Services Trade Restrictiveness Index: Policy Brief

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Organisation for Economic Co-operation and Development (OECD)

BETTER POLICIES FOR BETTER LIVES

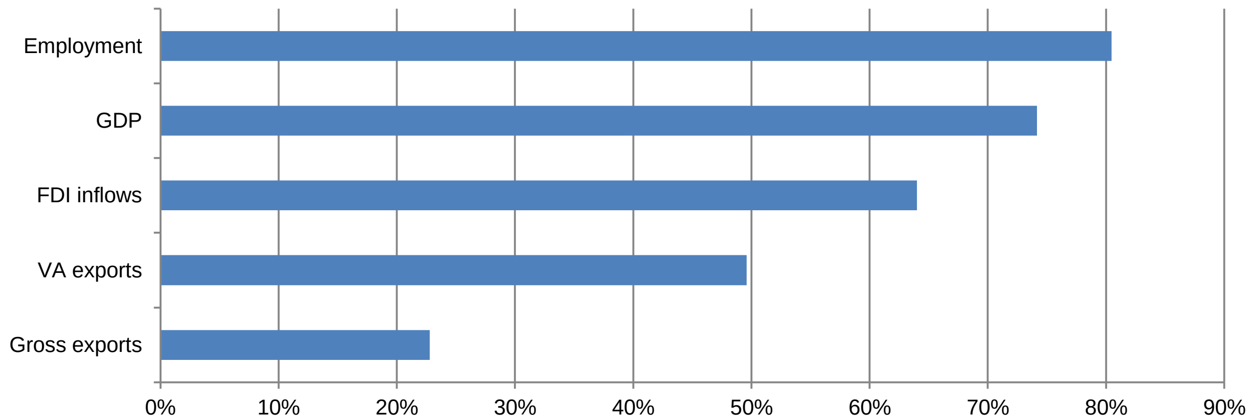
OECD Services Trade Restrictiveness Index (STRI)

"When you can measure what you are speaking about, and express it in numbers, you know something about it…." Lord Kelvin

Services and services trade are crucial for growth and employment...

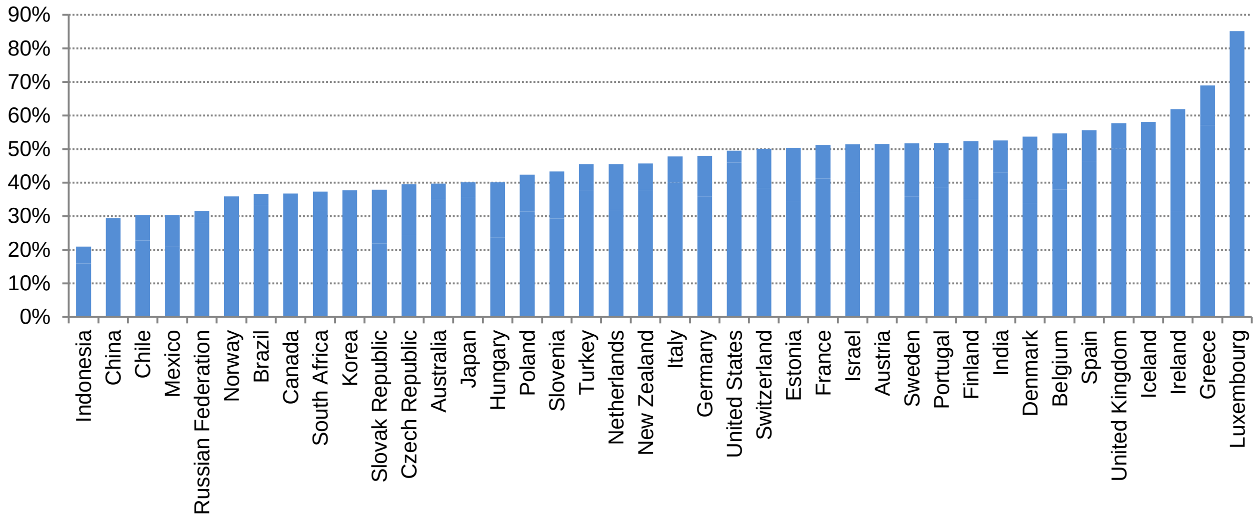
Services account for about 80% of employment and 75% of GDP in OECD countries and between 40 and 70% on both accounts in major emerging economies. From the sheer size of the services sector it is evident that any significant improvement in overall income levels must come from the services sector. Exposure to ideas and competition from international markets enhances productivity in any sector. Services are no different.

Figure 1. Share of services in the economy (OECD average)



As Figure 1 shows, services account for a smaller share of international trade and investment than of domestic production and employment. But as revealed in the OECD-WTO TiVA-GVC database, when the value of services inputs is taken into account the share of services increases from 22% of gross exports to almost half of value added exports. Figure 2 shows how that applies at the national level.

Figure 2. Share of services value added in total exports, 2009



Source: OECD-WTO (2013).

