Union (ITU) (2016), *Trends in Telecommunication Reform 2016: Regulatory Incentives to Achieve Digital Opportunities*, Geneva: ITU.

International Telecommunication Union (ITU) (2017), "Spanning the Internet Divide to Drive Development", *Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development*, Geneva: WTO/Paris: OECD Publishing.

International Telecommunication Union (ITU) (2021a), *Measuring Digital Development: Facts and Figures 2021*, Geneva: ITU.

International Telecommunication Union (ITU) (2023), *Global Digital Regulatory Outlook 2023: Policy and Regulation to Spur Digital Transformation*, Geneva: ITU.

International Telecommunication Union (ITU) and United Nations Educational, Scientific and Cultural Organization (UNESCO) (2013), *The State of Broadband 2013: Universalizing Broadband*, Geneva: ITU/UNESCO.

International Telecommunication Union (ITU) and United Nations Educational, Scientific and Cultural Organization (UNESCO) (2019), *State of Broadband Report 2019: Broadband as a Foundation for Sustainable Development*, Geneva: ITU/UNESCO.

Jensen, J.B. and Kletzer, L.G. (2005), "Tradable Services: Understanding the Scope and Impact of Services Offshoring", *IIE Working Paper No. 05-9*, Washington, D.C.: Institute for International Economics.

Jones, B.F. and Olken, B.A. (2010), "Climate Shocks and Exports", *American Economic Review* 100(2): 454-459.

Jones, R.W. and Kierkowski, H. (1988), "The Role of Services in Production and International Trade: A Theoretical Framework", *International Trade Theory and Competitive Models: Features, Values, and Criticisms*, World Scientific Publishing.

Kaldor, N. (1966), *Causes of the Slow Rate of Economic Growth of the United Kingdom*, London: Cambridge University Press.

Kowalski, P., Lopez Gonzalez, J., Ragoussis, A. and Ugarte, C. (2015), "Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-related Policies", *OECD Trade Policy Papers No. 179*, Paris: OECD Publishing.

Lamprecht, P. and Miroudot, S. (2018), "The Value of Market Access and National Treatment Commitments in Services Trade Agreements", *OECD Trade Policy Papers No. 213*, Paris: OECD Publishing.

Lan, J. and Shepherd, B. (2019), "Women and the Services Sector", *Leveraging Services for Development: Prospects and Policies*, Tokzo: Asian Development Bank Institute.

Lee, W. (2019), "Services Liberalization and Global Value Chain Participation: New Evidence for Heterogeneous Effects by Income Level and Provisions", *Review of International Economics* 27(3): 888-915.

Lestage, R., Flacher, D., Kim, Y., Kim, J. and Kim, Y. (2013), "Competition and Investment in Telecommunications: Does Competition have the Same Impact on Investment by Private and State-owned Firms?", *Information Economics and Policy* 25(1): 41-50.

Liu, X., Mattoo, A., Wang, Z. and Wei, S. (2020), "Services Development and Comparative Advantage in Manufacturing", *Journal of Development Economics* 144.

Low, P. and Pasadilla, G.O. (2015), "Manufacturing-related Services: Summary Report", *Services in Global Value Chains: Manufacturing-related Services*, Singapore: Asia-Pacific Economic Cooperation.

Marchetti, J. (2018), "Addressing E-Payment Challenges in Global E-Commerce", *WEF White Paper*, Geneva: World Economic Forum.

Mattoo, A. (1999), "Financial Services and the World Trade Organization: Liberalization Commitments of the Developing and Transition Economies", *World Bank Policy Research Working Paper No. 2184*, Washington, D.C.: World Bank.

Mattoo, A., Rathindran, R. and Subramanian, A. (2006), "Measuring Services Trade Liberalization and its Impact on Economic Growth: An Illustration", *Journal of Economic Integration* 21(1): 64-98

Miroudot, S. and Cadestin, C. (2017a), "Services in Global Value Chains: Trade Patterns and Gains from Specialisation", *OECD Trade Policy Papers No. 208*, Paris: OECD Publishing.

