

# Trade Policy and the Global Economy

Scenario 4: Addressing Barriers to Services Trade

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This brief presents the results of analysis using the OECD Trade Model (METRO). METRO is a state-of-the-art analytical tool that uses a globally integrated approach to estimate likely outcomes from illustrative policy-change scenarios. METRO is not a forecasting tool and thus results are relevant only in the context of the specified scenario and are not reflective of actual policy actions in any specific country or sector.

Generating more than two-thirds of global gross domestic product (GDP) and employing over seventy per cent of workers in advanced economies, services are crucial to economic prosperity today and continued growth in the future. Today, trade in services accounts for twenty per cent of global gross trade and more than fifty per cent of the value-added in gross exports. Further, services trade is highly complementary with trade in goods, representing more than thirty percent of the value added of manufacturing exports<sup>1</sup>. As the fourth industrial revolution progresses, trade in services, including digitally-delivered cross-border trade as well as traded services supporting global manufacturing, will continue to be a key driver of economic development.

Services trade comprises a broad range of economic activities including transportation, travel, telecommunications, computer and information services, finances, and other professional services. Policies governing access to services, as well as the conduct of service professionals, are the responsibility of domestic regulatory authorities, including governmental and professional bodies. Because these policies often predate international agreements on services, considerable regulatory differences exist across countries, posing complications and potentially act as barriers for service providers seeking to enter foreign markets.

The OECD Services Trade Restrictiveness Index (STRI) estimates the relative levels of and differences between regulations affecting services trade, providing a quantitative measure of barriers to services trade. Launched in 2014 and updated annually, the STRI covers over 16 000 regulations across 22 sectors in 45 countries, including all G20 members. The STRI score represents the level of regulatory restrictiveness faced by all foreign service providers.<sup>2</sup>

The annual updates of the OECD STRI provide insight into the evolution of barriers to services trade. From 2014 to 2016, overall policy changes reflected shifts towards liberalisation in services trade. However, from 2016 to 2017, there was an overall tightening of the global regulatory environment for services trade, representing broad-based economy-wide policy changes including more stringent border entry conditions for service professionals as well as increased limitations on cross-border data flows. Given the pervasive role services play in the global economy, this has direct implications for countries' growth prospects.

This policy brief aims to illustrate the benefits of continued trade liberalisation in services, as could be expected from the implementation of regulatory reforms that – hypothetically – reduce services trade costs among G20 economies to the average costs among European Economic Area (EEA) economies.

This is the fourth note in a series of policy scenarios designed to examine both long standing and recently emerged issues in the trade policy debate. Drawing upon analysis from the OECD METRO Model, this note describes the expected effects of reducing trade costs associated with barriers to services trade across all G20 economies.<sup>3</sup> Results presented include estimates of macroeconomic and trade growth as well effects on households and workers. In conclusion, policy considerations are presented.

### Reducing Barriers to Trade in Services Across G20 Economies

The OECD has estimated the trade costs or ad valorem equivalents (AVEs)<sup>4</sup> of services barriers, based on the STRI, between each country and its' trading partners. While the STRI indicators are country-specific, distinguishing between trade partners matters when calculating AVEs. For example services trade regulation is substantially

less restrictive among member states of the EEA than among G20 member countries more broadly. This stems from the fact that the EEA has spent many years negotiating market access across various regulatory regimes. The services trade costs among EEA economies is considered a reliable benchmark as to what can be achieved under a cooperative regulatory approach. This work thus makes a distinction between AVEs between pairs of G20 economies where one, or neither is part of the EEA (e.g. Norway- China or South Africa-Brazil); and those based on the intra-EEA STRI used for flows between EEA members (e.g. Norway and Poland).<sup>5</sup>

The results of the scenario reported in this note is based on a reduction of services trade costs among G20 economies to the average costs among EEA economies.<sup>6</sup> Figure 1 shows the average reductions in trade costs of the estimated barriers to services trade by non-EEA members towards all trading partners, by EEA members towards non-EEA trading partners, and by EEA members towards EEA trading partners. Average reductions in estimated trade costs of services barriers reach up to 92 per cent, as in the case of non-EEA member countries reducing barriers to Insurance trade for all partner countries. This relatively high level of trade cost reduction is a reflection of the restrictiveness of initial barriers to services trade. As discussed, barriers to services trade are complex and, depending on the industry and policy, can almost entirely inhibit trade.<sup>7</sup> In addition, services often provide a necessary input to any process (e.g. legal certification or auditing results), making the costs associated with any restrictions generally higher than other (i.e. goods) inputs. The trade costs presented here are consistent with those estimated in other sources.<sup>8</sup> Naturally, intra-EEA reductions in trade costs in services are lowest as EEA members with above-average costs of services simply adjust downwards to the average level.

The findings from this scenario show widespread economic expansion as the G20 economies lower barriers to trade in services (Figure 2). At the broad, economy-wide level, G20 countries see gains in Gross Domestic Product (GDP), as production grows and consumption increases. The European Union, or EU24, gains the most overall, with GDP growth over three per cent, driven by domestic gains from increased access to foreign service providers. Production growth is highest in India, increasing over 2.5 per cent, as better-priced services intermediates feed manufacturing expansion. The Republic of Korea sees the greatest increases in consumption of nearly 3 per cent, as household earnings increase and consumption prices decline. While South Africa has an increase in income and consumption overall, domestic production declines by 2.6 per cent. This is due to a decline in transportation, which is a relatively large part of South Africa's total domestic production. While other services sectors increase

(for example, financial services more than doubles), it is not enough to make up for the decline in transportation.

