

TRADE POLICIES AND THE GLOBAL ECONOMY

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.

SCENARIO 4 ADDRESSING BARRIERS TO SERVICES TRADE

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 continual 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 exports¹. 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 advanced 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 professions 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 complexities and, ultimately, barriers for service providers seeking to enter foreign markets.

The OECD Services Trade Restrictiveness Index (STRI) measures 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 44 countries, including all G20 members, with the exception of Argentina. For countries in the European Economic Area (EEA), two STRI scores are reported: one for restrictions for foreign service providers within the EEA and another for foreign service providers outside of the EEA. For all other

¹ Trade Policy Note on OECD STRI (March 2018). <http://www.oecd.org/tad/policynotes/oecd-services-trade-restrictiveness-index-policy-note.pdf>

countries, the STRI score represents the level of regulatory restrictiveness faced by all foreign service providers.²

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 trade liberalization in services trade. However, from 2016 to 2017, there was an overall tightening of the global regulatory environment for services trade, representative of restrictive horizontal, economy-wide policy changes including more stringent border entry conditions for service professionals as well as limitations on cross-border data flows. To ensure the continued gains from liberalization in the services sector, countries would benefit from following an evidence-based approach in formulating strategic regulatory reforms to scale back entry restrictions, regulate investment and competition policies, and target logistical bottlenecks.³ This policy note aims to illustrate the benefits from trade liberalization in services, as could be expected from the implementation of targeted regulatory reforms.

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. 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)⁴ of services barriers, as calculated in the STRI, between each country and its' trading partners. The STRI measures the degree to which domestic regulations are barriers to foreign entry across trading partners, with EEA members distinguishing among partners internal and external to the EEA.⁵ Accordingly, these AVEs reflect the trade costs of the barriers faced by a country's trading partners seeking to trade services as well as the relative heightened costs of these foreign services to businesses and consumers in the domestic market.

The theoretical scenario in this note illustrates the potential gains from a reduction of the trade costs associated with barriers to services trade, given that governments implement strategic policy changes targeting services liberalization. For all G20 countries, with the exception of Argentina, the scenario assumes that each country reduces the costs of barriers to services trade for all partners to the mean of the least restrictive level, as observed among EEA members.⁶ For non-EEA members, this entails multilateral liberalizations across all services sectors. While EEA members liberalize multilaterally across all service sectors for non-EEA partners, they only liberalize towards other EEA members in service sectors where barriers to trade are above the least restrictive level.

² Regulations are categorized 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 *Services Trade and the Global Economy*, OECD Publication (2017). ² <http://www.oecd.org/publications/services-trade-policies-and-the-global-economy-9789264275232-en.htm>

³ *Services Trade and the Global Economy*. OECD Publication (2017).

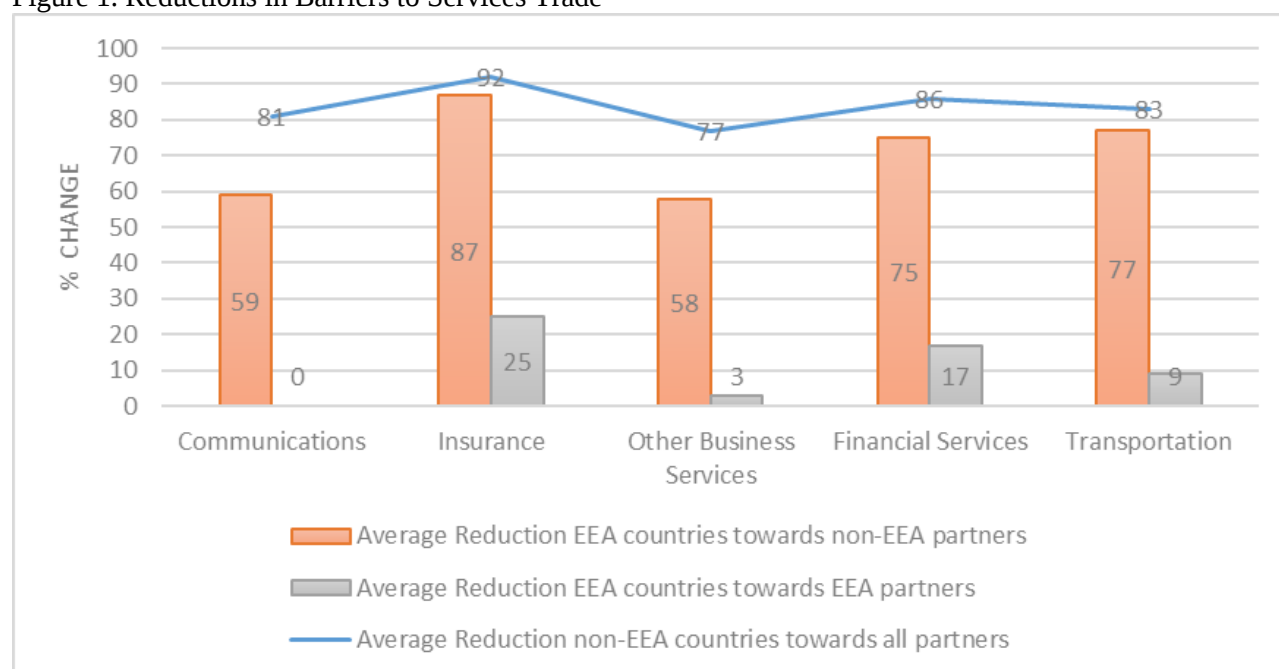
⁴ Ad valorem equivalents are the estimated trade costs of, in this case, a non-tariff barrier, calculated as a percentage of the import price of the product.

⁵ More information on the STRI can be accessed at <http://oe.cd/stri>.

⁶ The level of services policies restrictiveness among EEA members is considered a benchmark in this scenario. This relative level is reflective of ongoing regulatory coordination within the EEA, unparalleled in scope elsewhere.

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 reflective 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 be binding in a binary fashion, such that trade may be entirely inhibited⁷. Non-EEA members reduce trade costs more than EEA members, as EEA members already have on average lower bilateral trade costs in services even with non-EEA members. 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 mean level.