Miroudot, S. and Cadestin, C. (2017b), "Services in Global Value Chains: From Inputs to Value-creating Activities", *OECD Trade Policy Papers No. 197*, Paris: OECD Publishing.

Miroudot, S. and Pertel, K. (2015), "Water in the GATS: Methodology and Results", *OECD Trade Policy Papers No. 185*, Paris: OECD Publishing.

Miroudot, S., Sauvage, J. and Shepherd, B. (2013), "Measuring the Cost of International Trade in Services", *World Trade Review* 12(4): 719-735.

Mistura, F. and Roulet, C. (2019), "The Determinants of Foreign Direct Investment: Do Statutory Restrictions Matter?", *OECD Working Papers on International Investment No. 2019/01*, Paris: OECD Publishing.

Molinuevo, M. and Sáez, S. (2014), *Regulatory Assessment Toolkit: A Practical Methodology for Assessing Regulation on Trade and Investment in Services*, Washington, D.C.: World Bank.

Nano, E., Nayyar, G., Rubínová, S. and Stolzenburg, V. (2021), "The Impact of Services Liberalization on Education: Evidence from India", *WTO Staff Working Paper ERSD-2021-10*, Geneva: WTO.

Nano, E. and Stolzenburg, V. (2021), "The Role of Global Services Value Chains for Services-led Development", *Global Value Chain Development Report 2021: Beyond Production*, ADB/UIBE/WTO/ IDE–JETRO/CDRF.

Nayyar, G. and Cruz, M. (2019), "Developing Countries and Services in the New Industrial Paradigm", *Leveraging Services for Development: Prospects and Policies*, Tokyo: Asian Development Bank Institute.

Nayyar, G. and Davies, E. (2023), "Services-led Growth: Better Prospects after the Pandemic", *Falling Long-term Growth Prospects: Trends, Expectations, and Policies,* Washington, D.C.: World Bank.

Nayyar, G., Hallward-Driemeier, M. and Davies E. (2021), *At Your Service? The Promise of Services-led Development*, Washington, D.C.: World Bank.

Nordås, H.K. (2020), "Telecommunications: The Underlying Transport Means for Services Exports", *Trade, Law and Development* 12(1): 158-187.

Nordås, H. and Y. Kim (2013), "The Role of Services for Competitiveness in Manufacturing", *OECD Trade Policy Papers No. 148*, Paris: OECD Publishing.

Nordås, H.K. and Rouzet, D. (2016), "The Impact of Services Trade Restrictiveness on Trade Flows", *The World Economy* 40(6): 1155-1183.

Organisation for Economic Co-operation and Development (OECD) (2022a), "Shedding Light on the Drivers of Services Tradability over Two Decades", *OECD Trade Policy Papers No. 264*, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) (2022b), "The Digitalisation of Agriculture; A Literature Review and Emerging Policy Issues" *OECD Food, Agriculture and Fisheries Paper No. 176*, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) (2023), *The Impact of Regulation on International Investment in Portugal*, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) and World Trade Organization (WTO) (2019), Aid for Trade at a Glance 2019: Economic Diversification and Empowerment, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) and World Trade Organization (WTO) (2015), Aid for *Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth*, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) and World Trade Organization (WTO) (2019), *Aid for Trade at a Glance 2019: Economic Diversification and Empowerment*, Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD) and World Trade Organization (WTO) (2021), "Services Domestic Regulation in the WTO: Cutting Red Tape, Slashing Trade Costs, and Facilitating Services Trade" (*OECD–WTO Trade Policy Brief,* 26 November 2021).

Osnago, A., Piermartini, R. and Rocha, N. (2015), "Trade Policy Uncertainty as Barrier to Trade", *WTO Staff Working Paper* ERSD-2015-05, Geneva: WTO.