The overall economic expansion due to services trade liberalisation throughout the G20 is directly driven by the gains from growth in trade. Figure 3 shows widespread trade growth in terms of both imports and exports across the G20. As countries implement measures to liberalise service sectors and reduce barriers to services trade, trade costs are reduced, benefiting consumers and businesses alike. Consumers benefit from access to a greater variety of services at lower prices, and their increased access to foreign services contributes to the increased import growth. Businesses benefit twofold: (1) all sectors (goods and services) gain from access to more services at better prices, and (2) services sector gain from greater access to foreign markets. These gains for businesses are reflected in the growth in imports and exports.

The macroeconomic gains and trade growth from reducing barriers to services trade reflect the economy-wide importance of services through direct and indirect effects. Services are intrinsically linked to manufacturing, representing 18 per cent of all inputs and 24 per cent of intermediate inputs in manufacturing production for G20 economies (and closer to 30% globally). On average, the value of services inputs for manufacturing production in the G20 outweighs that of either labor or capital inputs (Figure 4). It is this importance of services as an input into manufacturing production that drives a lot of the growth observed in Figures 2 and 3. In turn, the expansion of manufacturing generates economic gains to the workers in the manufacturing sector and to households purchasing manufacturing goods.

Following a services trade liberalisation across the G20, service markets open up as barriers to entry decrease. Market competition increases as more innovative firms enter and less-efficient incumbents exit, driving down prices for all services. Businesses in manufacturing across the G20 benefit from lower prices on services intermediates. Figure 5 highlights the translation of more-competitively priced service inputs into manufacturing expansion. Prices for services intermediates decline the most for the EU24, falling by over five per cent on average across service sectors, and manufacturing expands by over four per cent. The EU24 benefits from a combination of its high servicification (i.e. service content in the rest of the economy) as well as improved access to outside markets, leading to relatively greater price declines than observed in other regions. India sees the second largest decline in price for service intermediates (just less than five per cent), but has the highest gains in terms of manufacturing expansion by over eight per cent. Again, the widespread use of services in the economy and the improved market access combine to help India. The



regional heterogeneity of service price reductions is a function of relative levels of liberalisation, the level of services use in overall economic activity and market response. For example, Turkey and China have lower levels of services inputs to their manufacturing process, and thus do not gain to the same extent from services liberalisation.

Figure 6 provides an illustration of the links between reductions to barriers in services trade and manufacturing growth, leading to a rise in exports. In response to services liberalisation, the Italian economy increases imports of services intermediates by 24 billion USD. With a more open economy, market efficiencies prevail, and the prices for services intermediates decline by 1.3 per cent. Services intermediates comprise over 25 per cent of inputs in Italian manufacturing, across all manufacturing sectors. Manufacturers gain from this price reduction to over a quarter of their inputs, and overall manufacturing expands by four per cent. As Italian manufacturers expand, they not only grow in the domestic market but also gain market share abroad, and manufacturing exports rise by 27 billion USD.

The economic gains from reducing barriers to trade in services at the macroeconomic level translate to gains for households and workers. Figure 7 shows the relation between economy-wide gains in GDP and increases in the national household income per worker. Across the G20, countries with higher GDP growth from services trade liberalisation also benefit more at the worker level from gains in household income. In Canada, for example, with a labour force of around 20 million, estimated real GDP gains of 2.35 per cent translate to increased incomes of 1200 USD per worker whereas, in India, with a labour force of around 520 million, estimated GDP gains of 1.71 per cent translate to increased incomes of 60 USD per worker. A principal factor influencing regional differences in gains is differences in the relative level of servicification across countries. Canada exhibits a high level of servicification, with services comprising 58 per cent of domestic production, whereas services comprise 42 per cent of domestic production in India. In addition to differences in levels of servicification, relative gains for households are also determined by various other economic factors such as differences in the composition of household consumption.

Average wage gains by groups of occupations are shown in Figure 8. Overall, most countries across the G20 gain from wage increases for all skill types, though within countries wage changes differ across skills. In Canada, for example, wages increase by 3.2 per cent for managers, by 2.6 per cent for technical workers, by 2.8 per cent for office workers, and by 3.6 per cent for services and low skilled workers. Wage declines for certain skill types in India, Russia, and South Africa are indicative of labour market

reallocation as relative market demand reacts to production expansion, especially for manufacturing sectors in India. Here, as manufacturing sectors become relatively more competitive, *vis a vis* the already competitive services sector, workers move into these areas. Over time, this should lead to greater overall job creation to replenish services sectors demand for technical and semi-professionals. Overall, these within country differences are driven by changes in demand between sectors and the industry-level composition of demand across the skill types.

## Policy Considerations

This scenario highlights the benefits from reducing barriers to services trade, illustrating how economy-wide growth at the macroeconomic level and bilateral trade flows translate into gains for households and workers. As an illustrative exercise, this note examines the reduction of the trade costs associated with regulatory barriers to trade in services. In practice, reducing these costs involves not only targeted domestic policy reforms of services sectors, including industry-specific as well as economy-wide changes but international co-operation as well.

Domestic policy reforms in the services sector should cover sector-specific policies as well as broader, horizontal measures affecting general economic conditions. Sector-specific policies include, for example, licensing requirements, such as in the legal and accounting services sectors, or restrictions on foreign investment and operations, such as in telecommunications and broadcasting sectors. Horizontal measures include economy-wide policies such as those governing movement of persons, market competition, as well as tax and subsidy programs.

In conjunction with domestic services policy reforms, governments can increase international cooperation to promote transparency and to encourage coherent reform processes across trading partners. Regulatory transparency improves trade by improving businesses' understanding of foreign market services regulations and hence reducing costs to enter the foreign market. Further, with bilaterally reduced barriers to services trade, both trading partners can obtain a premium by locking in certainty through committed regulatory co-operation, including internationally, such as in trade agreements, for example.