This is in part because the value created by services as intermediate inputs represents over 30% of the total value added in manufactured goods. There would be no global value chains without well-functioning transport, logistics, finance, communication and other business and professional services to move goods and coordinate production along the value chain. More efficient services sectors contribute to improve productivity and to enhance competitiveness across the economy – in manufacturing as well as in services sectors themselves. In brief, improving services performance is a far more significant contribution to growth and employment than has traditionally been realised.

World class services sectors cannot be developed if isolated from best international practice and world class inputs. That is why the OECD has turned its attention to identify services trade barriers and the scope to unlock growth through their reform. At a time when G20 economies are looking to achieve 2% growth above trend, it is clear that reform of services markets could be an important contributor to such strategies. The STRI project provides a new set of tools that can assist all countries to achieve higher growth.

...but comparable information and reliable metrics on services trade barriers have been lacking

The new OECD Services Trade Restrictiveness Index (STRI) provides a comprehensive portrait of services trade restrictions and includes two essential elements. A *regulatory database* has been compiled, verified and peer reviewed by the OECD, based on laws and regulations in existence today in 40 countries across 18 sectors; the database is maintained on-line, frequently updated, and is interactive. C*omposite indices* have been developed that quantify identified restrictions across five standard categories, with values between zero and one. Complete openness to trade and investment gives a score of zero, while being completely closed to foreign services providers yields a score of one. A description of the structure and content of the information base is provided at the end of this Brief.

The STRI provides a unique diagnostic tool, generating a picture of services restrictiveness at the national level, by sector; it allows benchmarking for individual countries and relative to global best practise. It allows countries to quickly see where the outlier restrictions are and where potential bottlenecks exist. For the first time comprehensive and comparable information is available for policy makers to scope out reform options, benchmark them, and assess their likely effects; for trade negotiators to clarify those restrictions that most impede trade, growth and employment; and for businesses to shed light on the requirements that traders must comply with when entering foreign markets.

The STRI provides a snapshot by sector…

The STRI scores for telecoms and legal services sectors are presented as an illustration. The scores on the STRIs by policy area are depicted in Figure 3 for telecoms and Figure 4 for legal services.

The regulatory profile in telecoms is summarised here across the 40 countries in the database. Cross country comparisons provide insights on the degree of relative openness or restrictiveness. In addition the profile displays the composition of the regulatory measures. The STRI for telecoms shows that the two dominant contributors to restrictiveness in this sector are *Restrictions on foreign entry* and *Barriers to competition*. This reflects the specific nature of this sector. Telecoms are often considered a strategic industry and one where foreign equity limitations are common. Those are classed as *Restrictions on foreign entry* in the STRI. Telecoms are also a network industry. For both these reasons, a telecoms incumbent can have significant market power in the absence of pro-competitive regulations. In such a case, this missing element in best practice regulation is included in the STRI. Along with state ownership, this is largely what is covered by *Barriers to competition* in the STRI for telecoms.

Clearly, most countries wishing to examine options for lessening restrictiveness in telecoms would focus on these two regulatory categories. Examining the specific regulations, and their impacts, in more open countries in the database might also highlight alternative regulatory approaches that warrant consideration.