Figure 1. Reductions in Barriers to Services Trade



The findings from this scenario show widespread economic expansion as the G20 economies implement these reductions in trade costs, lowering barriers to trade in services (Figure 3). At the broad, economy-wide level, G20 countries see gains in Gross Domestic Product (GDP), as production grows and consumption increases. The European Union (24) 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.

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. Estimates of trade costs associated with barriers to services as implemented in this scenario are in line with previous OECD findings (Benz 2017) as well as those in the literature (Fontagné et al. 2016).

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

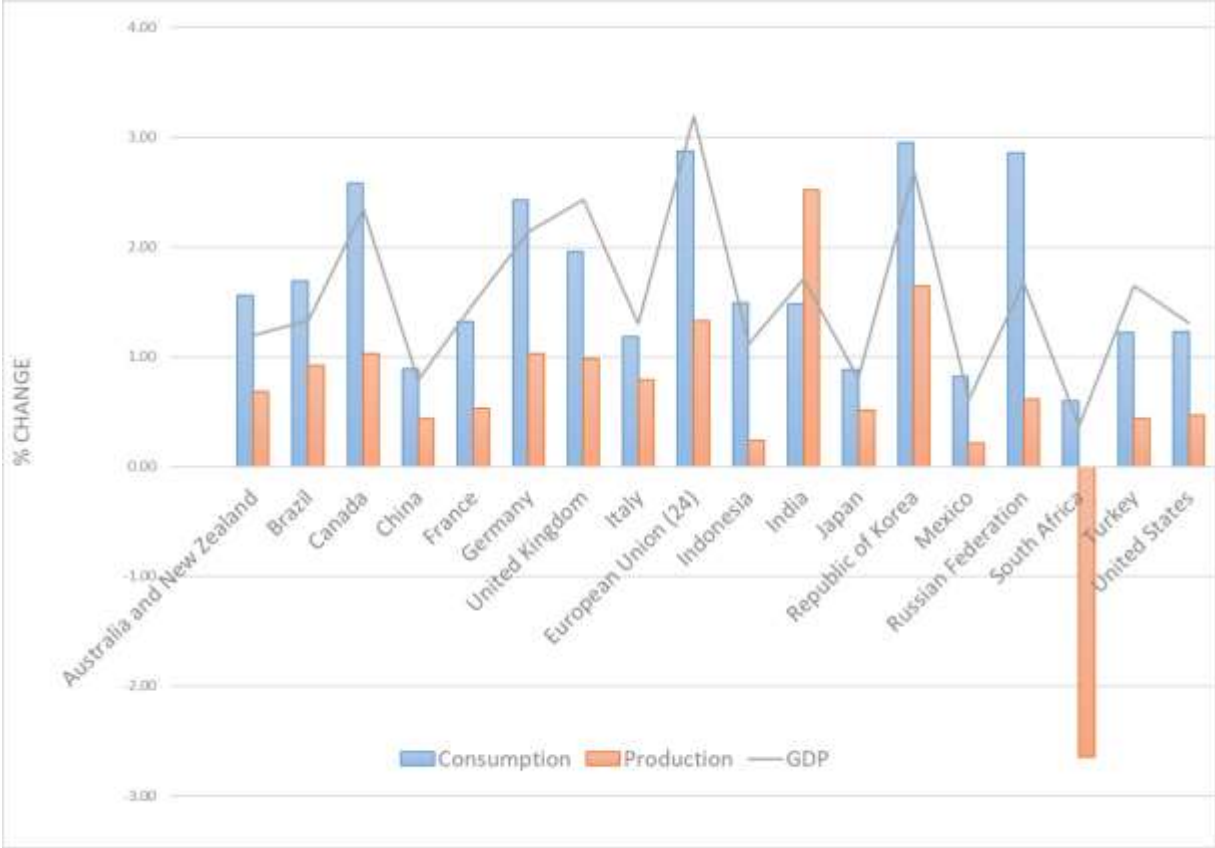
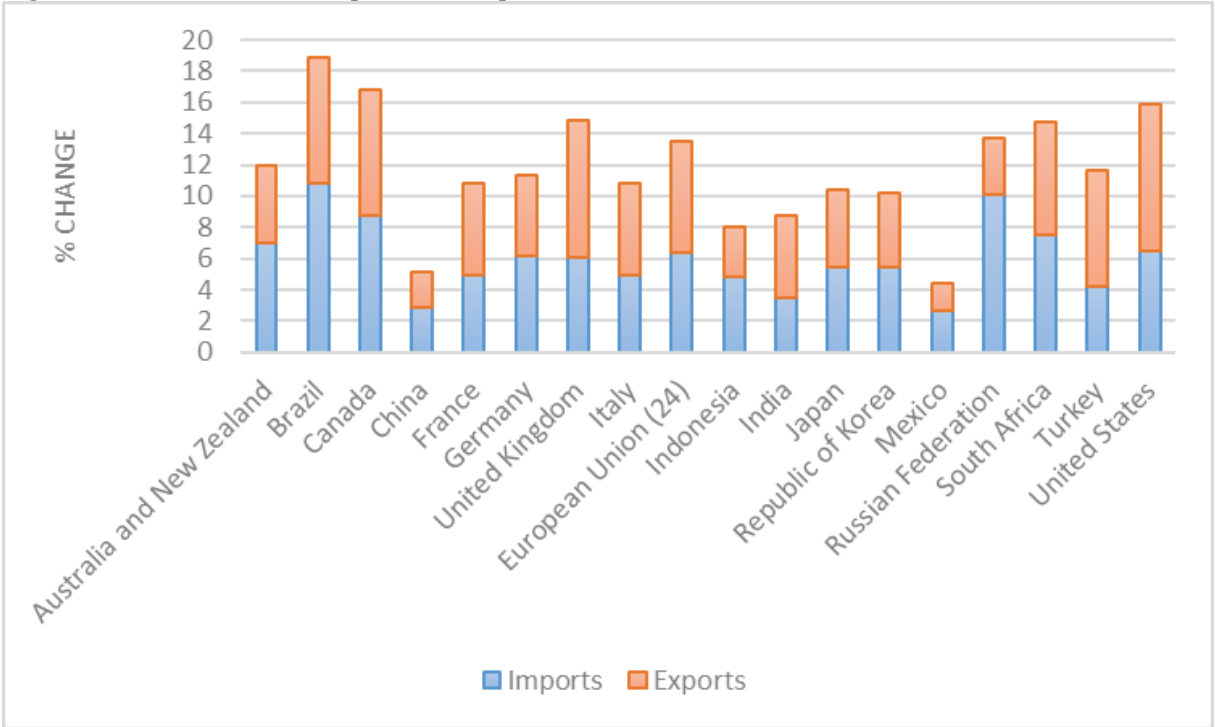