As recommended in *Services Trade Policies and the Global Economy* (OECD 2017), best practices for implementing policy reforms include strategic regulatory approaches that cultivate open and well-regulated services markets. These can include **supporting pro-competitive domestic policies**, which by reducing barriers to competition, allowing more efficient firms to enter markets and supporting

incumbent firms in efforts to enhance the level of efficiency and innovation. More competitive markets lead to economy-wide gains in productivity and increase overall domestic economic growth. In addition, **scaling back discriminatory measures towards foreign service providers** which bars domestic access to global value chains, also limit consumer choice and business opportunities. Openness to foreign services, which allows businesses increased access to high-quality services, is key to strengthening links in global value chains, fostering upward movement in value chains and more competitive domestic economies.

Because of the complexity and breadth of services policies, governments would benefit from promoting dialogue between policymakers and stakeholders across regulatory domains. By pursuing government-wide dialogue and initiatives, policy practitioners can facilitate comprehensive integration of services policies in the formulation and implementation of reforms as well as in negotiations with trading partners. Thus **developing balanced policies across different modes of supply and engaging in opportunities for regulatory co-operation** can help reduce costs and reduce uncertainty. This is especially true for the complex business models used by services suppliers. Complementarities in modes of supply may reflect combinations of modes, such as commercial presence (Mode 3) relying on movement of people from headquarters to affiliates (Mode 4), or interchangeability between modes, such as a service supplier offering a digital product (Mode 1) to one subset of customers and an in-person service (Mode 4) to another subset. As countries reduce regulatory restrictiveness in the services sector, regulatory differences across markets become increasingly costly. Regulatory convergence aids firms by reducing compliance costs associated with meeting differing requirements across multiple regulatory regimes while maintaining domestic public policy objectives such as consumer protection. In addition, creating a predictable trade regime with stable regulatory environment promotes investment and long term growth.

Finally, **develop effective safety-nets to assist firms and workers in the transition** that results from markets adjusting to policy change; as less-efficient firms leave the market, making way for more innovative firms, or as small and medium enterprises test the waters of foreign markets. Governments can ensure that gains from trade in services liberalisation are evenly distributed across society by coupling changes in services regulations with effective safety-nets and labour market policies.<sup>9</sup>

## Endnotes

**1** OECD Services Trade Restrictiveness Index Policy Brief (January 2019). [https://issuu.com/oecd.publishing/docs/services\\_trade\\_restrictiveness\\_index](https://issuu.com/oecd.publishing/docs/services_trade_restrictiveness_index)

**2** Regulations are categorised under five policy areas: (1) restrictions on foreign entry, (2) restrictions on movement of people, (3) other discriminatory measures, (4) barriers to competition, and (5) regulatory transparency. Information on regulations classified under these five areas is scored according to a binary system, and the scores for each policy area are weighted by experts, resulting in the STRI score by sector and country. Further information can be found in OECD (2017), *Services Trade Policies and the Global Economy*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264275232-en>.

**3** The restrictions to Mode 3 estimated in the STRI are not simulated in the Metro model which only includes services barriers recorded in the balance of payments.

**4** Ad valorem equivalents are the estimated trade costs of, in this case, a non-tariff barrier, calculated as a percentage of the import price of the product, see Benz, S. (2017), “Services trade costs: Tariff equivalents of services trade restrictions using gravity estimation”, OECD Trade Policy Papers, No. 200, OECD Publishing, Paris, <https://doi.org/10.1787/dc607ce6-en>.

**5** See Benz, S. and F. Gonzales (2019), “Intra-EEA STRI Database: Methodology and Results”, OECD Trade Policy Papers, No. 223, OECD Publishing, Paris, <https://doi.org/10.1787/2aac6d21-en>.

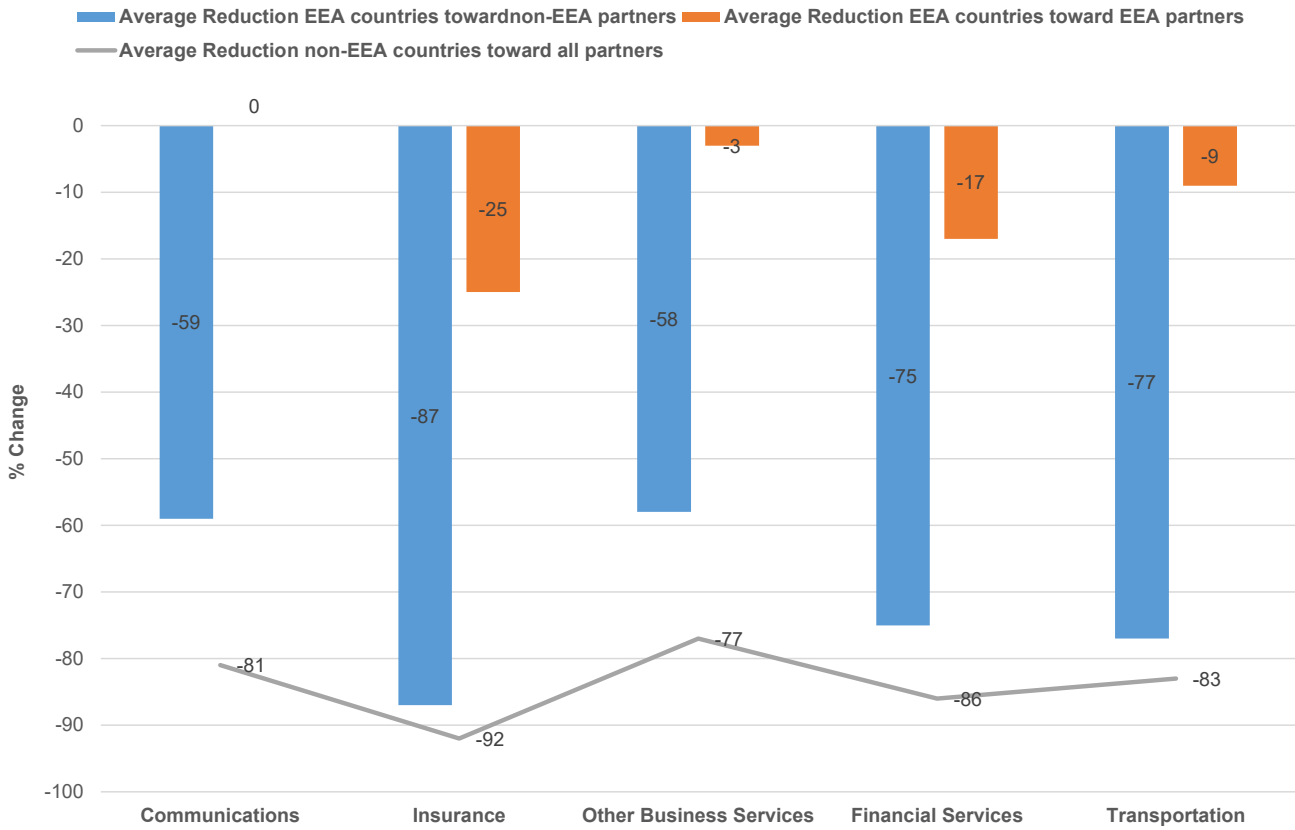
**6** Given the lack of data, the results discussed in this note do not include Argentina or Saudi Arabia.