Figure 3. STRI: Telecoms

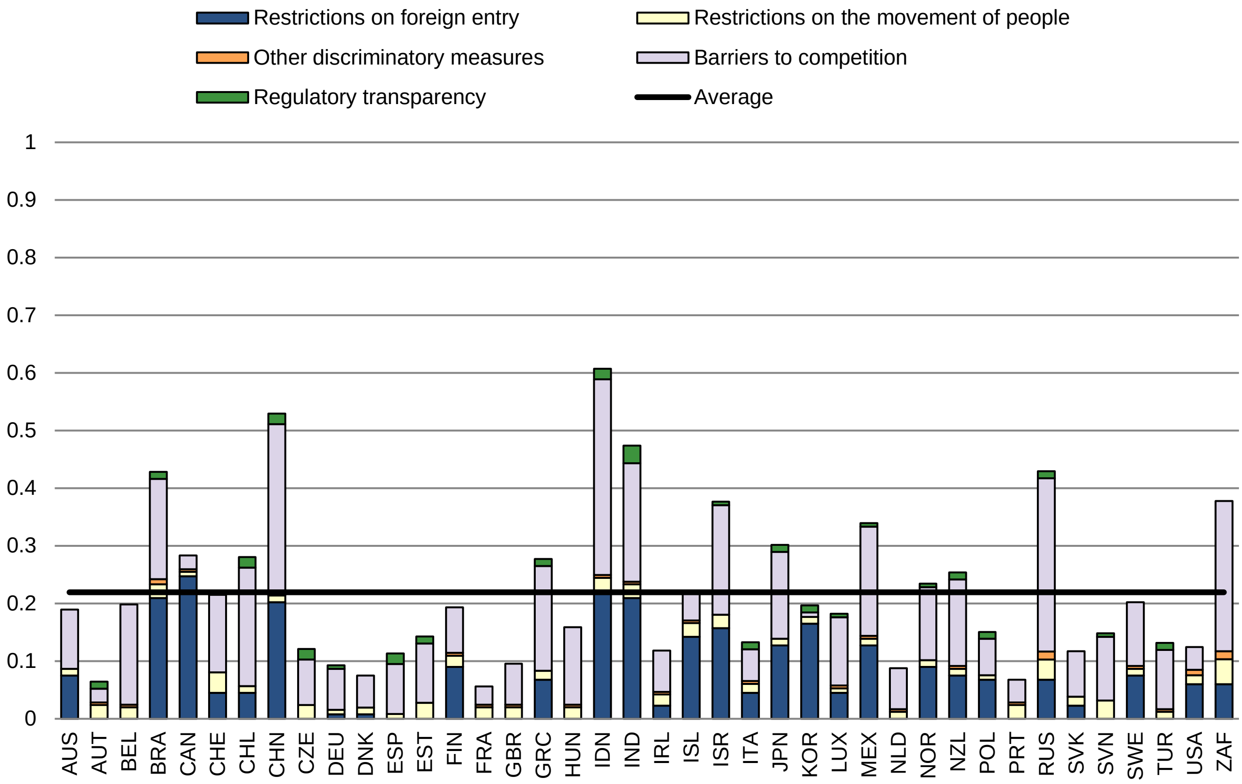
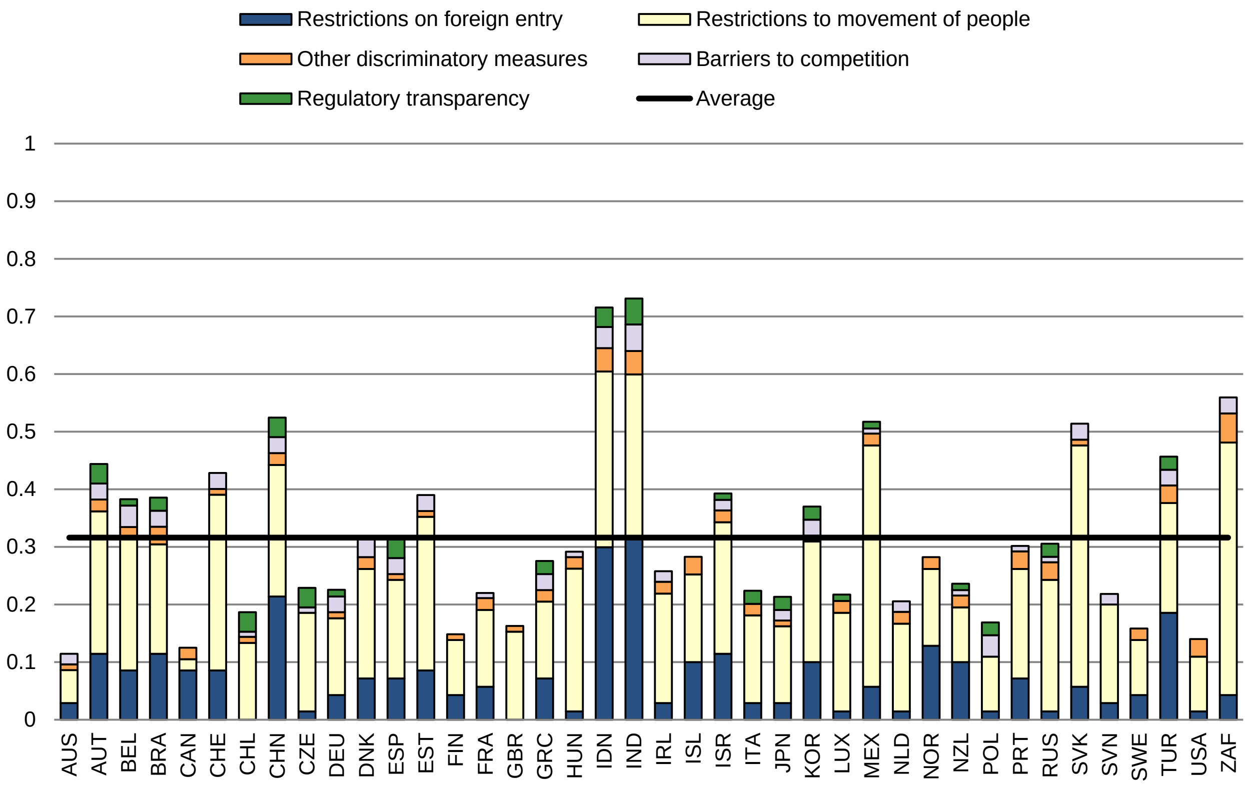


Figure 4. STRI: Legal services



While *Restrictions on foreign entry* are quite important for legal services as well, this sector is quite different. Legal services are a skilled, labour intensive, regulated profession and what really matters (in a way that it did not in telecoms) is *Restrictions on movement of people*. The barriers facing foreign lawyers often relate to the scope of the services they may provide, recognition of the qualifications required to obtain a license, and linking ownership of law firms to holding a license. A number of countries limit foreign lawyers and law firms' activities to legal services in international law and their home country law. Such regulations are captured under *Restrictions on foreign entry* and *Restrictions on movement of people*. These two policy areas contribute to most of the index value in legal services.

