



# **Pilot Program for Measuring the Regulatory Environment of Services Trade in the APEC Region**

Report to the Group on Services

16 September 2020

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## Executive summary

Services represent more than half of APEC economies' GDP contributing to growth and job creation across the region. APEC Leaders have long recognized the importance of promoting services trade, and set ambitious goals to reduce trade barriers and promote regional economic integration. Impediments to services trade, however, remain widespread and risk undermining these efforts, while complex regulatory regimes make it difficult to grasp the domestic policy environment in which services trade operate.

The 2016 APEC Services Competitiveness Roadmap set out key targets to increase services competitiveness in the region by 2025. In order to inform decision-making and monitor progress, Leaders committed to establishing an APEC index measuring the services regulatory environment by 2020. Delivering on that mandate, this project presents the pilot APEC Index developed by APEC Technical Group on Measuring the Regulatory Environment of Services Trade in the APEC Region with support from the OECD.

The pilot program covers four services sectors: computer services, telecommunication services, distribution services and logistics services (storage and warehousing) across four economies (Chile, Peru, Chinese Taipei, and Viet Nam). Building on existing indices, particularly on the OECD Services Trade Restrictiveness Index (STRI), the pilot APEC Index is comprised of regulatory information on barriers affecting services and composite indices that quantify these in a comparable manner. The pilot APEC Index also takes into account regional initiatives and APEC specific elements, such as the APEC Business Travel Card, to reflect relevant APEC-wide efforts to liberalise trade.

The pilot APEC Index demonstrate economies' substantial efforts to reduce trade barriers in line with their commitments under the Bogor Goals. APEC-wide cooperation in key areas such as trade facilitation, customs procedures, and regulatory transparency contribute to easing the regulatory hurdles on APEC businesses, particularly on small and medium sized enterprises (SMEs). At the same time, there is scope to further reform services sectors that form the pillar of regional trade such as logistics services. Moreover, lowering barriers to telecommunications and computer services would further allow APEC economies to benefit from the digital transformation.

In going forward, expanding the APEC Index pilot program to more services sectors and more economies will help to maximise the benefits of this new tool. Through regular updates, the APEC Index can continue to provide relevant and timely information to policy makers and exporters while also monitoring progress on services liberalisation efforts.

As APEC Leaders prepare to set a Vision for APEC beyond 2020, increased regulatory cooperation on services trade will be essential to unleash new sources of growth, especially in the context of economic recovery from the COVID-19 pandemic. The APEC Index is a unique tool that can help policy makers make better choices to drive economic recovery and empower a services-led growth model in the APEC region.

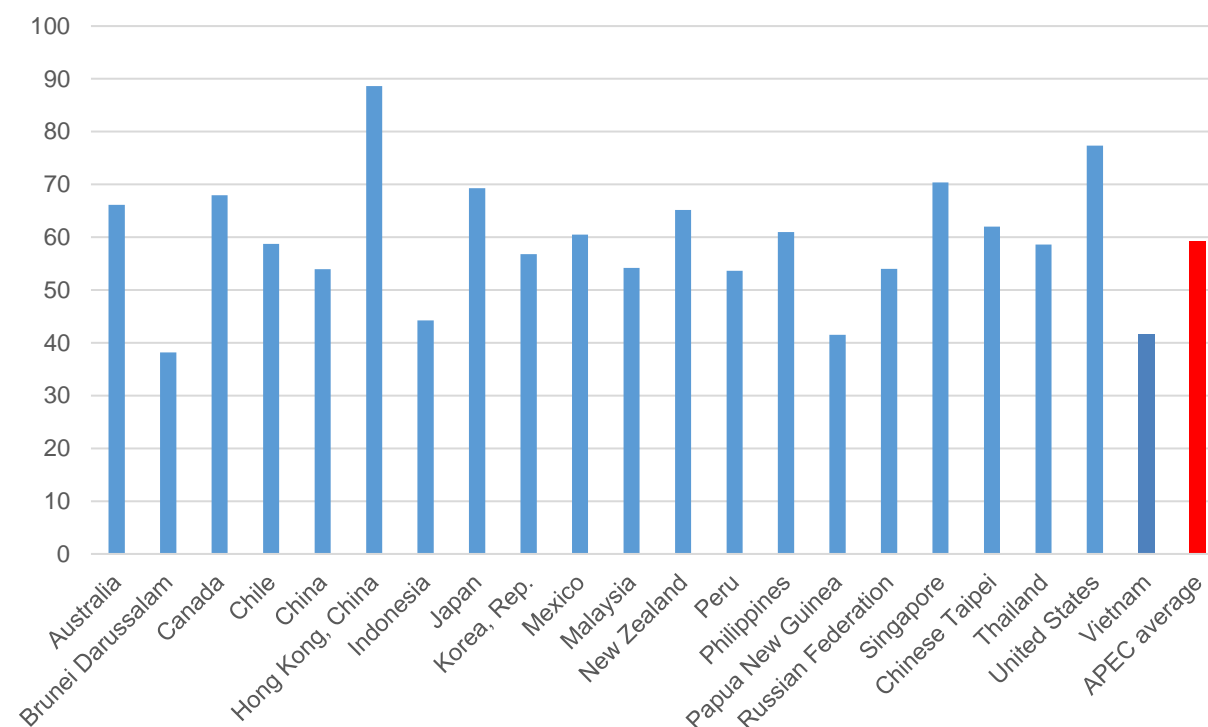
# 1 Introduction

1. Services play an important role in fostering economic growth across the APEC region, contributing to more than half of APEC economies' GDP on average (Figure 1). With new technologies increasingly facilitating cross-border supply of services, growth strategies across APEC economies have placed services at the forefront of the policy agenda.

2. Impediments to services trade, however, remain significant as domestic trade and regulatory policies in individual services sectors are often made with limited regard for economy-wide impacts. Comparable and reliable information on regulations affecting services is key to inform policy discussions on services reforms and demonstrate progress achieved. It also fosters regulatory transparency and boosts competitiveness among market players.

**Figure 1. Services are key economic drivers across the APEC region**

Services value added as percentage of GDP, 2019



Source: World Development Indicators (2019). Data for Hong Kong, China, Japan, and Peru is for 2018. Data for New Zealand, Papua New Guinea, and the United States is for 2017, and data for Canada is for 2016. Data for Chinese Taipei is from Directorate-General of Budget, Accounting and Statistics, available [here](#) for 2019.