Figure 3. Trade Growth in Exports and Imports



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 liberalize 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 is reflected in increased import growth. Businesses benefit twofold: (1) businesses across all sectors also gain from access to more services at better prices with greater access to imported services, and (2) businesses in the services sector gain from reduced costs for entering foreign markets. These gains for businesses are reflected in 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. The direct effects benefit consumers and businesses as discussed above whereas the indirect effects come from spillovers to non-service sectors and, in particular, the manufacturing sector. Across the G20, services are intrinsically linked to manufacturing, representing 18 per cent of all inputs and 24 per cent of intermediate inputs in manufacturing production. On average, the value of services for manufacturing production in the G20 outweighs that of either labor or capital inputs (Figure 4). Given the importance of services as an input into manufacturing production, reductions in barriers to services trade benefit businesses in the manufacturing sector as more competitively priced services inputs encourage production expansion. In turn, this expansion of manufacturing generates further economic gains, with the benefits to the workers in the manufacturing sector and to households purchasing manufacturing goods.

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

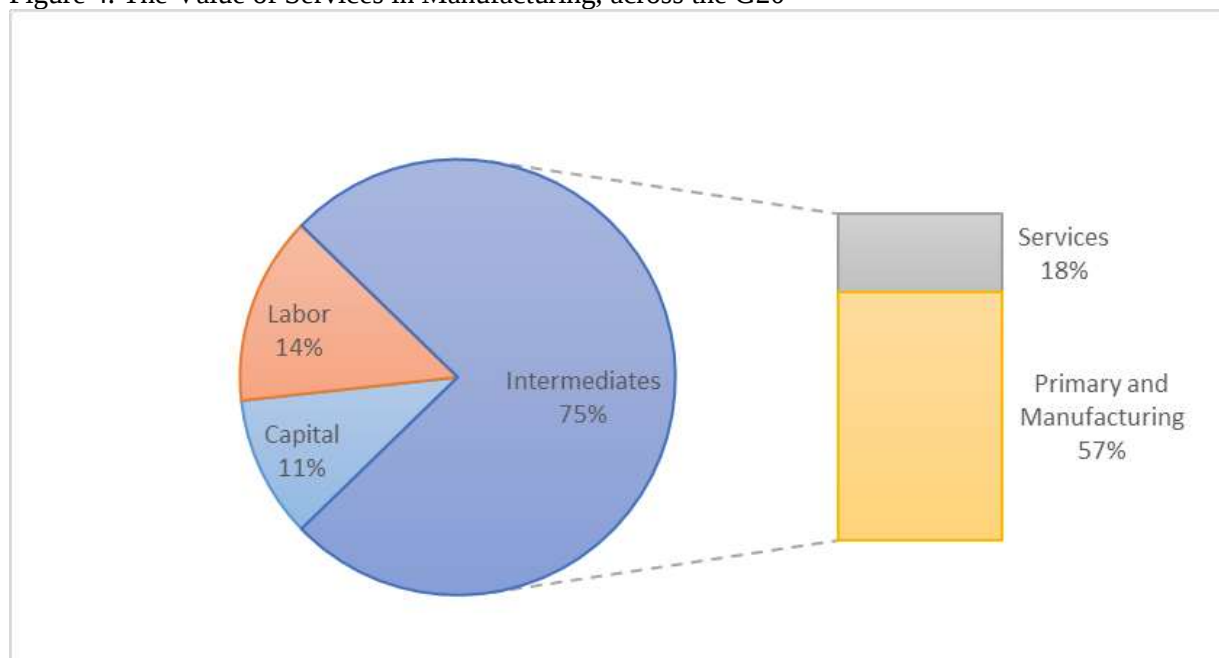
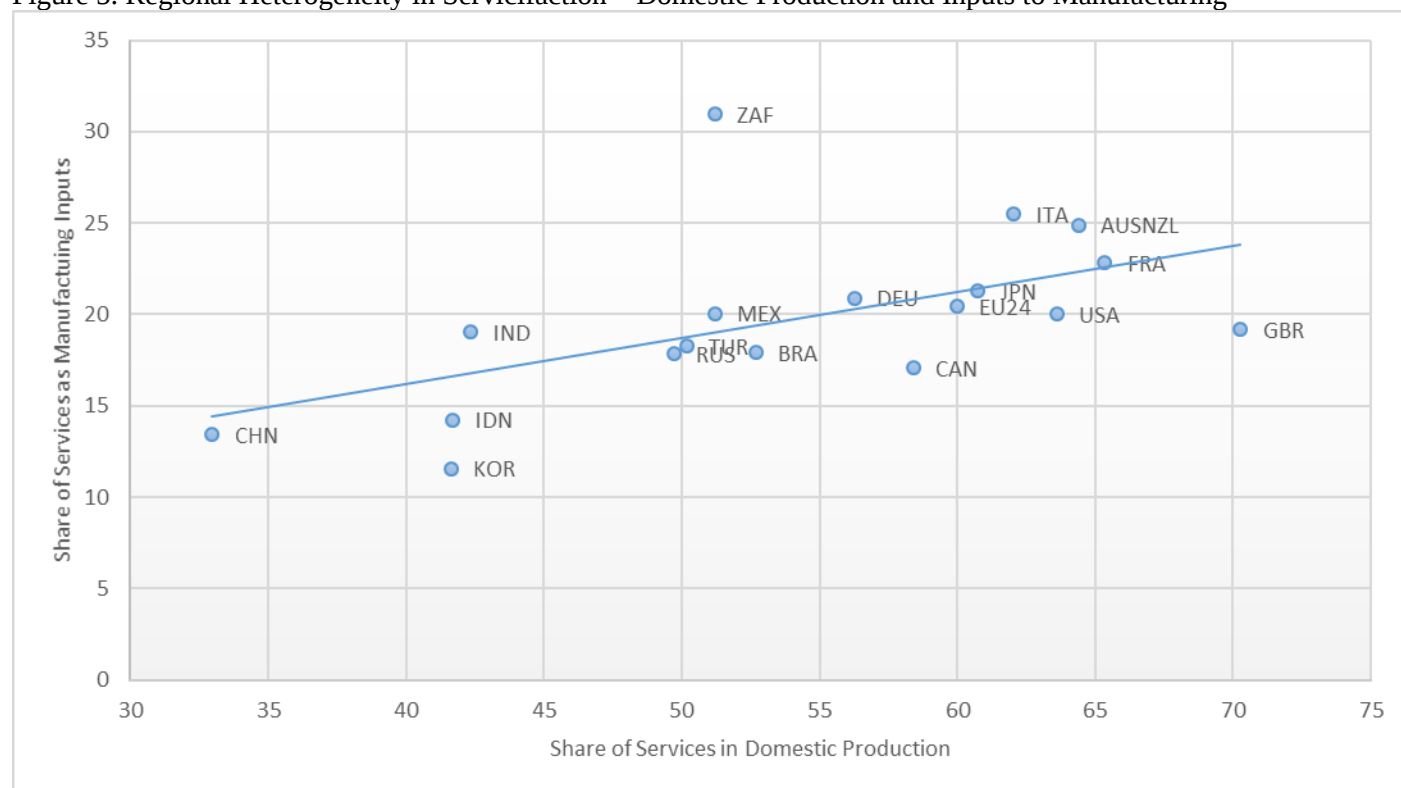