Raballand, G. and Macchi, P. (2009), "Transport Prices and Costs: The Need to Revisit Donors' Policies in Transport in Africa", *BREAD Working Paper No. 190*, Washington, D.C.: Bureau for Research and Economic Analysis of Development.

Riddle, D.I (1986), *Service-led Growth: The Role of the Service Sector in World Development*, New York: Praeger Publishers.

Rodrik, D. (2015), "Premature Deindustrialization", *IAS Economics Working Papers No. 107*, Princeton: Institute for Advanced Study.

Rouzet, D., Benz, S. and Spinelli, F. (2017), "Trading Firms and Trading Costs in Services: Firm-level Analysis", *OECD Trade Policy Papers No. 210*, Paris: OECD Publishing.

Roy, M. (2014), "Services Commitments in Preferential Trade Agreements: Surveying the Empirical Landscape", *The Preferential Liberalization of Trade in Services: Comparative Regionalism*, Cheltenham: Edward Elgar Publishing.

Roy, M. (2017), "The Contribution of Services Trade Policies to Connectivity in the Context of Aid for Trade", *WTO Staff Working Paper No. ERSD2017-12*, Geneva: WTO.

Roy, M. (2019), "Elevating Services: Services Trade Policy, WTO Commitments, and Their Role in Economic Development and Trade Integration", *Journal of World Trade* 53(6): 923-950.

Roy, M., Marchetti, J. and Lim, H. (2007), "Services Liberalization in the New Generation of Preferential Trade Agreements (PTAs): How Much Further than the GATS?", *World Trade Review* 6(2): 155-192.

Roy, M. and Sauvé, P. (forthcoming), "Preferential Frontiers in Services Trade Governance", *Future Design of Preferential Trade Agreements*, London: Edgar Elgar.

Sáez, S., Taglioni, D., van der Marel, E., Hollweg, C.H. and Zavacka, V. (2014), *Valuing Services in Trade: A Toolkit for Competitiveness Diagnostics*, Washington, D.C.: World Bank.

Sauvé, P. (2019), "To Fuse, Not to Fuse or Simply Confuse? Assessing the Case for Normative Convergence between Goods and Services Trade Law", *Journal of International Economic Law* 22(3): 355-371.

Sauvé, P. (2020), "Gendered Perspectives on Services Trade and Investment", *Journal of World Trade* 54(4): 481-502.

Sauvé, P. and Lacey, S. (2013), *A Handbook on Negotiating Preferential Trade Agreements: Services Liberalization*, Bangkok: United Nations Economic Commission for Asia and the Pacific.

Schettkat, R. and Yocarini, L. (2006), "The Shift to Services Employment: A Review of the Literature", *Structural Change and Economic Dynamics* 17(2):127-147.

Shepherd, B. and van der Marel, E. (2016), *Case Study on the Role of Services Trade in Global Value Chains: Transport Services in Chile*, Singapore: Asia-Pacific Economic Cooperation.

Su, X., Anwar, S., Zhou, Y. and Tang, X. (2020), "Services Trade Restrictiveness and Manufacturing Export Sophistication", *The North American Journal of Economics and Finance* 51.

Ta, V.L., Do, A.D., Phan, T.U., Nguyen, Q.H., Nguyen, T.T.H., Le, T.D. and Nguyen, T.P. (2021), "Factors Affecting FDI Intentions of Investors: Empirical Evidence from Provincial-level Data in Vietnam", *Journal of Asian Finance, Economics and Business* 8(4): 125–134.

Teravaninthorn, S. and G. Raballand (2009), *Transport Prices and Costs in Africa: A Review of the International Corridors*, Washington DC: World Bank.

Thomsen, S. and Mistura, F. (2017), "Is Investment Protectionism on the Rise?", *Global Forum on International Investment*, Paris: OECD Publishing.