3. In 1994, APEC Leaders committed to the Bogor Goals which aimed at “free and open trade and investment” in the Asia-Pacific region by 2020. This goal set into motion a wide range of individual and collective initiatives over the last 25 years with concrete outcomes that helped reduce trade and investment barriers, and promoted more economic integration across APEC economies (APEC, 2018<sup>[1]</sup>).
4. Recognizing the importance of services in achieving the Bogor Goals, APEC Leaders adopted the APEC Services Cooperation Framework (ASCF) in 2015, agreeing to “seek better ways to produce services-related statistics and increase the number of APEC economies with indices for measuring the regulatory environment in services including by providing capacity building and exploring the development of an APEC index, taking into account, as appropriate, existing indices maintained by other fora such as the OECD.”
5. Building on the ASCF, the 2016 APEC Services Competitiveness Roadmap (ASCR) set out key targets to increase services competitiveness in the region by 2025. In order to inform decision-making and monitor progress, Leaders committed to establishing an APEC index measuring the services regulatory environment by 2020.
6. Implementing this mandate, the Committee on Trade and Investment (CTI) initiated a project on “Measuring the Regulatory Environment in Services Trade of APEC” in 2016. Under the auspices of the Group on Services (GoS) and the project leadership of the Republic of Korea, the project aimed at developing an APEC index to measure the regulatory environment for services in the region building on existing work undertaken by international organisations such as the Organisation for Economic Co-operation and Development (OECD) and the World Bank.
7. To further the objectives of the project in incremental steps, a pilot program was agreed upon based on voluntary participation by economies. The Technical Group on Measuring the Regulatory Environment of Services Trade in the APEC Region was established to undertake the work. The Technical Group met for the first time in Port Moresby, Papua New Guinea, in May 2018. The OECD was invited to participate in the discussions and provide support to the work of the Technical Group. Several workshops supported by the United States and others were organised to enhance economies’ understanding of barriers to services trade and how these are measured, provide capacity building for economies to participate in the index development process, and provide a broader forum to discuss issues relating to services trade policy in the APEC region. Workshops were held in Viet Nam (2019), the Philippines (2018), and Malaysia (2017).
8. This report presents the outcomes of the pilot program, and it is structured as follows: Section 2 provides an overview of the key milestones in developing the regulatory database and indices for the sectors and economies covered while Section 3 provides a summary of the main findings. Section 4 will cover potential applications on the new tool and describes a range of online tools to disseminate it.

# 2 Developing the tools to measure the regulatory environment for services trade in the APEC region - the pilot APEC Index

## Defining the scope and approach

9. The Technical Group decided to use the OECD STRI as a baseline approach for the pilot APEC Index which would then be further refined based on APEC specific regional characteristics.<sup>1</sup> A two-track approach was adopted to expedite the work (Table 1). The first track covered discussions by the Technical Group on how to reflect APEC regional initiatives and other APEC specific approaches in the index. In parallel, the OECD was tasked with developing the baseline index, including the regulatory databases and preliminary baseline indices. The baseline index would subsequently be fine-tuned to reflect the APEC regional initiatives and create the pilot APEC Index.

**Table 1. The two track approach for implementing the pilot program**

<b>Track 1: Discussion on APEC specific elements</b>	<b>Track 2: Development of the baseline index</b>
<ul style="list-style-type: none"> <li>• Technical Group to discuss and develop the additional APEC specific elements that can be added to the baseline data</li> </ul>	<ul style="list-style-type: none"> <li>• OECD to collect the baseline regulatory data, complete the regulatory database and generate preliminary baseline indices for volunteering economies</li> </ul>
<ul style="list-style-type: none"> <li>• Agreed customisation elements can be added to the draft baseline index to derive the pilot APEC Index</li> </ul>	<ul style="list-style-type: none"> <li>• Reflect customisation elements in the baseline index to derive the pilot APEC Index</li> </ul>

Source: The Technical Group on Measuring the Regulatory Environment of Services Trade in the APEC Region

10. Table 2 presents the four economies that volunteered to participate in the pilot program and the services sectors of their choice.

<sup>1</sup> For more details regarding the OECD STRI methodology, see (Geloso Grosso et al., 2015<sub>[1]</sub>).

**Table 2. Volunteering economies and their selected services sectors for the pilot program**

	Computer	Telecommunication	Distribution	Logistics (storage and warehousing)
Chile		✓	✓	
Peru	✓	✓	✓	✓
Chinese Taipei	✓	✓	✓	✓
Viet Nam	✓		✓	✓

### Building the baseline regulatory databases

11. Further to the activities under Track 2, the OECD Secretariat collected the regulatory data for the baseline index between March and August 2019 (Figure 2). The policy measures in the regulatory database are organised under five policy areas (Annex A provides a complete list of measures covered in each sector):

- *Restrictions on foreign entry* include information on foreign equity limitations, requirements that management or board of directors must be citizens or residents, foreign investment screening, restrictions on cross-border mergers and acquisitions, capital controls, regulations on cross-border data flows and a number of sector-specific measures.
- *Restrictions on movement of people* include information on entry visa quotas, economic needs tests and duration of stay for foreign natural persons providing services as intra-corporate transferees, contractual services suppliers or independent service providers. These categories are covered by the GATS and have in common that the natural persons are not supposed to seek employment in the host economy. This policy area also contains information on recognition of foreign qualifications and licensing in regulated professions.
- *Other discriminatory measures* include discrimination of foreign services suppliers as far as taxes, subsidies and public procurement are concerned, and instances where domestic standards differ from international standards where relevant.
- *Barriers to competition* include information on anti-trust policy, government ownership of major firms and the extent to which government-owned enterprises enjoy privileges and are exempt from competition laws and regulations. Sector-specific pro-competitive regulation in network industries also falls in this category.
- *Regulatory transparency* includes information on consultations and dissemination prior to laws and regulations entering into force. It also records information on administrative procedures related to establishing a company, obtaining a license or a visa.

12. The regulatory database collects information on policy measures that relate to market access and national treatment applied on a most favoured nation basis and does not take into account preferential treatment through free trade agreements (FTA).

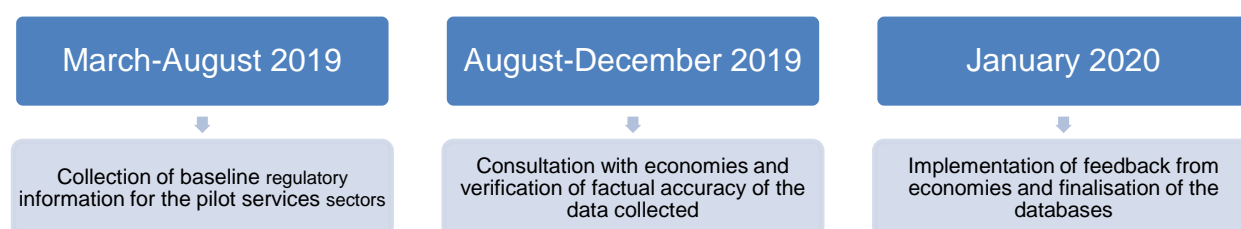
13. Data was collected using publicly available regulatory information from official law repositories and government sources.<sup>2</sup> Regulatory information was collected retroactively for every year until 2014 in order to generate a longer time series in the data that can provide more nuanced insights on the development of regulatory policies over time. For the four economies, over 300 laws and regulations were analysed and more than 6,600 observations recorded in the database overall.

<sup>2</sup> As Chile is also covered in the OECD STRI, the regulatory information for this economy was already available.



14. Extensive consultations were undertaken with the volunteering economies to ensure the factual accuracy of the regulatory information in their respective databases. Subsequently, the baseline regulatory databases were revised and finalised taking into consideration the feedback received.