Figure 5. Regional Heterogeneity in Servicification – Domestic Production and Inputs to Manufacturing



In the policy scenario presented in this note where all G20 countries liberalize services trade, countries are expected to benefit from two main sources: (1) gains from opening the domestic market and (2) gains from greater access to trading partner markets. The level of these gains will depend on the relative importance of services for a country's economy.

While services are an integral component of economies across the G20, regional heterogeneity exists in terms of the extent of servicification, or the reliance on services as inputs into manufacturing and for the economy as a whole (Figure 5). Countries with a higher share of services in economy-wide production (exhibiting economy-wide servicification) tend to also demand more services as inputs into manufacturing production (servicification in the manufacturing sector).

France exhibits a high level of servicification, with services representing over 65 per cent of domestic production and accounting for nearly 23 per cent of inputs into the manufacturing sector. In contrast, China exhibits a relatively low level of servicification, with services representing less than 33 per cent of domestic production and accounting for only 13 per cent of inputs into the manufacturing sector (Figure 5). Based on these relative levels of servicification, France is expected to gain more from liberalizing in services trade than China. Of course, it is important to note that the outcome of services liberalisation for a given economy depends on a myriad of factors and that comparative advantages in manufacturing, labour force skill distributions, and established trade ties will contribute as well.

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 services. Businesses in manufacturing across the G20 benefit from lower prices on services intermediates. Figure 6 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. India sees the second largest price drops for service intermediates by just less than five per cent but has the highest gains in terms of manufacturing expansion by over eight per cent. The regional heterogeneity of service price reductions depends on relative levels of liberalisation and market response. Differences in associated growth of manufacturing depend on the composition of services inputs as well as differences across manufacturers.