**7** Barriers to services trade are comprised of a multitude of regulations, differing in nature and purpose from those constituting non-tariff barriers to goods trade. Examples of binary binding barriers include professional qualifications and investment provisions.

**8** Estimates of trade costs associated with barriers to services as implemented in this scenario are in line with previous OECD findings as well as those in the literature (for example, Fontagné et al. 2016 [http://www.cepii.fr/PDF\\_PUB/wp/2016/wp2016-20.pdf](http://www.cepii.fr/PDF_PUB/wp/2016/wp2016-20.pdf), Breinlich, Soderbery, and Wright (2018) <https://doi.org/10.1257/pol.20150116>).

**9** OECD (2017), “Making trade work for all”, OECD Trade Policy Papers, No. 202, OECD Publishing, Paris, <https://doi.org/10.1787/6e27effd-en>.

**Figure 1. Reductions in Barriers to Services Trade**



**Figure 2. Economic Expansion of Production and Consumption as GDP Grows**

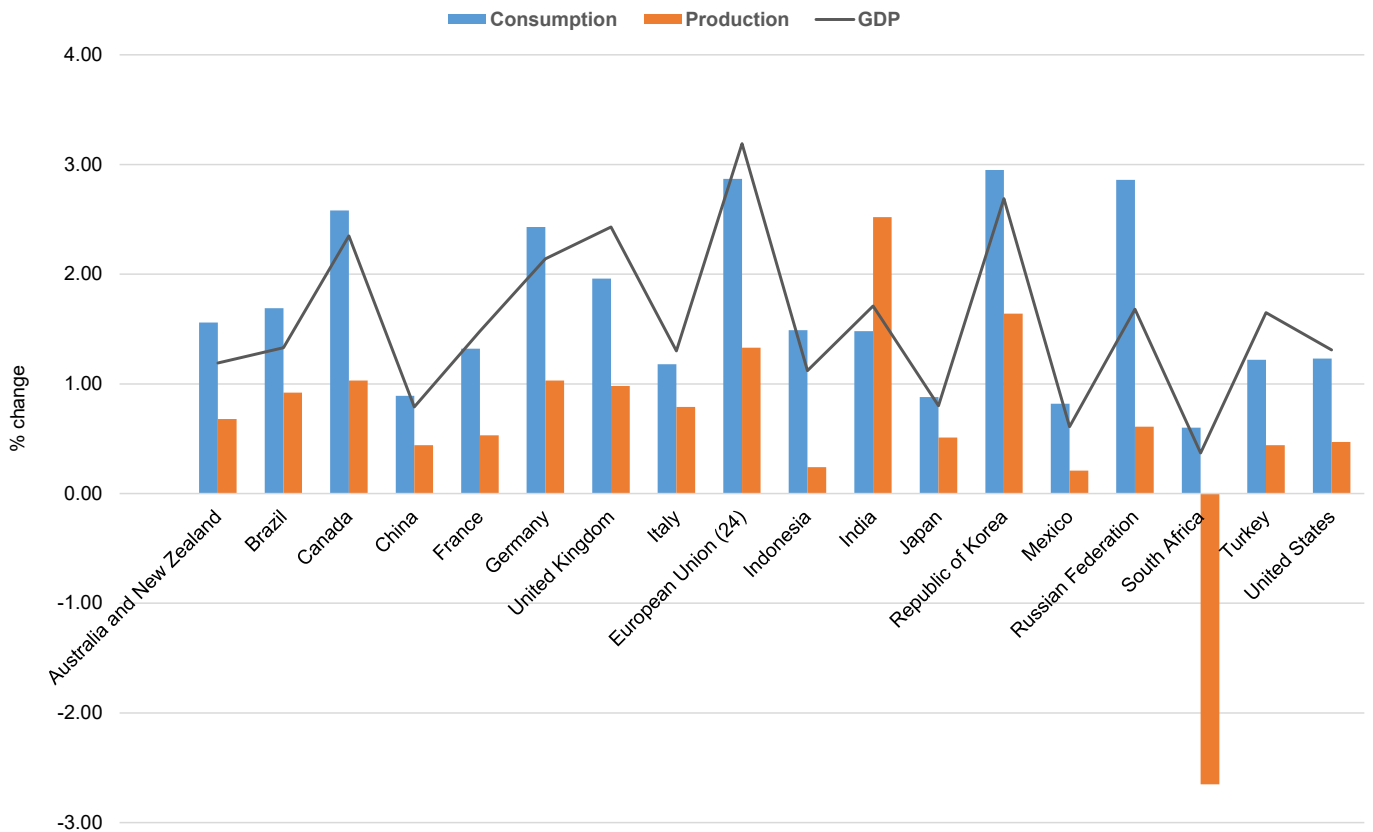


Figure 3. Trade Growth in Exports and Imports

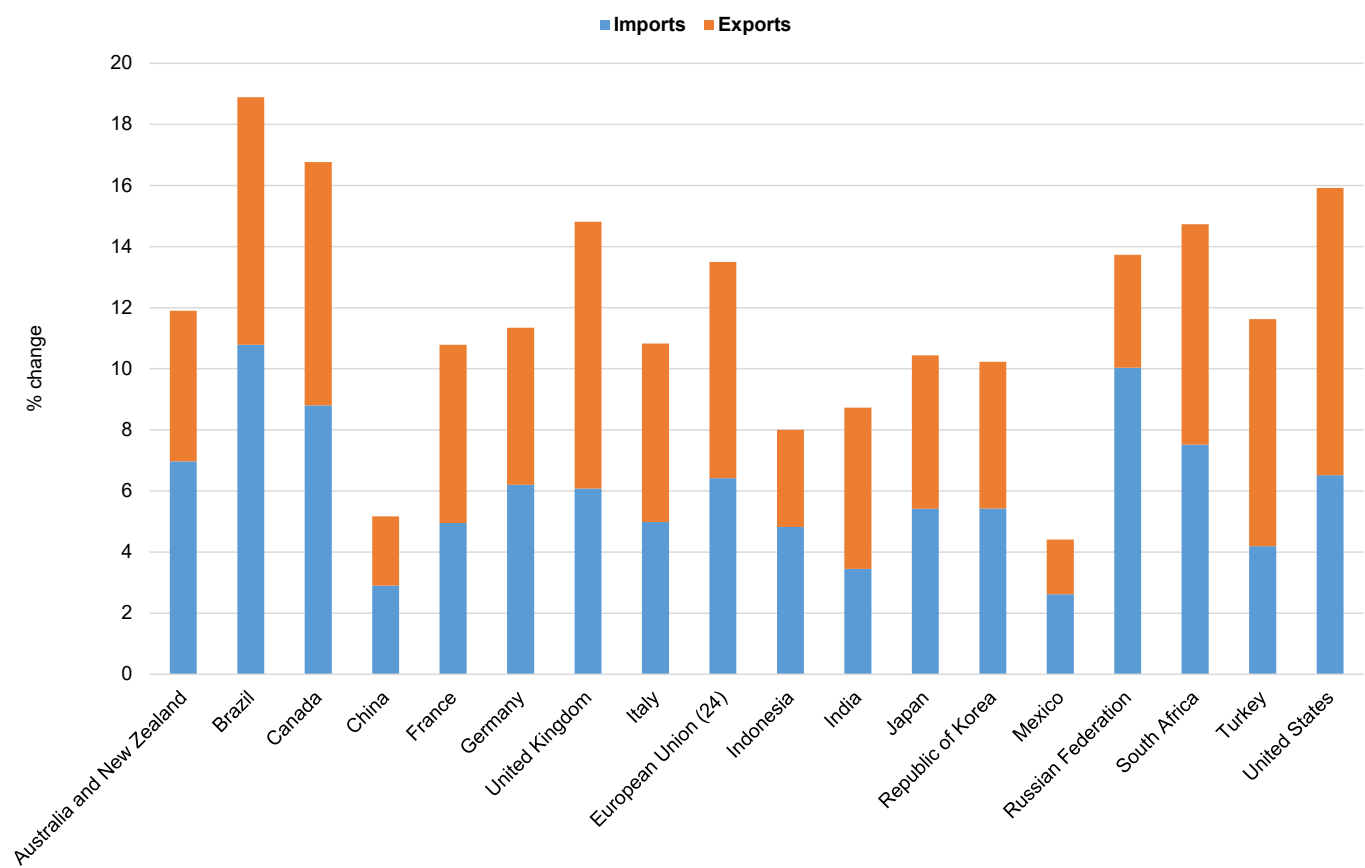
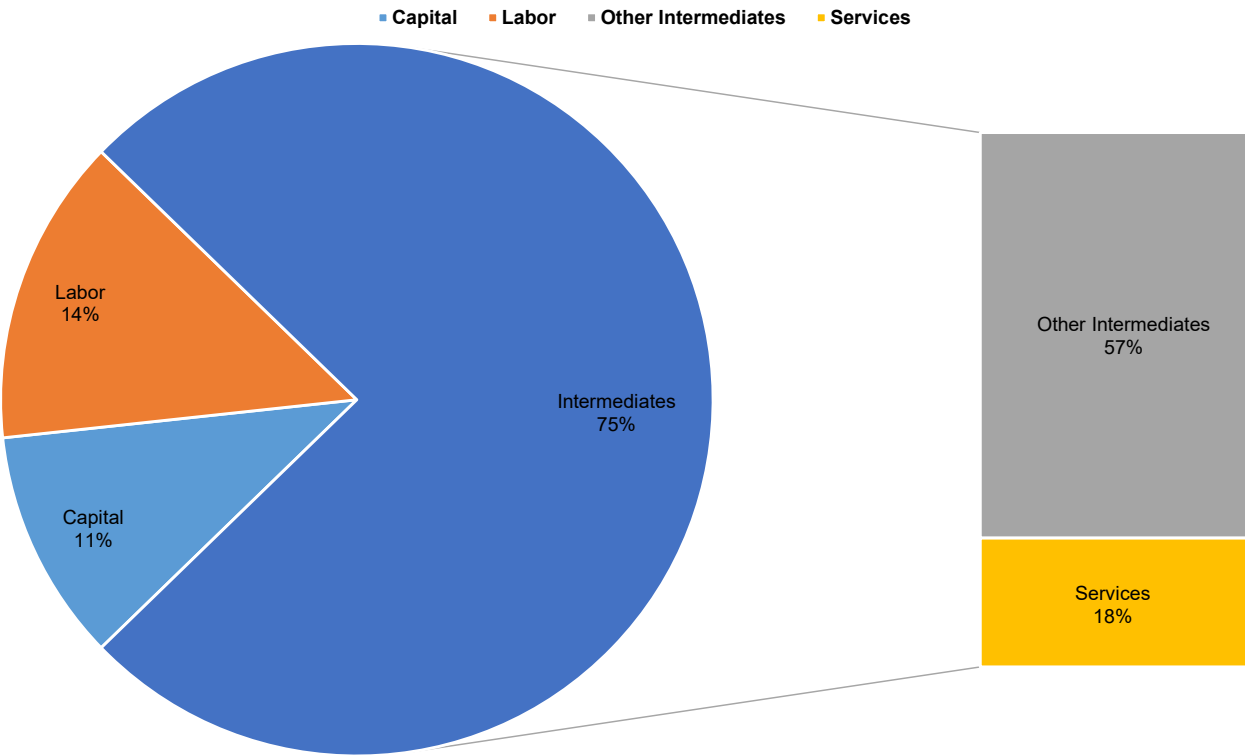
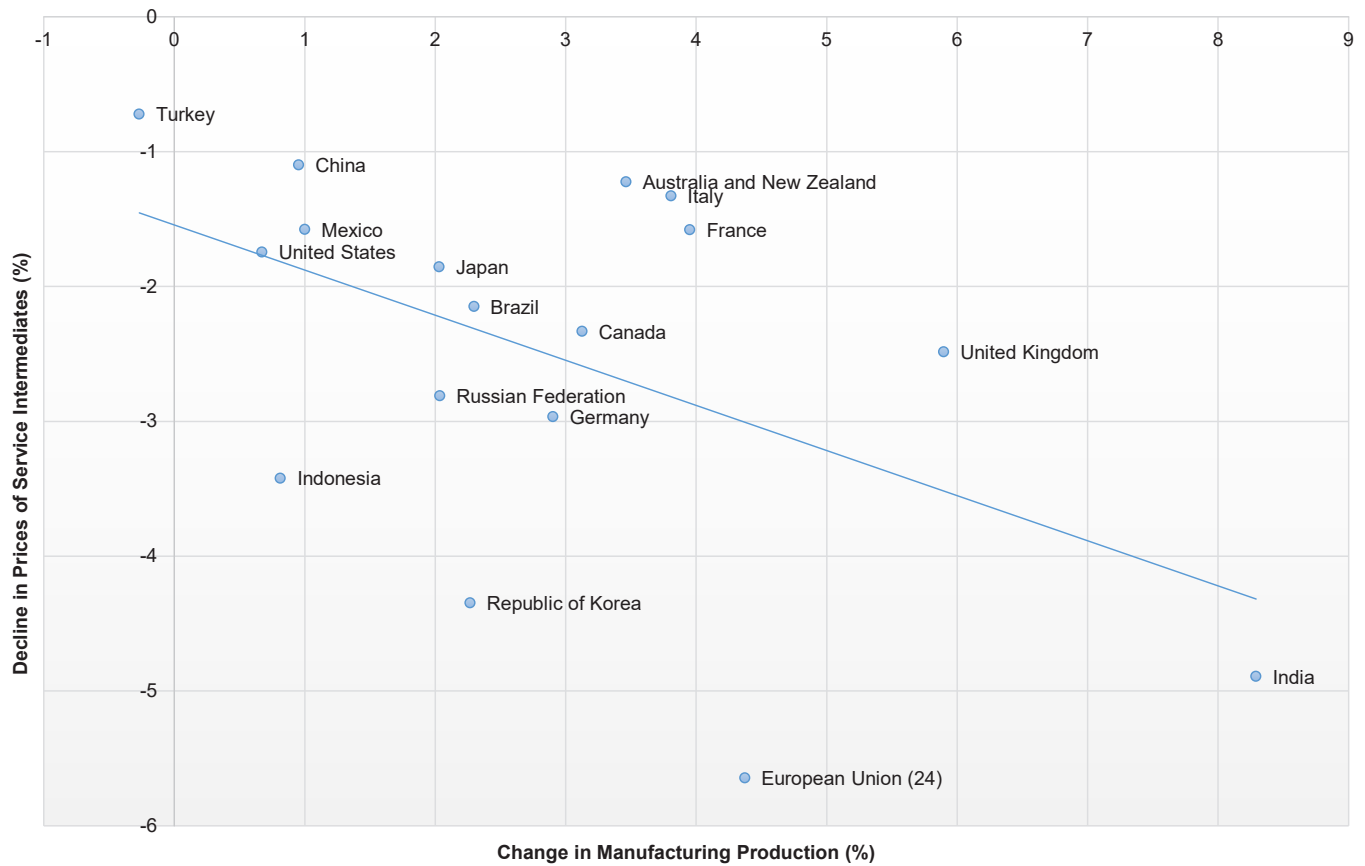