**Figure 2. Timeline for developing the baseline regulatory database**



## Scoring and weighting

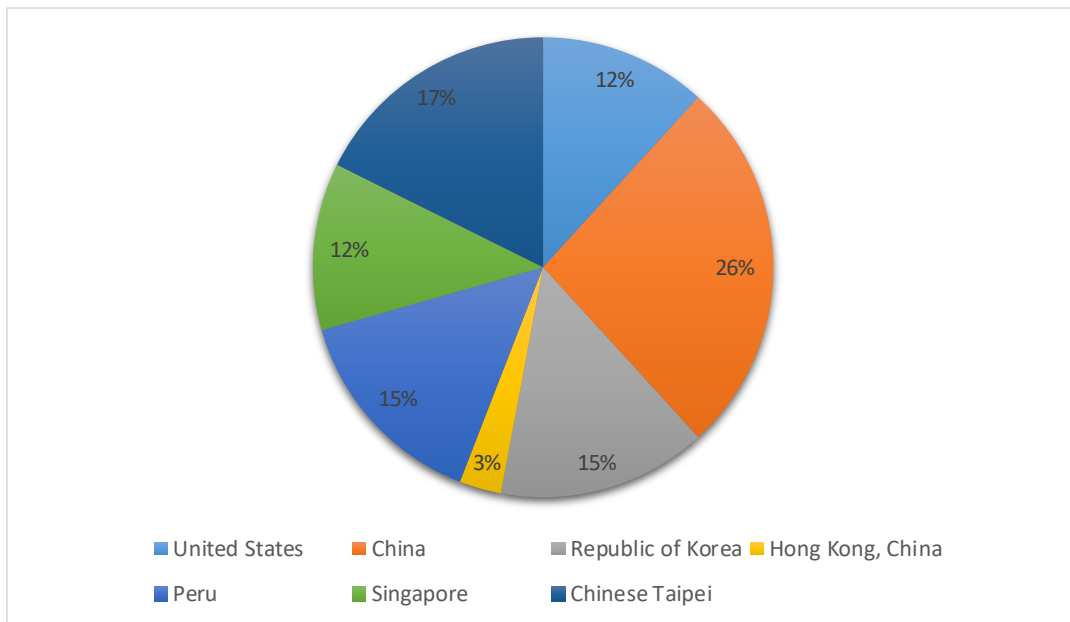
15. A scoring and weighting methodology was used to calculate the pilot APEC Index based on the regulatory information collected. Scoring entails the transformation of qualitative information into quantitative data using a binary system where a score of 0 (not restrictive) or 1 (restrictive) is assigned to individual measures in the database. The scoring also takes into account specific regulatory and market characteristics as well as linkages and hierarchies between measures.

16. Weighting, in turn, helps to balance the relative importance of these measures in each sector. The weighting relies on expert judgement as basis for deriving these weights. In order to strengthen the regional representation of experts in the pilot APEC Index, the existing OECD STRI weights were complemented with inputs by experts on services from the APEC region collected through an online survey between December 2019 and January 2020. Members of the Technical Group were invited to disseminate the survey to experts with comprehensive understanding of the regulatory framework and trade policies related to one or more of the four pilot sectors in an APEC economy or across the APEC region.

17. Experts have distributed 100 points among the five policy areas reflecting their views on the relative importance of these policy areas for each sector. Subsequently, these inputs were translated into weights by assigning the points experts allocated to the policy area to each measure that falls under it and correcting for differences in the number of measures under the policy areas.

18. In total, 34 responses were received from experts across seven APEC economies (Figure 3). The highest share of responses was from China with 26%, following by Chinese Taipei with 17%. Experts from the Republic of Korea and Peru accounted for 15% of the respondents each, while experts from the United States and Singapore accounted 12%, and experts from Hong Kong, China for 3%.

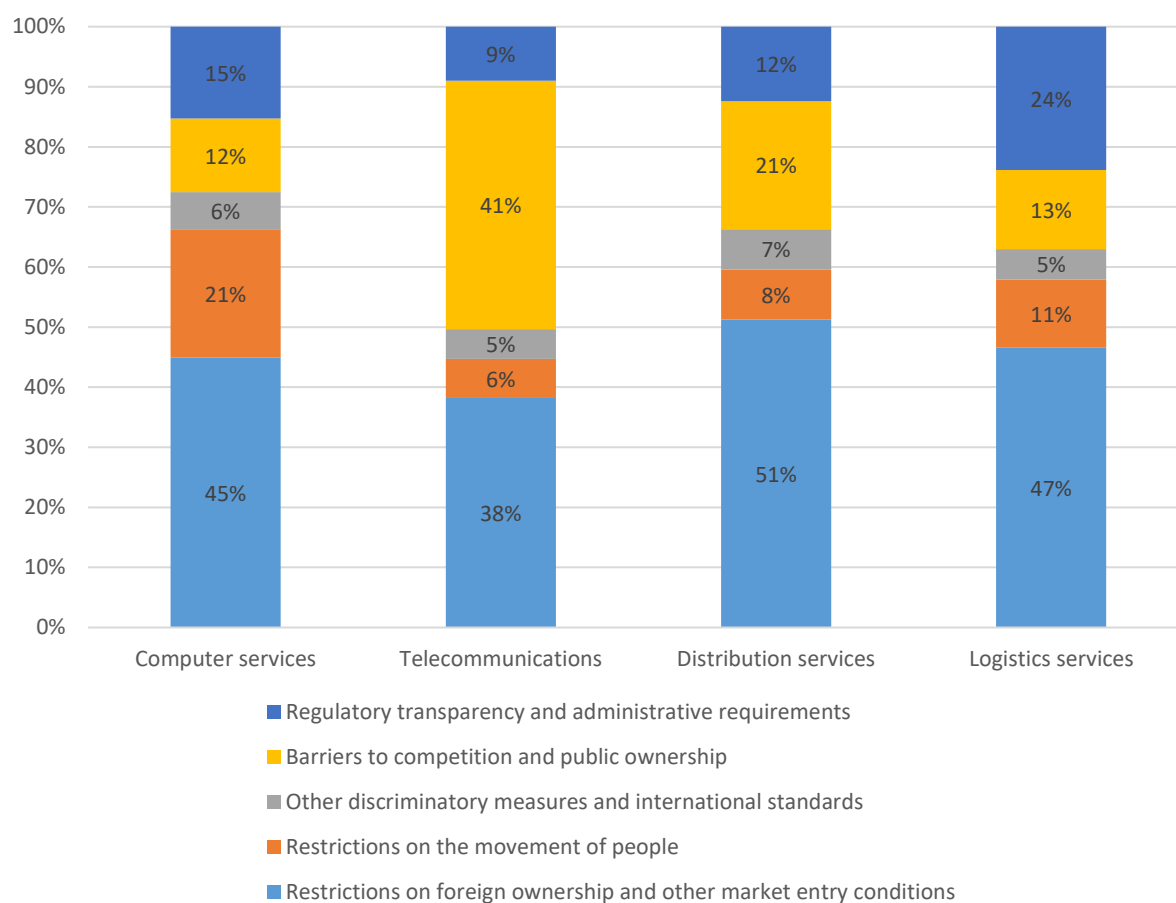
Figure 3. Distribution of expert inputs into the weighting scheme



Source: APEC Index survey (2020).

19. Figure 4 below presents the final weights used for the pilot APEC Index in each of the four sectors. Sectoral variations in the weights reflect well the differences in market characteristics. For instance, in telecommunications services, barriers to competition and restrictions on foreign ownership and market entry have the highest weights which underline the importance of both trade and competition regulations in this sector. In other capital intensive markets served through commercial presence such as logistics services, restriction to foreign entry and barriers affecting regulatory transparency are considered most important for trade operations. In computer services, restrictions on the movement of people contribute more significantly than in other sectors highlighting the continued importance of professional support in-person in the ICT sector, particularly in the course of installation, maintenance and repair of ICT equipment. In distribution services, barriers to foreign entry are considered the most relevant trade impeding factor, accounting for over half of the total weights allocated to this sector.

Figure 4. Weights used for the APEC Index per sector



Source: Author's own calculation.

### Fine-tuning the pilot APEC Index by capturing APEC specific regional initiatives

20. APEC is known for promoting policy initiatives aimed at facilitating trade and investment across its member economies. Driven by voluntary participation and building on sharing of knowledge and best practices, such initiatives promote economic integration, foster certainty for business operations, and improve the overall trade and policy environment across the region.