Again, countries wishing to examine reform options could focus on just two regulatory categories and lessons from countries in the database that have less restrictive legal services sectors could offer useful insights.

It is also worth noting that the performance of countries in terms of relative restrictiveness differs quite significantly between these two sectors. This is a general result of the STRI project; no country scores among the three most restrictive or the three least restrictive in all sectors.

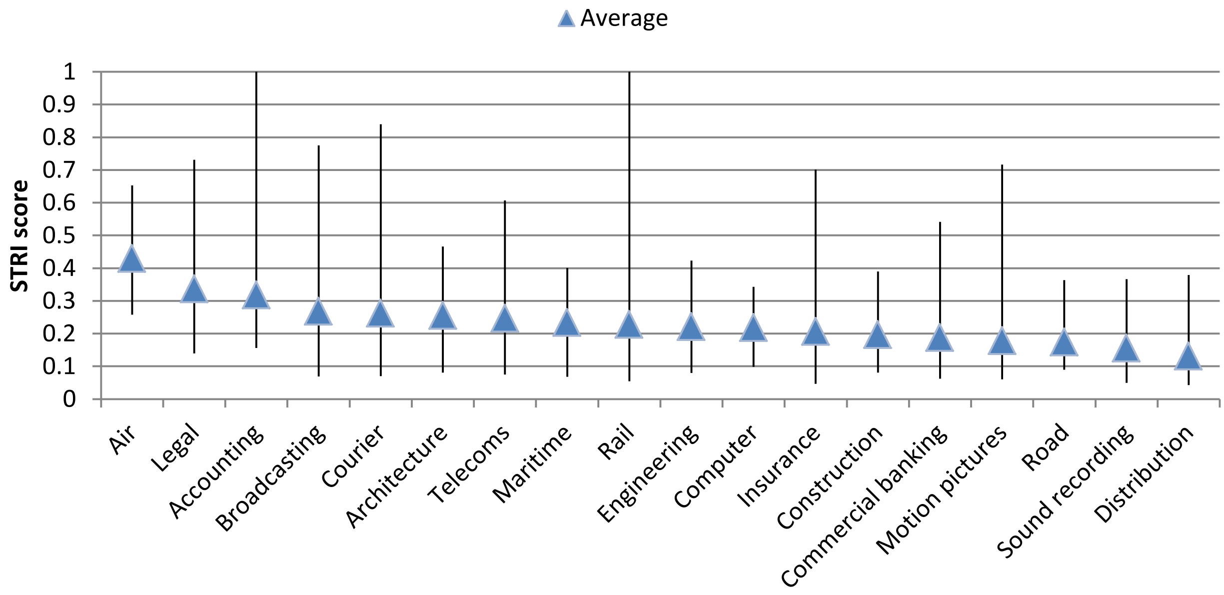
…and a comprehensive view across sectors

The STRI is a practical tool at the national level for diagnosing where reform options might be most needed and how they might be best achieved. But the STRI is also a tool that enables governments to take a more comprehensive cross-country view and to explore concrete options to improve services sector performance on multilateral, plurilateral or regional levels. This can occur in the context of trade negotiations, or in non-negotiating environments such as the G20, for example. Figure 5 is potentially useful from that perspective.

Figure 5 depicts the highest, the lowest and the mean score for all 18 sectors and illustrates both the level and the dispersion of restrictions across sectors.

The large gap between the average score and the maximum score of 1 should not be misinterpreted as suggesting that services markets are largely open; they are not. An STRI score of 1 represents a totally closed sector. In goods trade, a tariff to secure that same outcome would have to be set at a level of several hundred percent *ad valorem* (technically, it is equivalent in fact to an infinite tariff). A sector score above 0.1 is significant, and scores between 0.2 and 0.3 represent quite significant restrictions on international trade.

Figure 5. STRI average, minimum and maximum scores by sector



Note: Air transport and road freight currently cover only commercial establishment (with accompanying movement of people).

The average levels of restrictiveness in each of the services sectors show a large dispersion around them, including countries that are completely closed to trade in some sectors. There is clear scope for gains from compressing those dispersions so that not only are overall levels of restrictiveness lower but that they are also more uniform.

Finally, three sectors stand out as more restricted than others, on average: commercial establishment in air transport, legal services, and accounting services. Notably, these sectors also have in common that they provide important inputs to and facilitate trade in other sectors. As we shall see below, reforms in these (and other) sectors would bring significant benefits not only to exporters, but even more so to local firms.