Figure 6. Better Priced Services Intermediates Foster Manufacturing Expansion

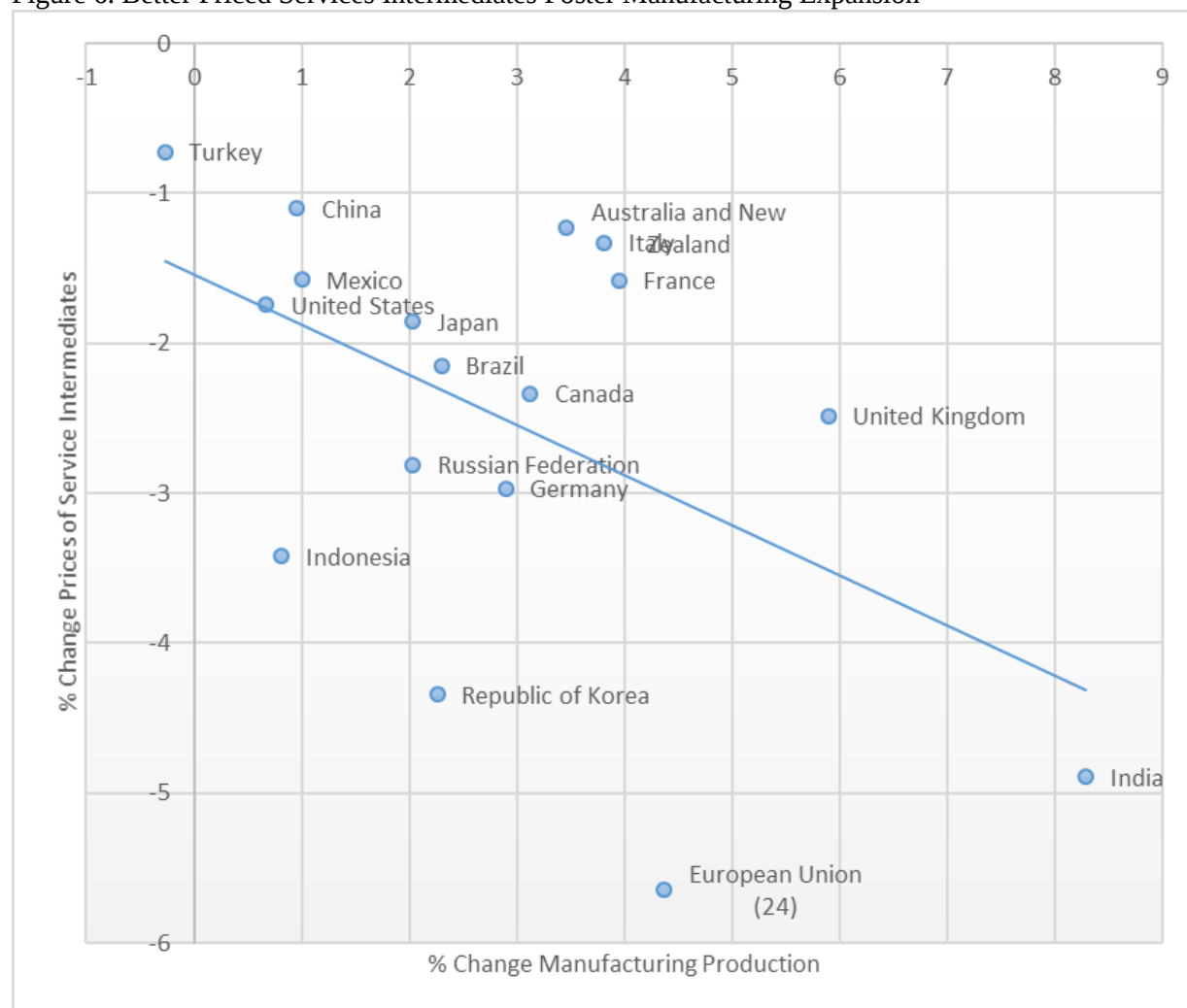


Figure 7. Spillover Effects in Italy– Imported Services Lead to Manufacturing Export Growth

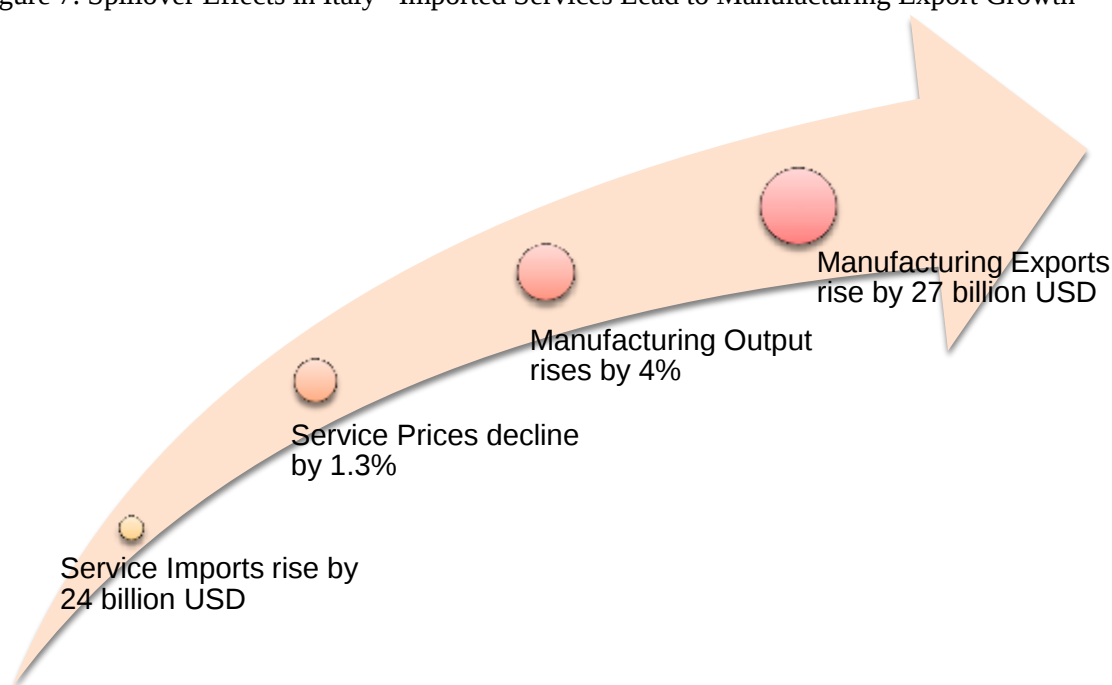
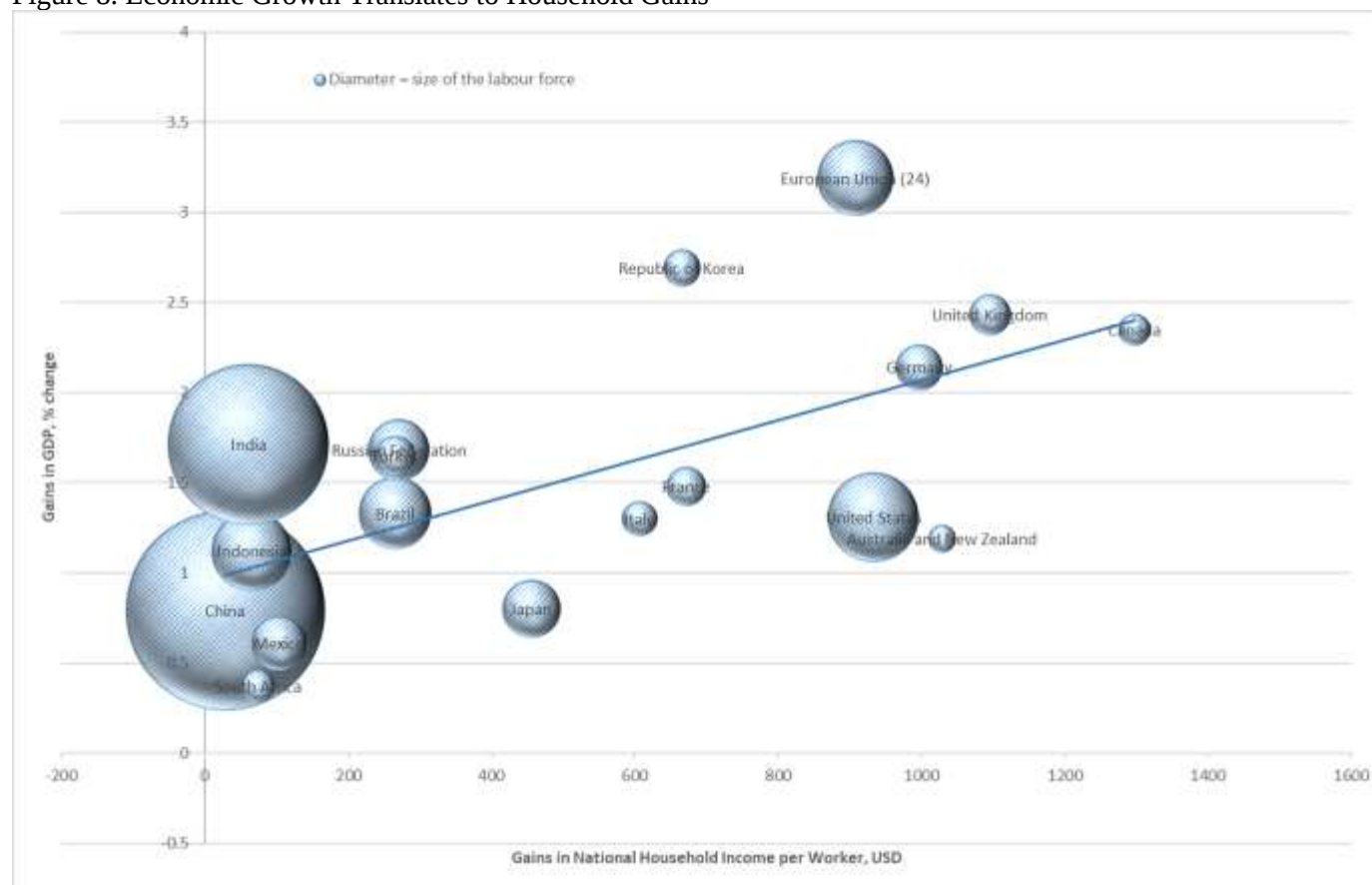