21. The Technical Group decided to cover two APEC specific elements: 1) the APEC Business Travel Card or equivalent programs, and 2) an "opening-up" indicator that demonstrates the rate of services liberalisation in the APEC region. The opening-up indicator is presented in Section 3 below.

22. The Technical Group considered that the inclusion of the APEC Business Travel Card (ABTC) program or equivalent programs into the pilot APEC Index would be essential given the wide application of this preferential scheme across the APEC region and its importance in facilitating the provision of services in the region through easing entry conditions for people travelling for businesses purposes. Other APEC regional initiatives do not generally entail similar levels of preferential measures among APEC economies, and thus it would be difficult to capture them in the framework of the pilot APEC Index.

23. The ABTC program facilitates short-term business travel in the region by streamlining entry processes into APEC economies (APEC, 2020<sup>[2]</sup>). Applicants for the ABTC only need to submit one

application for permission to enter participating economies. Successful applicants receive a card that is valid for five years authorizing entry for up to 60 or 90 days to APEC economies that have granted pre-clearance to the applicants without any further need for visas or other entry permits. Moreover, ABTC holders are also eligible for fast track immigration processing at major international airports.

24. The ABTC does not amount to a visa on its own but it confers visa exemption to its holders subject to pre-clearance by APEC economies. For the purposes of the pilot APEC Index, such visa-free entry has implications for several horizontal measures (i.e., measures relevant for all services sectors) related to business travel, notably:

- Range of visa processing time (days)
- Multiple entry visa for business visitors
- Cost to obtain a business visa (USD)
- Number of documents needed to obtain a business visa

25. As holders of the ABTC are exempt from applying for entry visas, measures related to visa processing time, costs and other administrative burdens would not affect them. While these are relevant factors when applying for the ABTC initially, the ABTC is not a visa on its own right and as such, it is not subject to economies' regular immigration processes. Moreover, given the lengthy duration of its validity, holders of the ABTC have essentially visa-free access to participating economies that grant pre-clearance. Consequently, the above measures are scored non-restrictive in the pilot APEC Index for participating economies across all four services sectors covered. The scoring for non-participating members is based on their existing regime for business visas, some of which may grant equivalent preferential measures to other APEC business travellers.

# 3 Outcomes

## The Pilot APEC indices

26. This section presents the pilot APEC Index for the four economies that volunteered to participate in the pilot program. These results take into account the adjusted weights and reflect the ABTC preferential measures for economies in all sectors.

27. Figures 5 and 6 below present the pilot APEC Index for computer and telecommunications services. Both sectors are key enablers of the digital economy, providing both the physical and software infrastructures that empower it. Telecommunications services provide the networks over which content is delivered, and computer services offer a host of services including information storage and processing, network management systems and over-the-top (OTT) services complementing and sometimes competing with telecommunications services.

28. In computer services, the pilot APEC Index range between 0.163 (Chinese Taipei) and 0.303 (Viet Nam) with an average of 0.250 in 2019. Restrictions that apply horizontally to all services, including computer services, contribute most to the indices. Nonetheless, certain horizontal restrictions, for instance, those related to cross-border transfers of data, may have a higher degree of implication for the tradability of computer services.

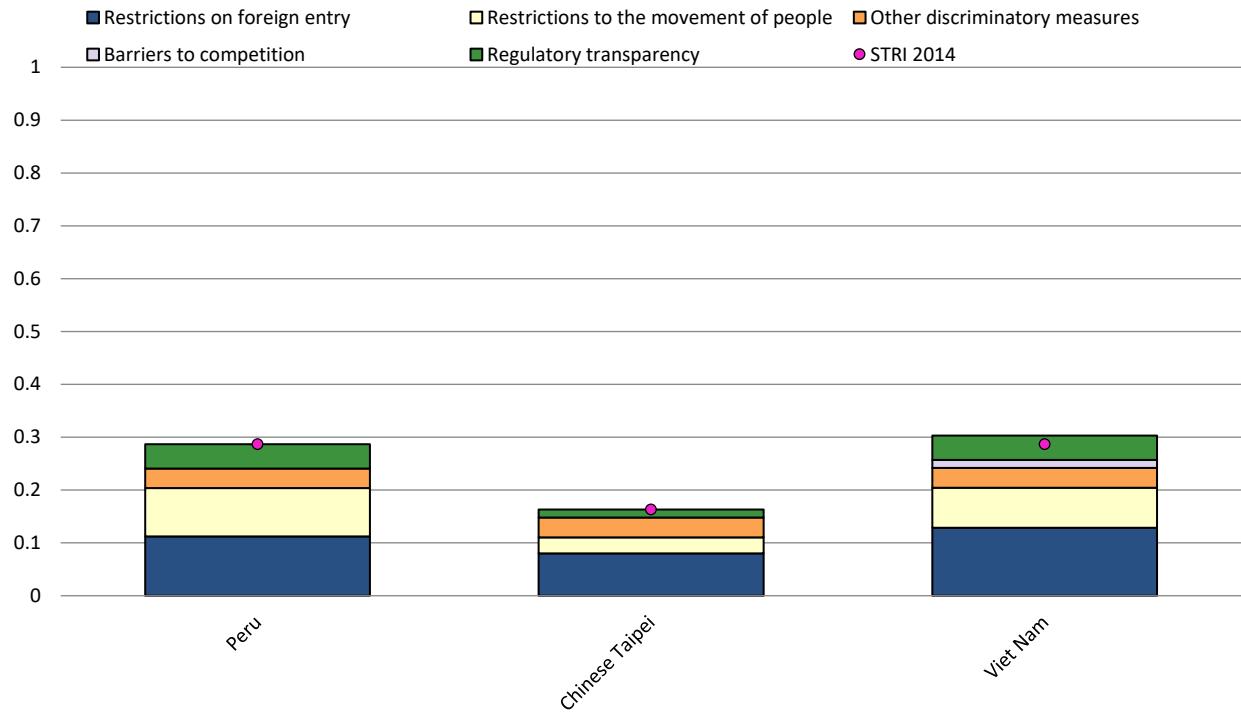
29. While computer services can easily be traded across borders through digital networks, cross-border trade needs to be supported by visits to the premises of the customer, both through business travel for technical support and for longer visits to work with clients, for instance, to install ICT equipment or undertake repair and maintenance. This skilled labour intensity of the sector together with the complementarity between cross-border trade and movement of natural persons explains why restrictions on movement of people have a more prominent contribution in the pilot APEC Index across all three economies. Particularly, limitations related to applying labour market tests and short permitted durations of stay affect the entry of persons providing services on a temporary basis as intra-corporate transferees, contractual services suppliers or independent services suppliers.

30. In telecommunications services, the indices range between 0.222 (Peru) and 0.360 (Chinese Taipei), with an average of 0.283 in 2019. Given the strategic importance of this sector, foreign entry restrictions, including limitations on foreign ownership and operation, are more common in this sector. However, in addition to restrictions on foreign entry, barriers to competition also play a key role. This reflects the special nature of this sector as well as the policy environment in which it operates. Competition in network industries like telecommunications, depend on access to essential facilities and high market entry costs for new competitors may favour incumbent firms. Such market imperfections may constitute a substantial entry barrier, even in the absence of explicit foreign entry restrictions. Hence, pro-competitive regulation is considered a trade policy issue, which is addressed in the WTO Telecommunications Services Reference Paper as well as in a number of regional trade agreements.