Figure 4. The Value of Services in Manufacturing, across the G20

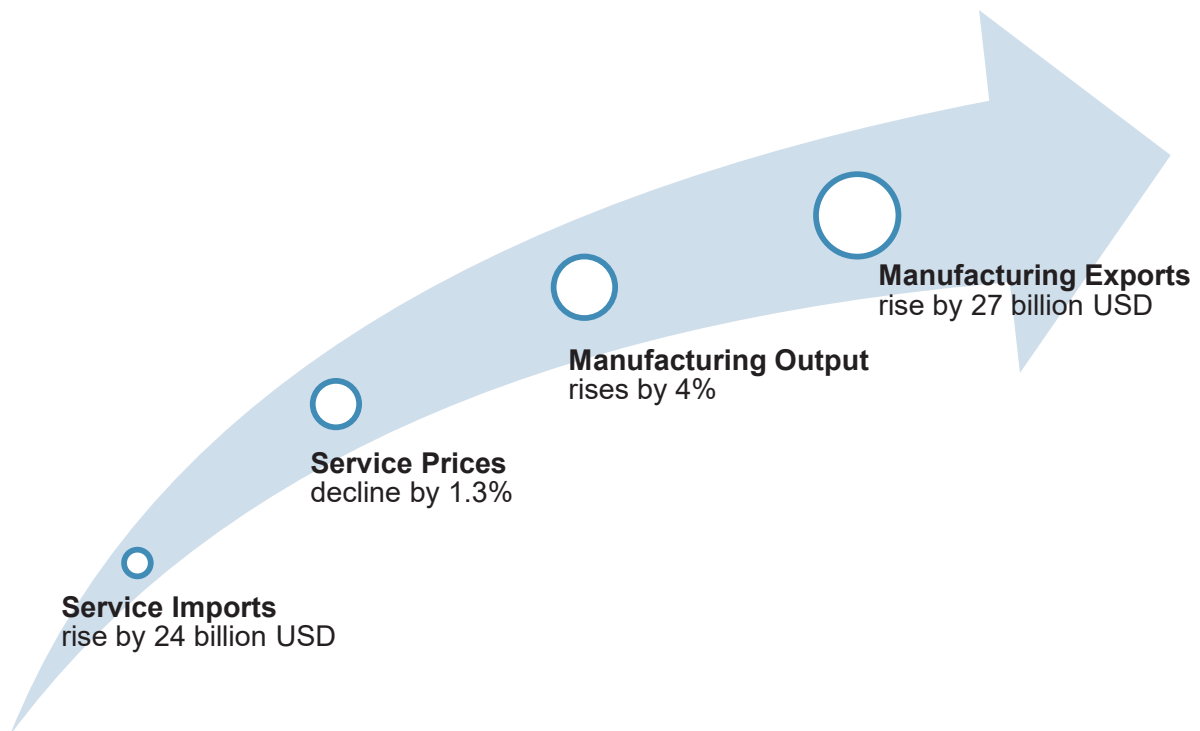




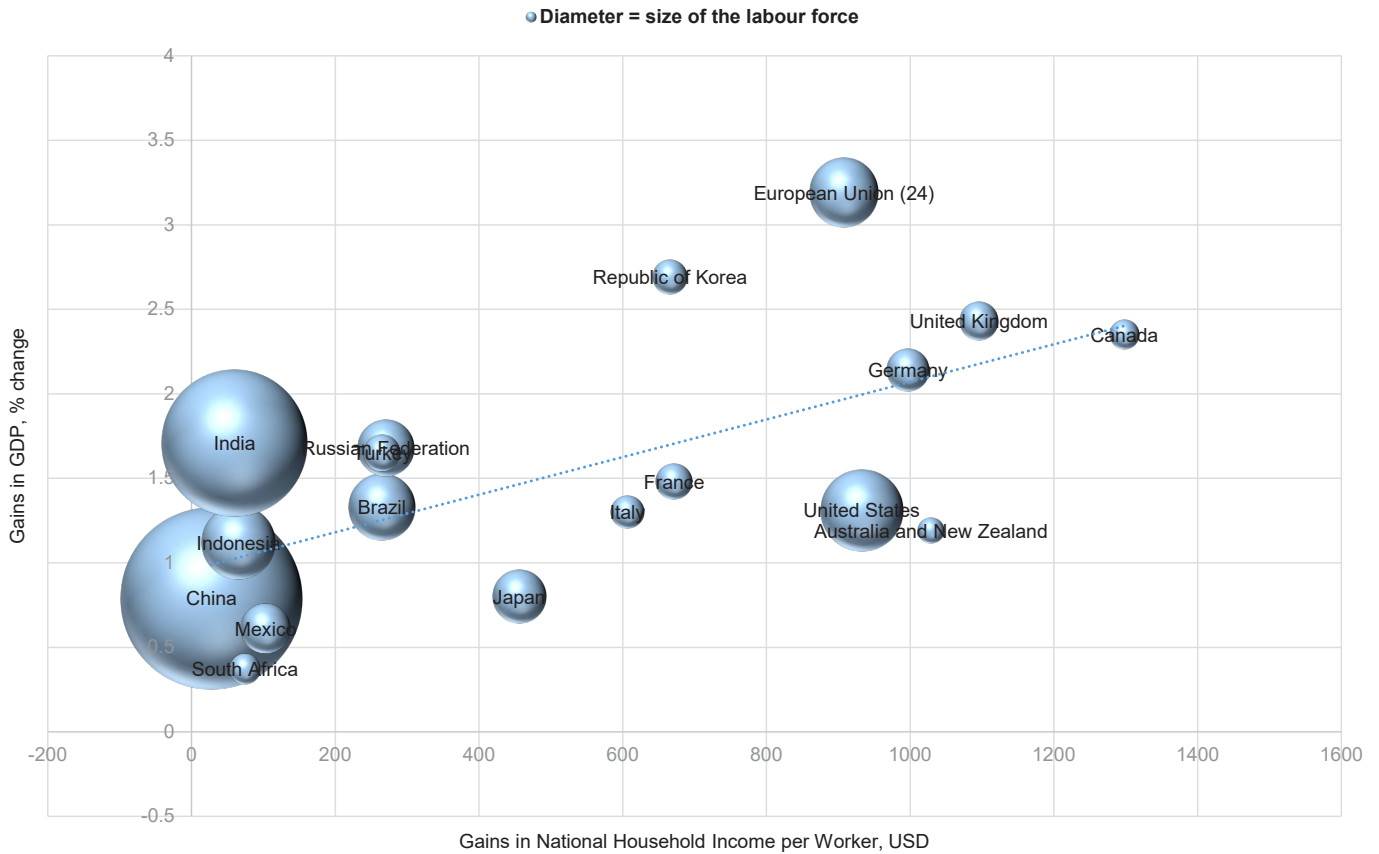
**Figure 5. Better Priced Services Intermediates Foster Manufacturing Expansion**