There is today ample scope for service sector reforms that would stimulate both domestic economies and overall global growth. Of course, reform can be an intensely political process, and some of the restrictions in place are long-standing and have proven to be difficult to change. The STRI provides an evidence base for well-informed discussion of current policies, their impacts, and alternatives to them. As the next stage of OECD work proceeds a priority will be to sharpen current estimates and to highlight more systematically the ways in which many of these restrictions are unnecessary and even self-defeating. Some preliminary results from initial OECD analysis are presented below.

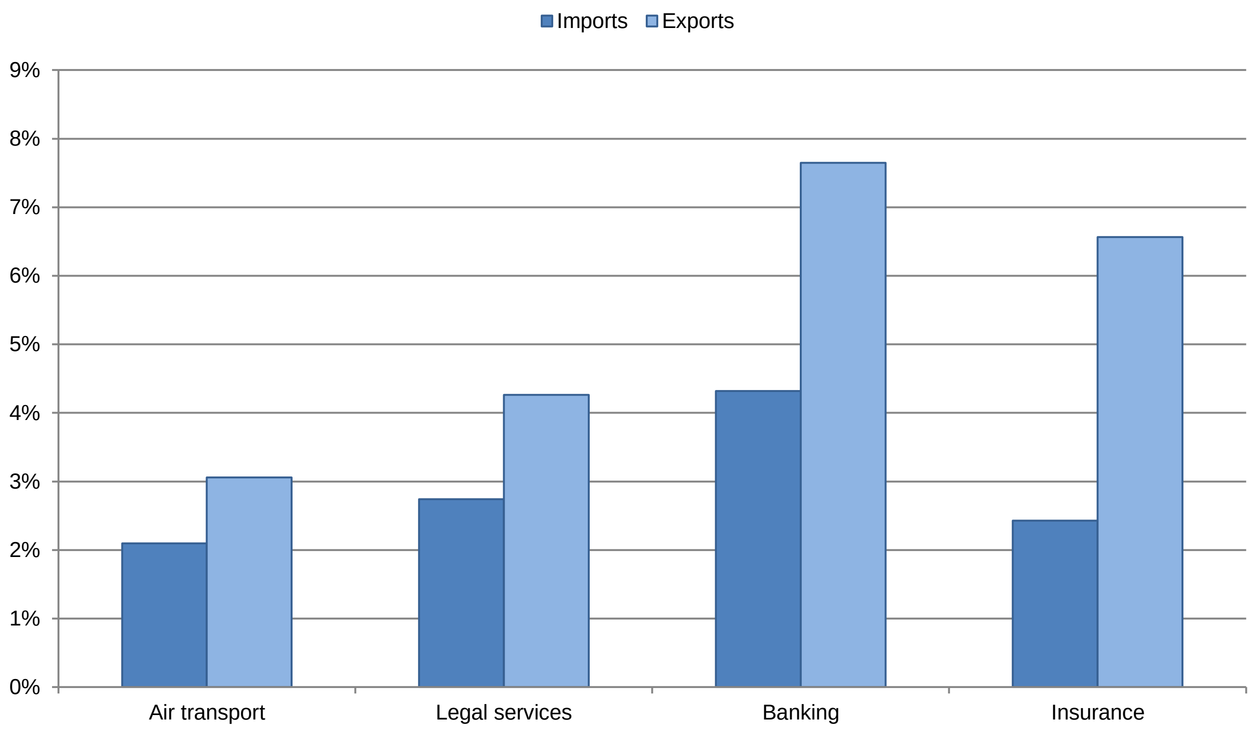
Services trade barriers reduce trade and investment in the sector concerned…

Services trade barriers obviously reduce imports in the restricted sector. However, restrictions can also significantly affect local firms' competitiveness in international markets at least as much as foreign firms' access to the local market.

Figure 6 shows the result of an estimation of the consequences of services policy reform. We take a country with an STRI score that is about average for the four sectors concerned. We model a scenario where that country undertakes a relatively modest reform. Specifically, the country implements reforms that bring down its index in each sector by 5 basis points (i.e. reducing the STRI sector score by 0.05; that is, if the country initially had a score of 0.35, it would be reduced to 0.3).

Figure 6. Impact of reform on trade in services by sector

% change in exports and imports from 5 basis points reduction in STRI



The estimated impact on that country's trade for the four services sectors is up to twice as large for exports as for imports. Two factors explain the effect on exports. First, services trade barriers are largely behind the border and impose costs on local firms too, making them less cost effective. Second, services trade barriers reduce the level of competition in local markets and thus the incentives for local firms to innovate and explore new, including foreign markets.