Figure 7 provides an illustration of the links between increased services imports following reductions to barriers in services trade and manufacturing growth, leading to a rise in exports. In response to services liberalisation, the Italian economy increases imports of services intermediates by 24 billion 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 (Figure 5). Manufacturers gain from this price reduction to over a quarter of their inputs to production, 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.

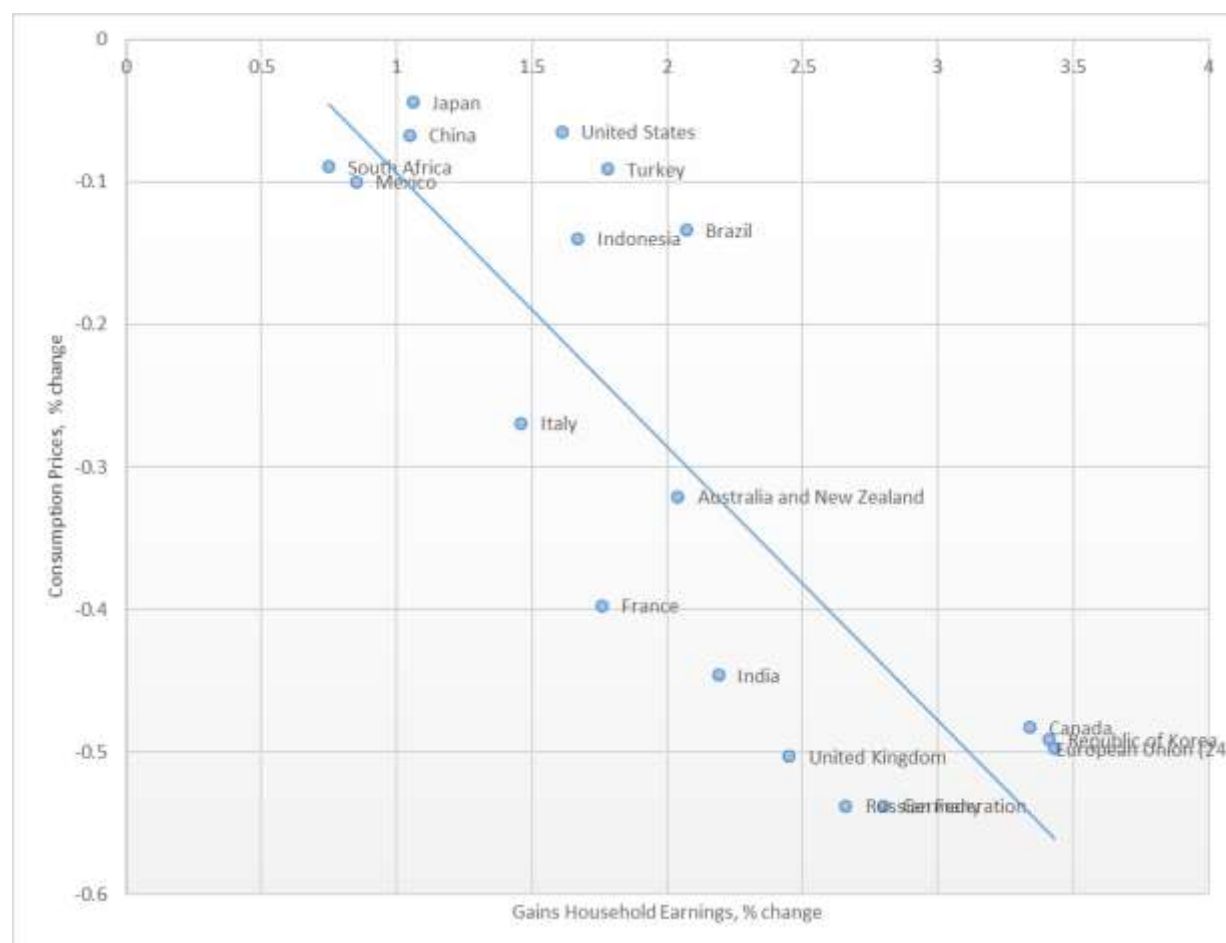
The economic gains from reducing barriers to trade in services at the macroeconomic level translate to gains for households and workers. Figure 8 shows the relation between economy-wide gains in GDP and increases in the national household income per worker. Across the G20, countries with higher GDP growth from services trade liberalization 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 GDP gains of 2.35 per cent translate to increased incomes of 1 200 USD per worker whereas, in India, with a labour force of around 520 million, estimated GDP gains of 1.71 per cent only 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 only comprise 42 per cent of domestic production in India (Figure 5). In addition to differences in levels of servicification, relative gains for households are also determined by various other economic factors such as differences in consumer baskets or the composition of household consumption.