31. Overall, barriers to competition account for 35% of the total pilot APEC Index in telecommunications, indicating scope for better pro-competitive regulations across all economies,

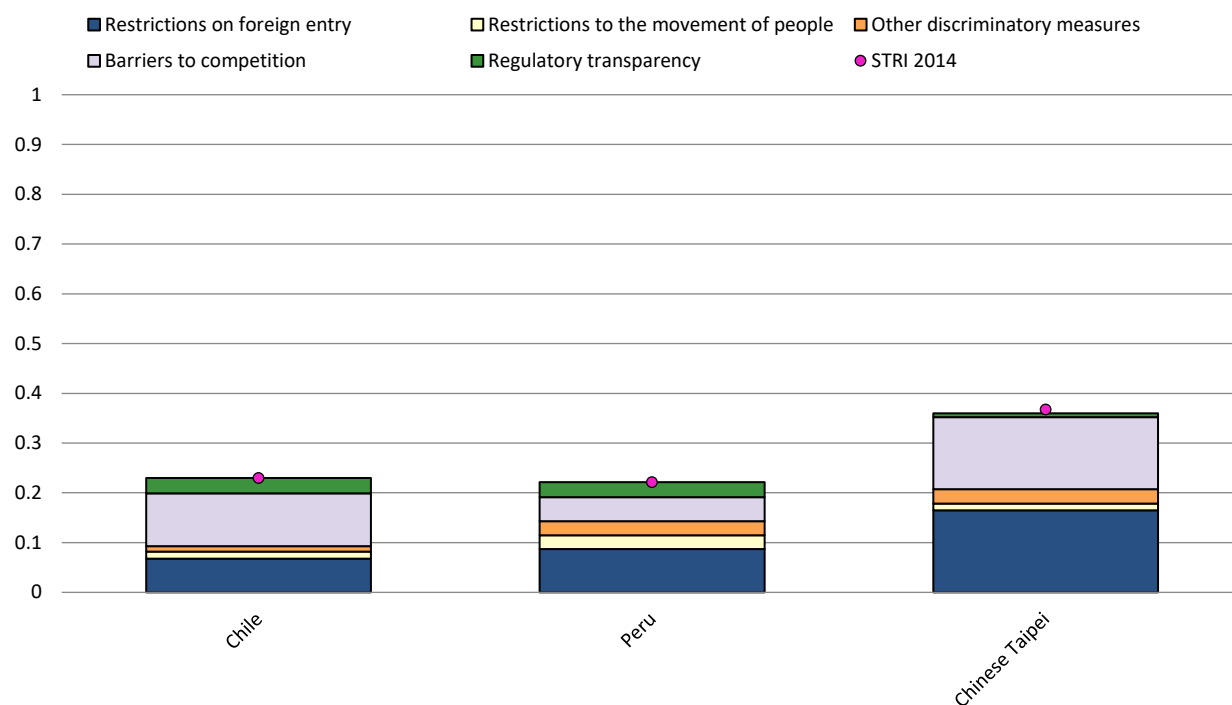
particularly with respect to access essential facilities, price regulation and transparency in telecommunications market segments where the incumbent provider has significant market power.

**Figure 5. Pilot APEC Index for computer services, 2019**



Note: The indices take values between zero and one, one being the most restrictive.  
 Source: APEC Index regulatory database (2019)

Figure 6. Pilot APEC Index for telecommunication services, 2019



Note: The indices take values between zero and one, one being the most restrictive.

Source: APEC Index regulatory database (2019)

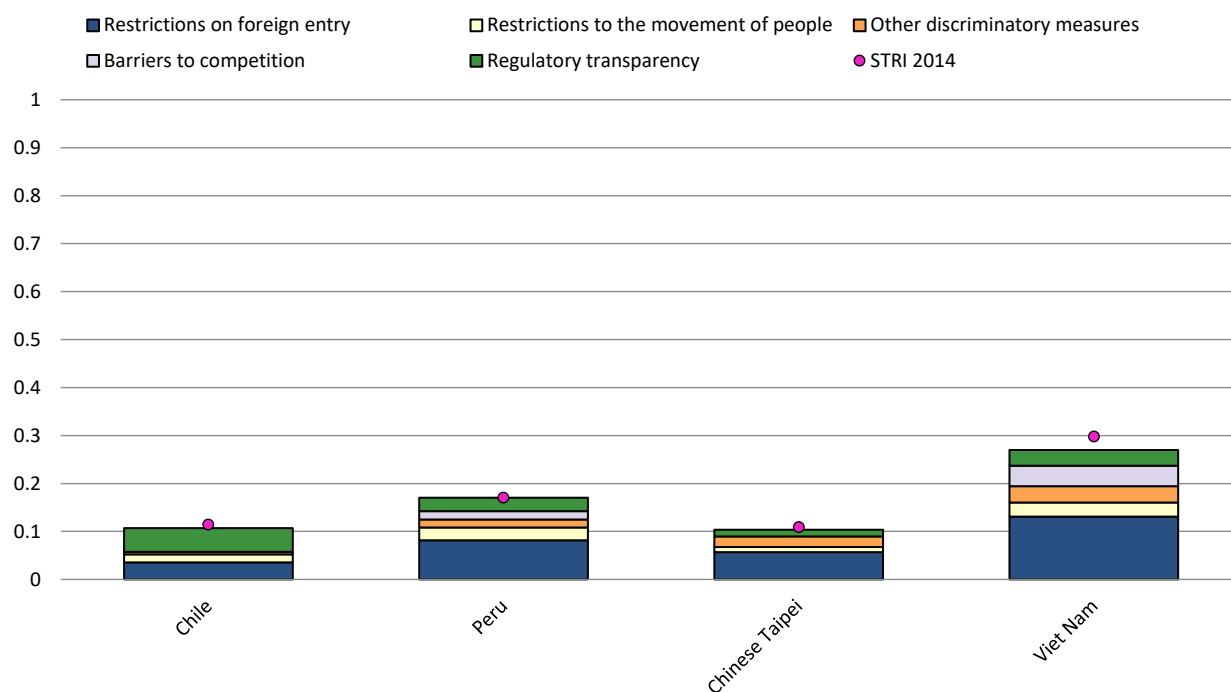
32. Figure 7 below presents the pilot APEC Index for distribution services. This sector covers both retail and wholesale distribution of goods. Distribution services are essential for bringing goods from the producer to the consumer, for job creation and for demand-driven economic growth. The rise of online retail sales has led to an increase in parcel delivery, and the importance of global production networks depends on both fast and reliable shipments. As global value chains have become a dominant feature of world trade in recent decades, distribution services depend also on effective transport and logistics services which together offer an integrated supply management, from network strategy design to the distribution and delivery phases.

33. Across the four economies, the indices for distribution services are relatively low varying between 0.104 (Chinese Taipei) and 0.270 (Viet Nam), with an average of 0.174 in 2019. This indicates a relatively open regulatory environment for trade in distribution services. Nonetheless, restrictions on foreign entry contribute to the overall score in all economies and account for 47% of the total score in this sector. This is mostly due to economy-wide limitations that affect all services sectors, including distribution services. Common restrictions include limitations related to the acquisition and use of land and real estate by foreign providers, imposing limitations on the control and establishment of foreign entities (e.g., through residency requirement for directors or managers) as well as limiting cross-border data flows. Moreover, the distribution of certain products in Viet Nam (e.g., tobacco) is reserved for statutory monopolies.

34. The pilot APEC Index for distribution services includes also custom procedures and licensing procedures. Trade facilitation processes related to customs procedures are widely applied through measures such as pre-arrival processing and the possibility to release goods before determination and payment of duties. Nonetheless, the time taken for customs clearance procedures varies significantly among economies, and in all cases remains longer than 1 day. Moreover, all economies have a *de minimis* regime in place for import duties but only the value threshold in Peru is higher than 100 USD. With regard

to licensing procedures for distribution services (both retail and wholesale), all economies employ objective and transparent criteria.