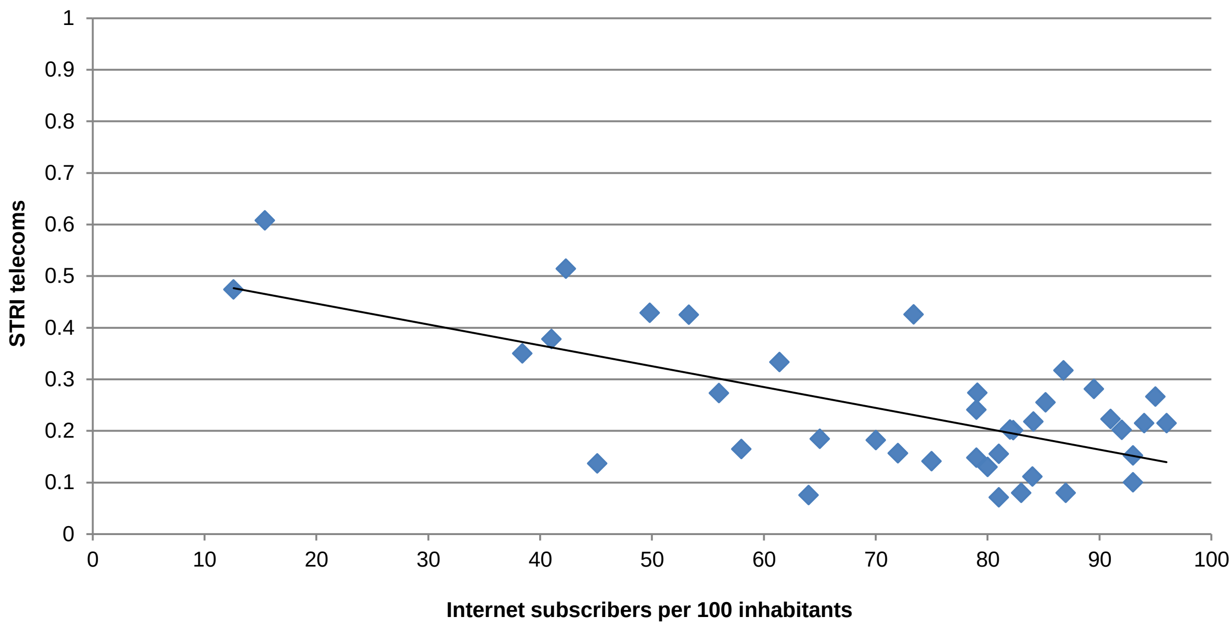
Firm level evidence supports both explanations. An analysis of local firms' profit margins suggests that a 10 basis points higher STRI score is associated with about 2.5% higher profit margins, suggesting that a higher STRI is associated with less competition. Foreign affiliates in contrast exhibit about 2.5% lower profit margins in the more protected countries. This finding is consistent with higher entry barriers for foreign firms, resulting in fewer entries and higher costs for those who do enter.

…. and can impair the competitiveness of local services suppliers in the regulated sector…

Financial services and telecoms are crucial for the functioning of a modern economy. Performance indicators for these two sectors are available from the World Bank's World Development Indicators (WDI). One would expect that services trade restrictions and barriers to competition would have a negative effect on performance in the protected sector. A first step in exploring such a possible causal relationship is to study whether performance indicators are correlated with the STRI scores in the expected direction.

Starting with telecoms, Figure 7 plots the STRIs for the sector on the vertical axis and the number of internet subscribers per 100 inhabitants for the 40 countries covered by the STRI on the horizontal axis.

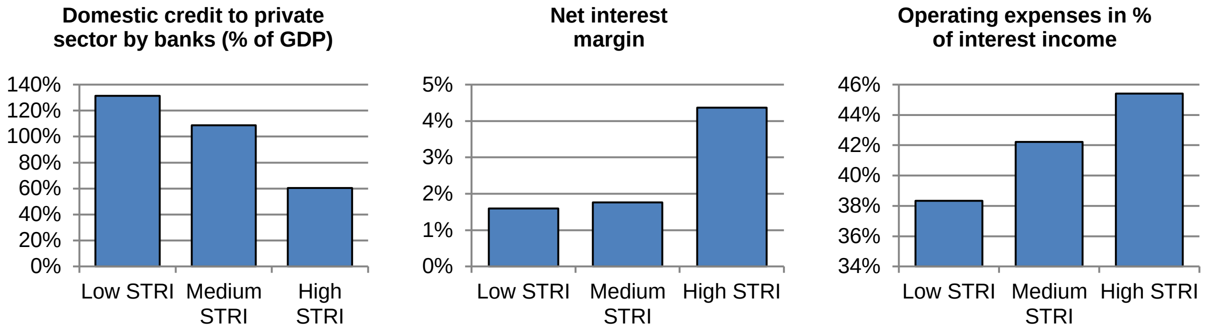
Figure 7. STRI and performance in telecoms



Clearly, the higher is the telecoms STRI score, the less internet subscriptions. A similar result is found for mobile and telephone lines per 100 inhabitants. The result suggests that reforming telecoms services generates a higher telecoms density. As noted earlier, a lower STRI score can include, for example, introducing new pro-competitive regulations as well as removing restrictions on entry.

A similar analysis of commercial banking and STRI scores are presented in Figure 8. Here countries are sorted into three levels of restrictiveness: Low, Medium and High. For each level the average on three performance indicators (domestic credit, net interest margins and operating expenses) is calculated.