Figure 8. Economic Growth Translates to Household Gains



Household gains from liberalization of services trade can be decomposed into price and earning channels (Figure 9). By the price channel, G20 households gain as consumer prices decrease from direct and indirect effects of reduced barriers to services trade. Direct effects include reduced prices for services, and indirect effects include reduced prices for manufactured goods. By the earnings channel, households gain from increased wages as economies expand. The price and earnings channels are complementary, and the interactions of changes through these channels determine changes in household purchasing power. Households in the United Kingdom, for example, gain twofold from lower consumption prices by 0.5 per cent and from increased earnings of nearly 2.5 per cent. While policy reforms reducing costs in services trade benefit countries throughout the G20, the variation of benefits across countries reflects differences in the level of servicification in the economy, in consumer baskets, and in the composition of the labour force (relative proportions of skilled versus unskilled workers).

Figure 9. Household Gains through Price and Earning Channels



The skill composition of the labour force varies across G20 (Figure 10). For certain countries including Mexico, China, and Indonesia, agricultural and low skilled workers comprise around fifty per cent of the labour force. For several countries, including the United Kingdom, France, Italy, Canada, and the United States, around sixty per cent of the labour force consists of very high skilled workers – managers, professionals, and technical workers. Gains in earnings from reduced barriers in services trade are affected by the relative distribution of skills in a country as wage responses differ by skill. As such, countries with larger proportions of high skilled workers, for example, would be expected to benefit more overall from wage increases for high skilled workers, relative to countries with lower proportions of high skilled workers.

Figure 11 shows the wage responses to liberalization in services across countries. 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 clerks, and by 3.6 per cent for shop assistants, agricultural, and other low skilled workers. Wage declines for certain skill types in India, Russia, and South Africa are indicative of labour market adjustments as relative market demand reacts to production expansion, especially for manufacturing sectors in India. Overall, these within country differences are driven by changes in demand across different industries and the industry-level composition of demand across the skill types.

Figure 10. Skill Composition across the G20

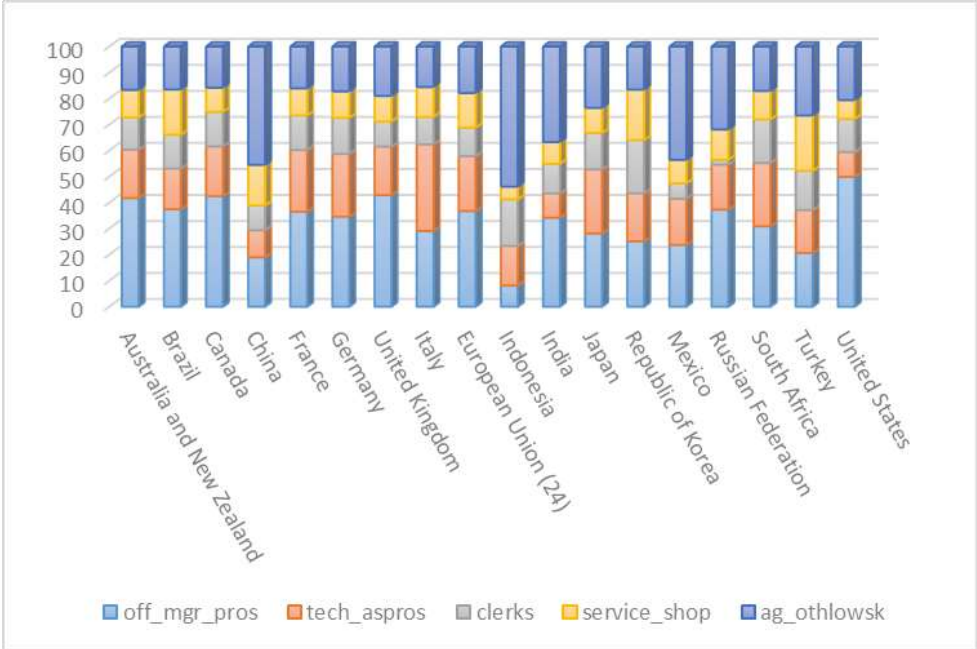
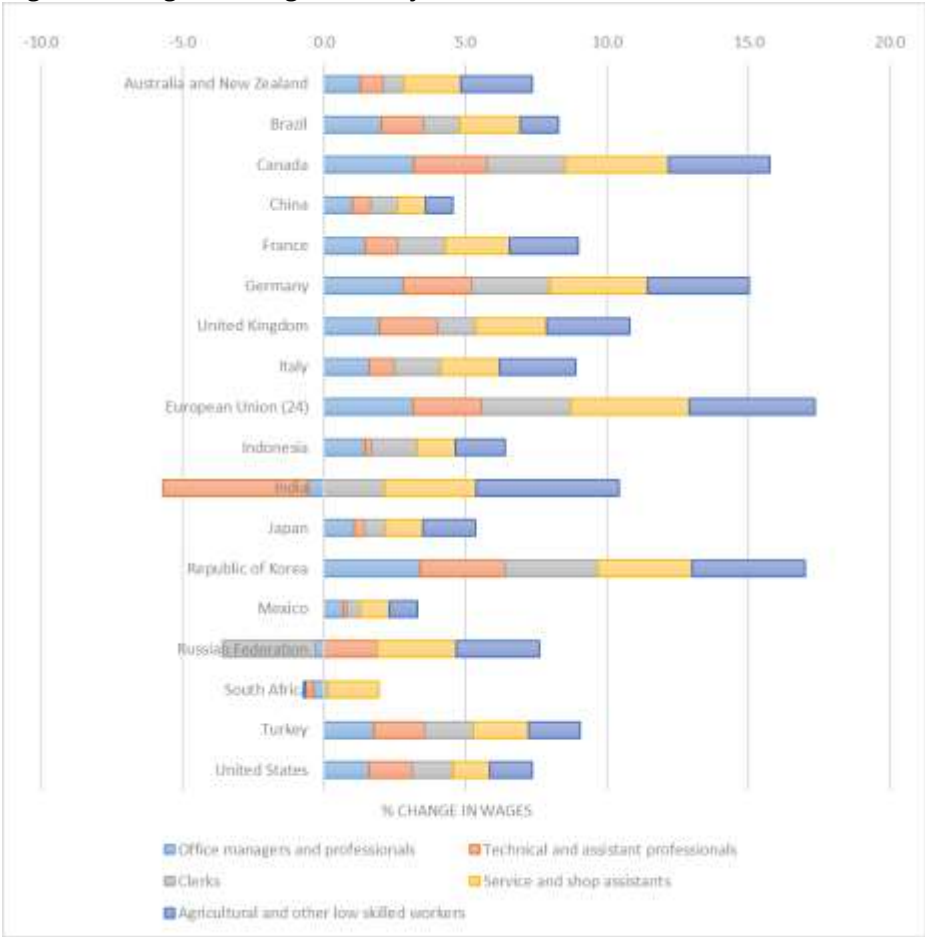