United Nations (2015), *Transforming Our World: The 2030 Agenda for Sustainable Development*, New York: United Nations.

United Nations Conference on Trade and Development (UNCTAD) (2006), *Preserving Flexibility in IIAs: The Use of Reservations*, New York and Geneva: United Nations.

United Nations Conference on Trade and Development (UNCTAD) (2022), *Economic Development in Africa Report 2022: Rethinking the Foundations of Export Diversification in Africa*, New York: United Nations.

van der Marel, E. (2012), "Trade in Services and TFP: The Role of Regulation", *The World Economy* 35(11): 1530-1558.

van der Marel, E. (2016), "Ricardo Does Services: Service Sector Regulation and Comparative Advantage in Goods", *Research Handbook on Trade in Services*, London: Edgar Elgar.

van der Marel, E. and Miroudot, S. (2014), "The Economics and Political Economy of Going Beyond the GATS", *The Review of International Organizations* 9(2): 205-239.

van der Marel, E. and Ferracane, M.F. (2021), "Do Data Policy Restrictions Inhibit Trade in Services?", *Review of World Economics* 157(4): 727-776.

Wolfmayr, Y. (2012), "Export Performance and Increased Services Content in Manufacturing", *National Institute Economic Review* 220: 36-52.

World Bank (2016), *World Development Report 2016: Digital Dividends*, Washington D.C.: World Bank.

World Bank (2018), *A Single Digital Market for East Africa: Presenting a Vision, Strategic Framework, Implementation Roadmap and Impact Assessment*, Washington, D.C.: World Bank.

World Bank (2019), "Economic Diversification: Lessons from Practice", *Aid for Trade at a Glance 2019: Economic Diversification and Empowerment*, Paris: OECD Publishing.

World Bank (2020), *Global Investment Competitiveness Report 2019/2020: Rebuilding Investor Confidence in Times of Uncertainty*, Washington, D.C.: World Bank

World Bank (2022), *Towards More Inclusive and Greener Growth: Gabon – Country Economic Memorandum*, Washington, D.C.: World Bank.

World Bank and World Trade Organization (WTO) (2022), *Trade Therapy: Deepening Cooperation to Strengthen Pandemic Defenses*, Washington, D.C.: World Bank/WTO.

World Bank and World Trade Organization (WTO) (forthcoming), *Services Trade Policies across Africa: New Evidence for 54 Economies*, Washington, D.C.: World Bank/WTO.

World Trade Organization (WTO) (2019), *World Trade Report 2019: The Future of Services Trade*, Geneva: WTO.

World Trade Organization (WTO) (2020a), "Trade in Services in the Context of COVID-19", *Information Note by the Secretariat*, 28 May 2020.

World Trade Organization (WTO) (2020b), "Trade in Services and Economic Diversification", *Discussion Paper for the G20 Trade and Investment Working Group (TIWG)*, Geneva: WTO.

World Trade Organization (WTO) (2022a), *Aid for Trade Global Review 2022: Empowering Connected, Sustainable Trade*, Geneva: WTO.

World Trade Organization (WTO) (2022b), *World Trade Report 2022: Climate Change and International Trade*, Geneva: WTO.

World Trade Organization (WTO) (2022c), *WTO Contribution to the 2022 UN High-Level Political Forum*, Geneva: WTO.

World Trade Organization (WTO) (2023), *Global Trade Outlook and Statistics*, Geneva: WTO.

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The services sector has been the main source of economic growth in recent decades. Logistics, finance and information technologies are essential to the functioning of modern economies while business services, healthcare and entertainment are among the world's fastest growing sectors.

This publication – co-published by the WTO and the World Bank – underlines the contribution that trade and investment in services can make to economic growth and development. It highlights, in particular, the importance of re-energizing international cooperation on services trade and encourages reflection on how best to mobilize assistance for developing and least-developed economies in implementing services sector reforms so that they can reap the gains from expanded trade and investment in services.

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