Figure 8. STRI and commercial banking sector performance



Note: Low STRI represents values from the lowest score to the mean less 0.5 standard deviations. Medium STRI ranges between the upper limit of the previous category to the average plus 0.5 standard deviations. High STRI ranges from the upper limit of the medium to the highest score. Sources: WDI, OECD.

As depicted on the first chart above, countries which are more open as measured by the STRI for commercial banking perform better in terms of extending credit to the private sector – a metric directly related to the ability of domestic firms to fund investments, production and exports. The second and third charts show the net interest margin and the cost/income ratio of banks, which gauge competition and efficiency in commercial banking activities. The higher the score on the STRI, the higher the gap between interest charged by banks on loans and interest paid on deposits and the higher the operating expenses per unit of income. This indicates that countries with high STRI scores in this sector also have less efficient and less competitive banking markets, in particular for the provision of credit at competitive rates.

…with knock-on impacts in downstream industries

The knock-on consequences for downstream users of these services are demonstrable. Services are key inputs in global value chains. When a manufacturer enters a contract with a foreign supplier, legal services are needed for setting up the contract. Cross-border financial services are needed for payment and supplier credit, computer and communication services are needed for product development and supply chain management, and transport and distribution services are needed to move products between processing stages and to the final consumers.

Previous OECD analysis has shown that the availability and quality of telecoms and transport services are strongly related to competitiveness in manufacturing. For instance, more internet connections are associated with more exports of branded goods at higher prices in several manufacturing sectors, most notably electronics. Our estimates suggest that an increase in telecoms density of 10% is associated with between 2 and 4% higher export prices in the electronics sector, and an increase in intra-industry trade in the sector by between 7 and 9%, depending on the initial density. As noted above, there is a strong relationship between the STRI score in telecoms and performance in telecoms. By implication, more open and better regulated telecoms result in more competitive manufacturing.

Preliminary estimates also suggest that lower scores on the STRI in legal services, courier and distribution services are associated with lower import prices of electronic products, providing downstream manufacturers with cheaper inputs and consumers with more competitive goods. Our estimates suggest that reforms that lower the STRI by 5 basis points in each of these sectors is associated with an accumulated reduction in import prices of almost 10% for a country with about average STRI scores.

A likely explanation for these findings are that more competitive and open legal services may help local firms obtain more favourable contracts; more competitive and open courier services increases the speed and lowers the cost of back-orders; and more competitive and open distribution services raises the incentives to find the lowest cost sources of imports.

The STRI in combination with the OECD-WTO TiVA-GVC database are powerful tools for further analysis of regulatory spill-overs in global value chains and the interdependence between sectors in an interconnected and increasingly digital world.

Trade negotiations offer large – and potentially immediate – benefits

The STRI provides a valuable tool for policy makers that want to undertake pro-competitive reforms. Whether that is done unilaterally, bilaterally, plurilaterally, or multilaterally is for governments to decide.

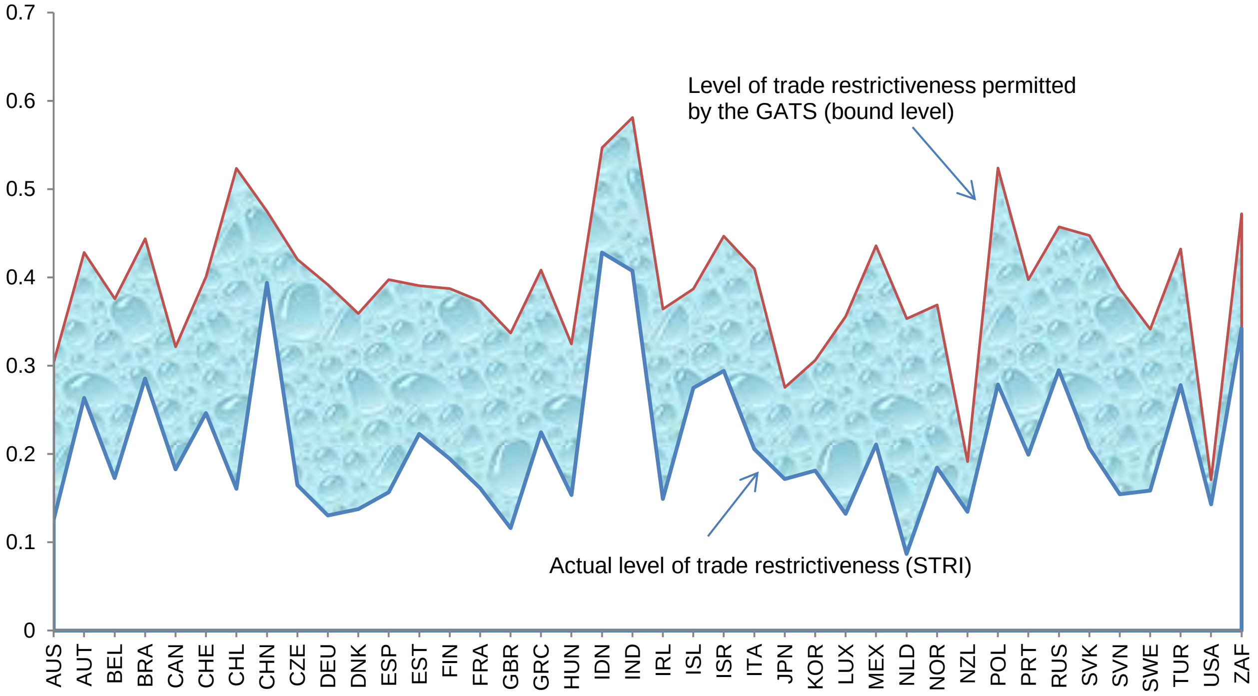
But a striking illustrative example an existing opportunity is shown in Figure 9. It displays graphically the difference between the level of restrictiveness according to laws and regulations currently in force (as revealed by the STRI) and current commitments in the WTO under the GATS (i.e. the graph displays the "water" in the GATS). The lower, blue bound shows the average STRIs for twelve sectors for each country included in the STRI. The upper red bound shows the average restrictiveness of the same twelve sectors when the STRIs are calculated on the basis of GATS schedules.