**Figure 7. Pilot APEC Index for distribution services, 2019**



Note: The indices take values between zero and one, one being the most restrictive.

Source: APEC Index regulatory database (2019)

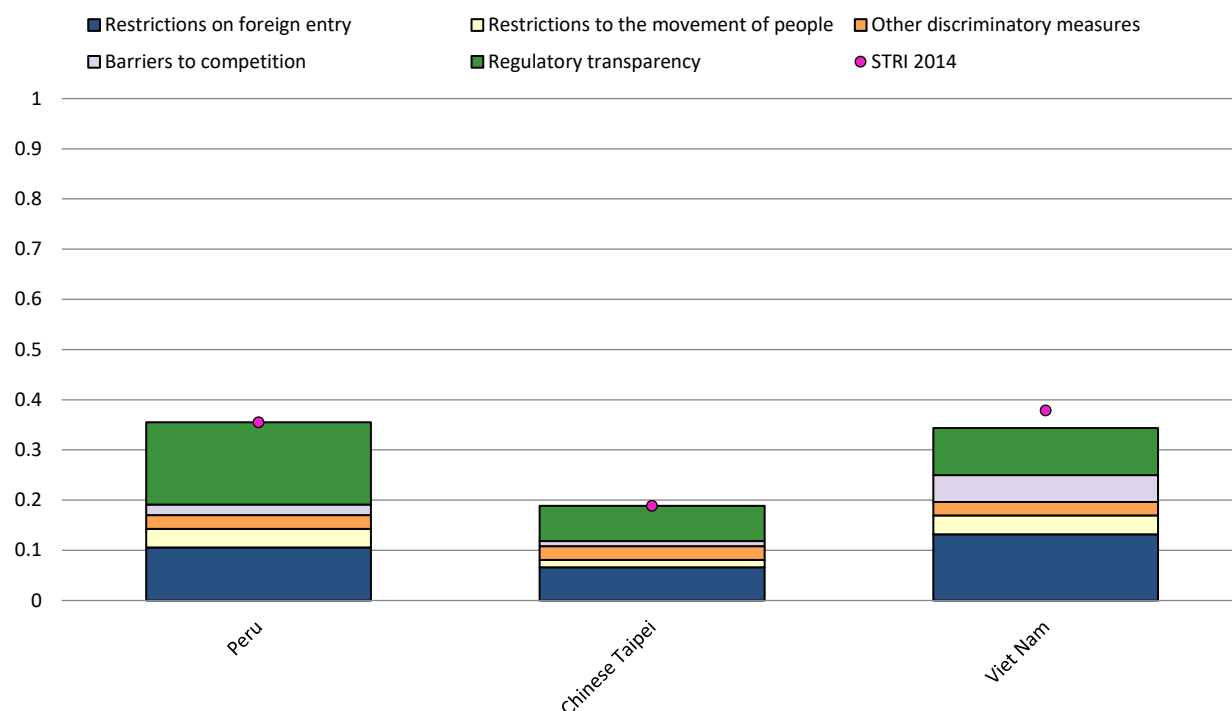
35. Figure 8 below presents the pilot APEC Index for logistics services in the segment of storage and warehousing.<sup>3</sup> Logistics services complement transport and distribution services, and play a fundamental role in keeping global supply chains operational. In international trade in goods, the process of bringing goods from factory gates across borders and to markets relies heavily on the efficiency of auxiliary services and the speed of carrying out border procedures.

36. The pilot APEC Index in this sector range between 0.189 (Chinese Taipei) and 0.355 (Peru), with an average of 0.289 in 2019. Barriers to regulatory transparency contribute the most to the indices in all three economies. In logistics services, additional sector-specific measures related to visa and customs procedures are covered. Competitive logistics services depend on efficient entry procedures for transport crew, whether aircrew, seamen, or truck drivers. Visa exemption or visas on arrival for air crew and seamen are generally available across economies but none of them have such a scheme for truck drivers. However, when visas are required for crew members, multiple entry visas are generally allowed.

<sup>3</sup> The OECD STRI covers four types of logistics services: cargo-handling, storage and warehousing, freight forwarding services and customs brokerage. Complementing the APEC Index with the remaining segments would benefit a broader understanding of logistics services in the APEC region, and could be considered in the context of potential future work related to the index.



Figure 8. Pilot APEC Index for logistics services (storage and warehousing), 2019



Note: The indices take values between zero and one, one being the most restrictive.

Source: APEC Index regulatory database (2019)

37. The logistics services sector also covers measures related to trade facilitation at customs. All economies have an advance ruling system albeit in Peru this is applied only to the extent that this is foreseen in a treaty signed by it. A single window regime and pre-arrival processing are also available across all three economies. Lastly, all economies have a *de minimis* regime in place for import duties but only the value threshold in Peru is higher than 100 USD.

38. The regulatory transparency measures in the pilot APEC Index for logistics services demonstrate well the significant progress that APEC has made in promoting trade facilitation for goods through making customs procedures more effective, reducing time and administrative burden for traders. At the same time, the pilot APEC Index also demonstrates the importance of these facilitation measures for trade in services, as lengthy customs procedures translate into increased trade costs, longer delivery times, and more uncertainty for logistics services suppliers.

## Measuring services liberalisation through the APEC opening-up indicators

39. Regulatory information on services policies in the four sectors covered was collected retroactively to 2014, covering in total six years of data between 2014 and 2019.<sup>4</sup> This facilitates the monitoring of policy changes that have been introduced through new or amended laws each year. This makes the pilot APEC Index a unique instrument to monitor services reforms, identify trends and emerging issues, as well as inform ongoing policy discussions. It is also a source of regulatory transparency and up to date regulatory information for businesses.

40. Changes in the pilot APEC Index from one year to the next provide detailed insights regarding the changes in the regulatory environment on services. The extent of reduction in the index values over time demonstrates progress that APEC economies have implemented in order to liberalise services trade. At the same time, increases in the index values could indicate a tightening regulatory environment.

41. Figure 9 below show the extent of services opening-up in the APEC economies covered by the pilot APEC Index. Services liberalisation in a broader range of APEC economies is presented in Annex C based on the OECD STRI.

42. Among the four economies covered, Viet Nam demonstrates the most extensive reforms. It has lowered its pilot APEC Index by 9% between 2014 and 2019 in both distribution services and logistics services. In distribution services, key reforms related to easing conditions on licensing for foreign services suppliers in 2018. In logistics services, comprehensive reforms related to customs procedures were progressively introduced since 2017, which followed reforms on expanding visa exemptions for air transport crew introduced in 2016.

43. In Chinese Taipei, horizontal reforms related to regulatory transparency in 2016 contributed to lowering the index in all sectors. In addition, in distribution services, easing conditions for non-resident foreign firms to register and declare taxes online were introduced in 2017.

44. With respect to Chile, reforms to the Customs Law introduced in 2017 eased various conditions related to customs procedures (for instance, introducing the possibility to release goods before determination and payment of duties on the basis of an appropriate warranty by a bank or insurance provider).<sup>5</sup>

45. The regulatory environment for services in Peru has been more stable during the past years, while an increase in the index level was observed in the computer services sector of Viet Nam. The latter is the result of a recent requirement introduced in 2019 for ICT services providers to establish branches or local offices in Viet Nam when they collect and process certain types of sensitive data in Viet Nam.