Figure 11. Regional Wage Gains by Skill



Policy Considerations

This scenario highlights the benefits from reducing barriers to services trade, illustrating how economy-wide growth at the macroeconomic level and the bilateral trade level translates to gains for households and workers. As a theoretical exercise, this note examines the reduction of the trade costs associated with regulatory barriers to trade in services. In practice, reducing these costs involves targeted domestic policy reforms of services sectors, including industry-specific as well as economy-wide changes and, further, multilateral co-operation.

This note considers reductions to barriers in services trade across the G20, as might be implemented through co-ordinated services trade policy reforms. While multilateral co-operation is key to facilitating regulatory transparency, countries must first begin with domestic reforms of restrictive regulations to achieve the highest levels of benefits from trade agreements and regulatory co-operation. Domestic reforms are a source of benefits on two levels. First, domestic reforms reduce market inefficiencies at the level by opening up the market to small and medium enterprises, increasing competition, and encouraging innovation. Second, reforms reduce costs to businesses and households by providing access to a greater variety of services available at lower prices.

Domestic policy reforms in the services sector should cover sector-specific policies as well as broader, horizontal measures. 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.

With domestic services policy reforms in place, governments can facilitate dialogue with trading partners to promote transparency and to encourage partner reforms. Regulatory transparency improves trade by improving businesses' understanding of foreign market services regulations and hence reducing costs to enter the foreign market. Partner reforms offer these domestic benefits to trading partners' economies. Further, with bilaterally reduced barriers to services trade, both trading partners can obtain a premium by locking in certainty through committed regulatory co-operation such as in trade agreements.

Because of the complexity and breadth of services policies, governments would benefit from promoting dialogue between policymakers and stakeholders across regulatory domains to ensure economy-wide coverage of policy reforms. When considering multilateral regulatory co-operation, governments would further benefit from ensuring coordination between trade negotiators and domestic regulators. 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.

As recommended in *Services Trade Policies and the Global Economy* (OECD 2017)⁸, best practices for implementing policy reforms include strategic regulatory approaches that cultivate open and well-regulated services markets:

- **Supporting pro-competitive domestic policies** – protectionist measures shelter the least competitive and most inefficient firms. By reducing barriers to competition, more efficient firms enter markets, pushing incumbent firms to enhance the level of efficiency and innovation. These more competitive markets lead to economy-wide gains in productivity and increase overall domestic economic growth.

⁸ <http://www.oecd.org/publications/services-trade-policies-and-the-global-economy-9789264275232-en.htm>

- **Scaling back discriminatory measures towards foreign service providers** – discrimination against foreign service providers bars domestic access to global value chains, limiting consumer choice and business opportunities. Supporting open markets which are inclusive to foreign service providers allows consumers to access a greater variety of services at better prices and provides businesses with a rich supplier base for intermediate services inputs. 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.
- **Targeting logistical bottlenecks** – restrictions in logistics, transport, and distribution services hinder global value chain integration by increasing trading costs to service suppliers and inhibiting just-in-time inventory management. Reducing barriers to entry in the network of logistics providers encourages efficiency and enables quick delivery of goods at lower costs to the supplier.
- **Prioritizing regulatory transparency** – disparities between regulatory regimes pose significant costs to domestic firms seeking to enter the global market and to foreign service providers supplying domestic importers. By increasing awareness of the differences across regulatory regimes, firms can more readily distinguish differences in costs of regulatory compliance at home versus abroad, and these firms will be better prepared to meet local regulatory requirements. Regulatory transparency is key to increasing access for small and medium firms which disproportionately face the cost of services trade restrictions. Better access to information on compliance costs and administrative procedures in foreign markets lowers regulatory hurdles and facilitates market entry for small and medium firms, which do not have the same resources as larger firms to absorb overhead costs.⁹
- **Developing balanced policies across different modes of supply** – business models for services suppliers are complex, often transcending multiple modes of supply. 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. To minimize market distortions, policy design and implementation should work in tandem across trade, investment, and competition regimes, extending best-practice regulation and market liberalisation across modes.
- **Engaging in opportunities for regulatory co-operation** – regulatory heterogeneity and unpredictability create costs for exporting service providers. As countries reduce regulatory restrictiveness in the services sector, regulatory differences 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 policies encourages service providers to engage in trade by reducing risks to the sunk costs incurred from exporting.
- **Developing effective safety-nets to assist firms and workers in the transition** - the process of market adjustment is a natural response to policy change which is expected 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.¹⁰

⁹ International Regulatory Co-operation and Trade: Understanding the Trade Costs of Regulatory Divergence and the Remedies. OECD 2017. <http://www.oecd.org/gov/regulatory-policy/international-regulatory-co-operation-and-trade-9789264275942-en.htm>

¹⁰ Making Trade Work for All. OECD 2017. <https://www.oecd.org/trade/making-trade-work-for-all.pdf>