The STRI reveals that countries have significantly more open services trade policies in place than what is committed in the GATS. This might be expected given that almost two decades have passed since these commitments were made for most of the countries included in the STRI database. Should these countries commit to the services trade openness already in place, without any further reforms at all, this alone would create valuable improved certainty about the business environment facing services suppliers and their customers.

And of course a higher level of ambition offers commensurately larger benefits for both the reforming country and the global economy.

Figure 9. Water in the GATS

Average for 12 sectors



Note: The sectors included in the graph are three audio-visual services sectors, the four professional services, construction, computer services, distribution services, and rail and road transport services.

Conclusions

The STRI regulatory database and composite indices provide policy makers with a powerful new tool for assessing their services trade restrictiveness and diagnosing options for reform; they also offer potentially new insights for businesses. The information contained in the database is up-to-date, based on laws and regulations in force, and verified by OECD Members.

None of the 40 countries included in the STRI is amongst the top three or bottom three in terms of trade restrictiveness in all 18 sectors. All countries in the sample have sectors and policy areas where there is scope to reach best-practice regulation. By the same token all countries have areas of good performance that could be a model for others.

Restrictions such as foreign equity limitations are most common in the backbone infrastructure sectors. Behind the border regulations related to licensing constitute considerable barriers to trade in professional services; access to the public procurement market is particularly important for construction firms, and national treatment in relation to taxes and subsidies is important in all sectors, but especially in transport and audio-visual services sectors. Finally restrictions on the movement of natural persons significantly hinder trade, particularly in skilled labour-intensive sectors such as computer services and professional services.

Initial findings from the STRI strongly support the key messages from the OECD-WTO TiVA-GVC database and related analyses. In an increasingly interconnected global economy, services trade restrictions often mean that the protected sector itself becomes less productive and less competitive and that this has knock-on consequences for the downstream firms in other sectors, not least in goods trade where services are crucial to international competitive performance.

Further reform of services sectors can benefit the reforming economy and if undertaken across countries, whether on the basis of trade negotiations or a voluntary commitment by G20 countries for example, can contribute significantly to global economic growth and employment.

OECD Services Trade Restrictiveness Index:
Structure and content of the database

The STRI regulatory database brings together information from more than 16 000 laws and regulations for 18 sectors in 40 countries (the 34 OECD Members and Brazil, the People's Republic of China, India, Indonesia, the Russian Federation and South Africa). The information has been compiled by the OECD Secretariat on the basis of a common methodology agreed by OECD Members. It has been verified and peer reviewed by those Members. The materials compiled for the emerging economies have been shared with them but should be considered as provisional pending their verification. The measures are organised under five policy categories:

- Restrictions on foreign market entry
- Restrictions on the movement of people
- Other discriminatory measures
- Barriers to competition
- Regulatory transparency

The first three policy categories cover measures related to market access and national treatment, the fourth entails information on pro-competitive regulation, or lack thereof, while the fifth category provides objective information on administrative procedures.

A core set of measures are the same for all sectors, although the information contained may differ across sectors. For instance information on limits on foreign equity is included in all sectors, but the limits, if any, may differ across sectors. In addition there are measures that capture the nature and market structure of each sector. For example, there are a number of measures related to pro-competitive regulation in network industries; matters related to the conditions for obtaining a license for regulated professional services; a number of measures relate to discrimination of foreign financial services suppliers; and there are matters related to the implementation of copyright and related rights in audio-visual services. The STRI database records measures on a Most Favoured Nation basis. Preferential trade agreements are not taken into account.

The information is standardised so that users can easily find and compare specific policy measures across countries. It is regularly updated. Users can search the database by country, sector, policy area and measure, or they can download the entire database. They can also use the interactive facility for comparing performance across countries. In addition, country and sector notes are available at http://oe.cd/stri.