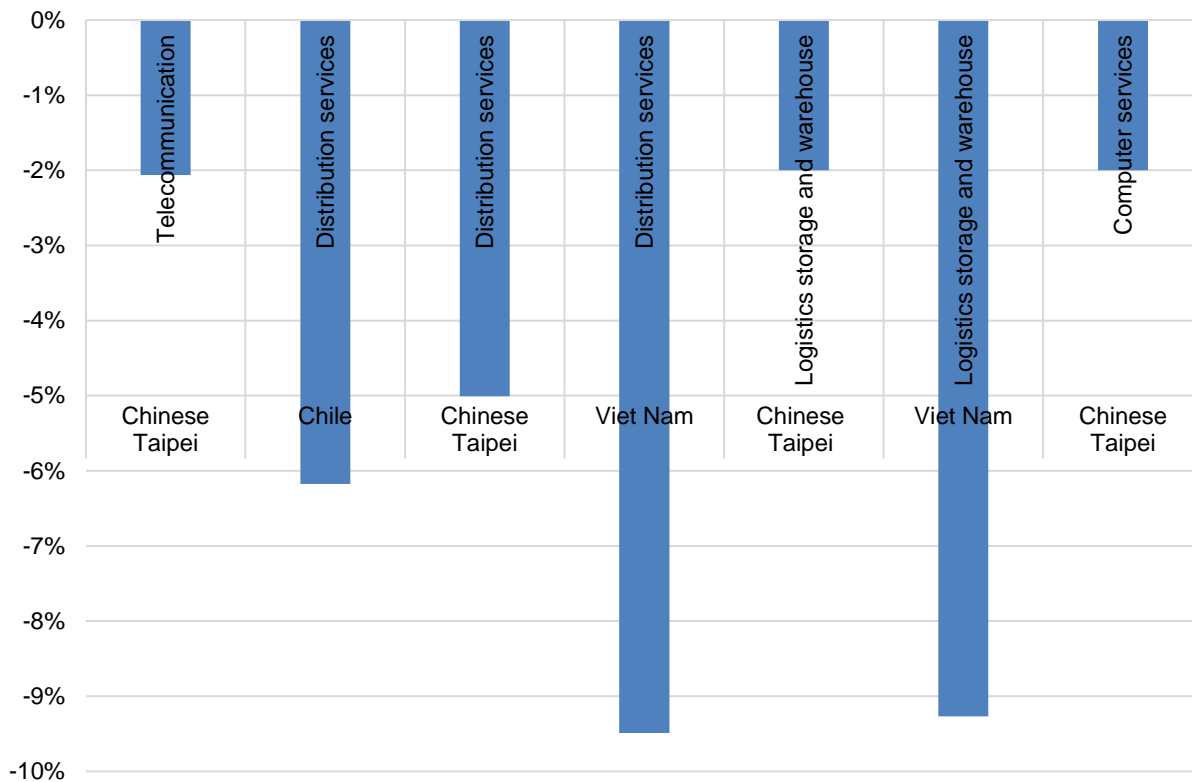
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<sup>4</sup> This structure also facilitates the continued yearly update of the APEC Index beyond 2019 to maintain its policy relevance in the longer term.

<sup>5</sup> These reforms are contributed to easing trade in logistics services in Chile. However, this sector is not part of the pilot APEC Index services sectors selected by Chile.

**Figure 9. Services opening-up among APEC economies**

APEC opening-up indicators measuring the extent of decrease in the pilot APEC Index values between 2014 and 2019 (%)



Note: Results for sectors where economies had a constant index value over time or the index value increased are not part of the opening-up indicators and hence not presented in the figure.

Source: APEC Index regulatory database (2019, 2014)

## 4 Potential ways forward on the application of the APEC Index

46. The APEC Index represent a key milestone in the APEC policy agenda to boost regional growth and competitiveness through services trade. The APEC Index brings together comparable information on trade-relevant services regulation across APEC economies, providing a new tool for policy makers and others to gain granular insight into this complex field and demonstrate collective progress on services liberalisation in the APEC region.

47. Potential applications of the APEC Index include aiding policy makers in their efforts to design reform options, align these with global best practice, and assess their likely effects.<sup>6</sup> The indices could help identify existing regulatory bottlenecks that impede services trade in APEC, and offer a new means to understand their impact, for instance, by quantifying the economic burden these represent in terms of trade costs for businesses.<sup>7</sup> It also opens up new ways to scope targeted reforms that aim at facilitating MSMEs' further integration in regional value chains.

48. Transparent and easily accessible information on services regulations help also APEC businesses stay informed about market entry requirements, while regular update of the APEC Index will ensure that it remains relevant for policy discussions. Future updates also present an opportunity to continue discussions on the inclusion of further APEC specific elements and regional initiatives in the index.

49. In going forward, it will be important for APEC economies to consider the expansion of the current pilot program to cover a broader range of services sector. Services are highly integrated with manufacturing industries and are also interlinked with each other. For instance, it would be a considerable added value to expand the current coverage of logistics services to all segments of the sector (i.e., cargo handling, freight forwarding and customs brokerage) in addition to the current coverage of storage and warehousing. This could be complemented with progressive coverage of other services sectors that support value chains in the region such as transport services, financial services and professional services. In addition, given the overarching transformative effect of digitalisation on trade, an APEC digital services index could also be developed to aid policy makers in their efforts to improve the policy environment for digital trade.<sup>8</sup>

50. At the same time, it will also be important to progressively expand the economy coverage of the APEC Index in order to maximise its benefits for the APEC region. This could build on existing work done through the OECD STRI which covers up to date regulatory information for 13 APEC economies,<sup>9</sup> and

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<sup>6</sup> For instance, see a recent study based on the OECD STRI analysing the contribution of services to the Australian economy. See (OECD, 2018<sup>[4]</sup>)

<sup>7</sup> For similar work using the OECD STRI, see (Benz and Jaax, 2020<sup>[2]</sup>) or (Rouzet and Spinelli, 2016<sup>[6]</sup>).

<sup>8</sup> For more information on the OECD Digital STRI, see (Ferencz, 2019<sup>[3]</sup>).

<sup>9</sup> Australia, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Russia, Thailand, United States.

work is currently in progress to add more APEC economies in the near future.<sup>10</sup> Such information could be easily transposed into APEC Index equivalents, allowing APEC economies to considerably expedite the expansion of the APEC Index (Annex D).

### Inclusion of further APEC specific measures or elements

51. Considering the rapid development of the regulatory and policy environment governing services trade among APEC member economies, the APEC Index could benefit from continued discussions in the future on adding further APEC specific measures or elements.

52. This would ensure that the APEC Index remains a relevant tool for APEC policy makers by reflecting the evolving regulatory landscape affecting services. Such measures could reflect progress made by APEC in promoting services trade in the region as well as identify emerging regulatory issues where collective action would benefit regional trade.

53. The OECD can provide support to APEC member economies' endeavours to include further APEC specific measures in the future.

### Online tools for the APEC Index

54. Several members of the Technical Group highlighted the need for developing dissemination tools for the APEC index, including through appropriate online tools. In this regard, the APEC Index could be disseminated through a dedicated website. This website could provide easy access to the indices as well as the regulatory information that supports them. This could be complemented with a dedicated page on services liberalisation efforts in the APEC region showing progress through the APEC opening-up indicators.

55. Other existing online tools could include an interactive policy simulator that provides all information by economy and by sector in an easy to understand manner.<sup>11</sup> This tool can be used to understand how the APEC indices are calculated, to analyse the contribution of each policy measure to the index, and to simulate the impact of a policy change on the index value. The focus view option provides links to legal sources. Finally, simulations can be saved and shared with other users, and the relevant data can be downloaded.