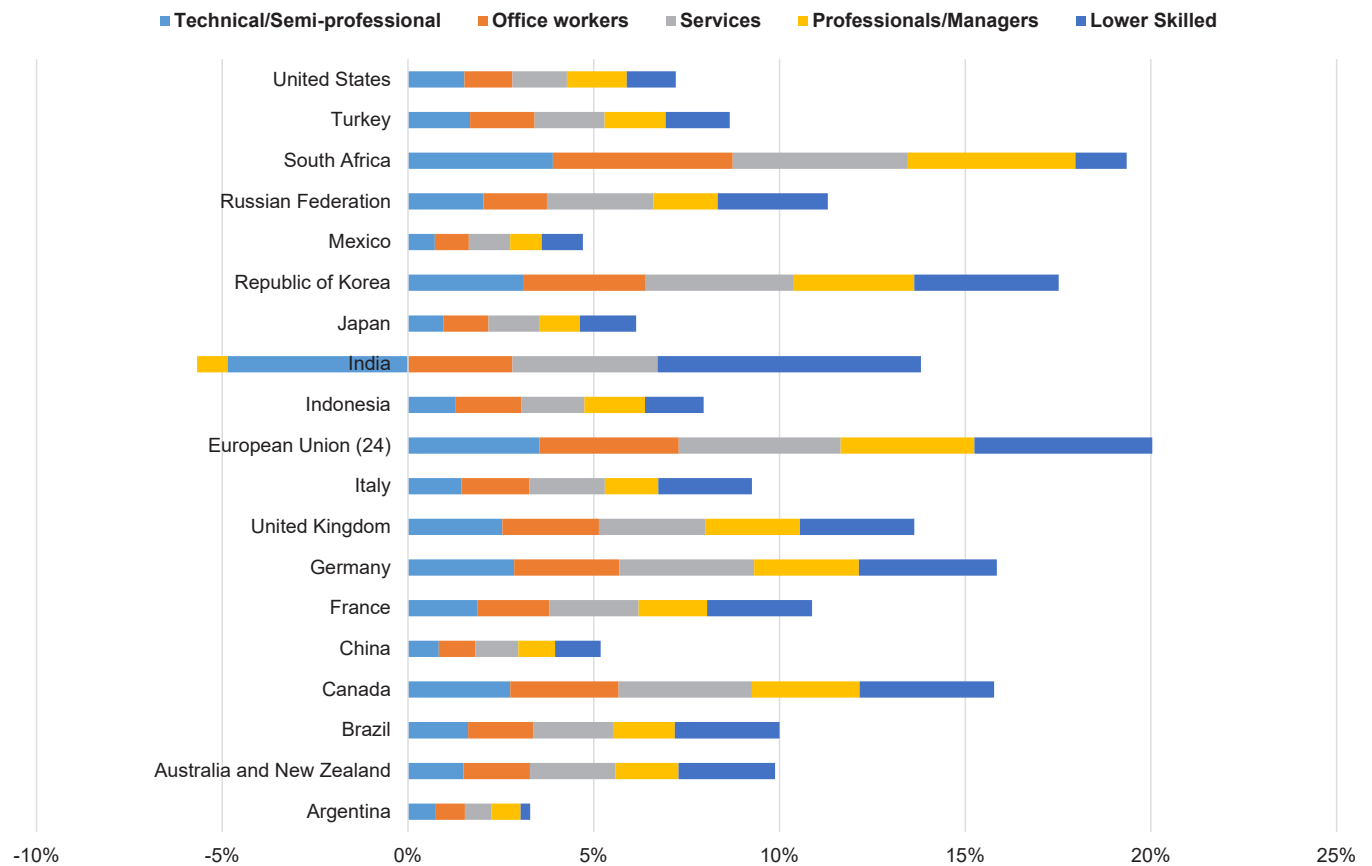
**Figure 6. Spillover Effects in Italy– Imported Services Lead to Manufacturing Export Growth**



**Figure 7. Economic Growth Translates to Household Gains**



**Figure 8. Regional Wage Gains by Skill**



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In today's uncertain trade policy environment, it is arguably more important than ever to retain an objective, evidence-based approach when assessing alternative actions to open or to close markets for trade. The OECD is developing four 'illustrative' scenarios that are analysed in order to highlight the likely consequences of possible future developments in critical trade policy areas. The scenarios are designed to address both long standing and newly emerged issues in the trade community, and will be examined using the OECD METRO Model.

The overall aim of this examination of a wide range of plausible international market scenarios is to provide a robust base of evidence and policy insights that can inform government consideration of alternative trade policy measures, while avoiding engaging in the day-to-day rhetoric that often surrounds specific trade policy announcements by one or more governments.

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