56. The website could be set up with technical support from the OECD.

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<sup>10</sup> There is also ongoing work with the ASEAN Coordinating Committee on Services that is highly complementary to the APEC Index.

<sup>11</sup> See the OECD STRI Policy Simulator here: <https://sim.oecd.org/>

# 5 Conclusion

57. The pilot APEC Index demonstrate the substantial efforts by APEC economies to reduce trade barriers in line with their commitments under the Bogor Goals. APEC-wide cooperation in key areas such as trade facilitation, customs procedures, and regulatory transparency contribute to easing the regulatory hurdles on APEC businesses, particularly on smaller players. At the same time, there is scope to further reform sectors that form the pillar of regional trade in APEC such as logistics services. Lowering barriers to telecommunications and computer services would further allow APEC economies to benefit from the digital transformation.

58. In going forward, there is a need for continued work on the APEC Index. Expanding the pilot program to more services sectors and more economies will be essential to maximise the benefits of this new tool. Through regular updates, the APEC Index can continue to provide relevant and timely information while also monitoring progress on liberalisation efforts.

59. As APEC Leaders prepare to set a Vision for APEC beyond 2020, increased regulatory cooperation on services trade will be essential to unleash new sources of growth, especially amidst the economic challenges left by the COVID-19 pandemic. The APEC Index is a unique tool that can help policy makers make better choices to drive economic recovery and empower a services-led growth model in the APEC region.

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# Annex A - List of measures in the pilot APEC Index per sector

**Table 3. List of measures in computer services**

Computer services	
Policy area	Measure
Restrictions on foreign entry	Foreign equity restrictions: maximum foreign equity share allowed (%)
	There are limits to the proportion of shares that can be acquired by foreign investors in publicly-controlled firms
	Legal form: only joint ventures are allowed
	Legal form: other restrictions
	Board of directors: majority must be citizens
	Board of directors: majority must be residents
	Board of directors: at least one must be citizen
	Board of directors: at least one must be resident
	Managers must be citizen
	Managers must be resident
	Screening explicitly considers economic interests
	Screening exists without exclusion of economic interests
	Memo: thresholds for screening projects
	Acquisition and use of land and real estate by foreigners is restricted
	Restrictions on the type of shares or bonds held by foreign investors
	Conditions on subsequent transfer of capital and investments
	Restrictions on cross-border mergers and acquisitions (M&A)
	Performance requirements
	Commercial presence is required in order to provide cross-border services
	Local presence is required for cross-border supply
	Memo: Free cross-border transfer of personal data or application of the accountability principle
	Cross-border transfer of personal data is possible when certain private sector safeguards are in place
	Cross-border data flows: cross-border transfer of personal data is possible to economies with substantially similar privacy protection laws
	Cross-border data flows: cross-border transfer is subject to approval on a case-by-case basis
	Cross-border data flows: certain data must be stored locally
	Cross-border data flows: transfer of data is prohibited
	Other restrictions on foreign entry
Restrictions to movement of people	Quotas: intra-corporate transferees
	Quotas: contractual services suppliers
	Quotas: independent services suppliers
	Labour market tests: intra-corporate transferees
	Labour market tests: contractual services suppliers
	Labour market tests: independent services suppliers



	Limitation on duration of stay for intra-corporate transferees (months)
	Limitation on duration of stay for contractual services suppliers (months)
	Limitation on duration of stay for independent services suppliers (months)
	Laws or regulations establish a process for recognising qualifications gained abroad
	Memo: Licence or authorisation is required to practice
	Other restrictions to movement of people
Other discriminatory measures	Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies
	Public procurement: Explicit preferences for local suppliers
	Public procurement: Procurement regulation explicitly prohibits discrimination of foreign suppliers
	Public procurement: The procurement process affects the conditions of competition in favour of local firms
	Memo: thresholds above which tender is mandated
	Memo: The procurement process below the value thresholds affects the conditions of competition in favour of local firms
	Other restrictions in other discriminatory measures
Barriers to competition	Decisions by the regulatory body can be appealed
	Firms have redress when business practices restrict competition in a given market
	State or provincial government control at least one major firm in the sector
	Publicly-controlled firms are exempted from the application of the general competition law
	Prices or fees are regulated
	Restrictions on advertising
	Minimum capital requirements
	Other restrictions in barriers to competition
	There is a legal obligation to communicate regulations to the public within a reasonable time prior to entry into force
	There is an adequate public comment procedure open to interested persons, including foreign suppliers
	Range of visa processing time (days)
	Multiple entry visa for business visitors
	Cost to obtain a business visa (USD)
	Number of documents needed to obtain a business visa
	Number of working days to complete all mandatory procedures to register a company
	Total cost to complete all official procedures required to register a company (in % of income per capita)
	Number of mandatory procedures to register a company
	Other restrictions in regulatory transparency

Table 4. List of measures in telecommunications

Telecommunications	
Policy_area	Measure
Restrictions on foreign entry	Foreign equity restrictions: maximum foreign equity share allowed (%) (fixed)
	Foreign equity restrictions: maximum foreign equity share allowed (%) (mobile)
	There are limits to the proportion of shares that can be acquired by foreign investors in publicly-controlled firms
	Legal form: only joint ventures are allowed (fixed)
	Legal form: only joint ventures are allowed (mobile)
	Legal form: other restrictions
	Board of directors: majority must be citizens
	Board of directors: majority must be residents
	Board of directors: at least one must be citizen
	Board of directors: at least one must be resident
	Managers must be citizen
	Managers must be resident
	Screening explicitly considers economic interests (fixed)
	Screening explicitly considers economic interests (mobile)
	Screening exists without exclusion of economic interests (fixed)
	Screening exists without exclusion of economic interests (mobile)
	Memo: thresholds for screening projects (fixed)
	Memo: thresholds for screening projects (mobile)
	Acquisition and use of land and real estate by foreigners is restricted
	Restrictions on the type of shares or bonds held by foreign investors
	Conditions on subsequent transfer of capital and investments
	Restrictions on cross-border mergers and acquisitions (M&A) (fixed)
	Restrictions on cross-border mergers and acquisitions (M&A) (mobile)
	Performance requirements (fixed)
	Performance requirements (mobile)
	Commercial presence is required in order to provide cross-border services (fixed)
	Commercial presence is required in order to provide cross-border services (mobile)
	Local presence is required for cross-border supply (fixed)
	Local presence is required for cross-border supply (mobile)
	Memo: Free cross-border transfer of personal data or application of the accountability principle
	Cross-border transfer of personal data is possible when certain private sector safeguards are in place
	Cross-border data flows: cross-border transfer of personal data is possible to economies with substantially similar privacy protection laws
	Cross-border data flows: cross-border transfer is subject to approval on a case-by-case basis
	Cross-border data flows: certain data must be stored locally
	Cross-border data flows: transfer of data is prohibited
	Other restrictions on foreign entry
Restrictions to movement of people	Quotas: intra-corporate transferees
	Quotas: contractual services suppliers
	Quotas: independent services suppliers
	Labour market tests: intra-corporate transferees
	Labour market tests: contractual services suppliers
	Labour market tests: independent services suppliers
	Limitation on duration of stay for intra-corporate transferees (months)
	Limitation on duration of stay for contractual services suppliers (months)
	Limitation on duration of stay for independent services suppliers (months)
	Laws or regulations establish a process for recognising qualifications gained abroad

	Memo: Licence or authorisation is required to practice
	Other restrictions to movement of people
Other discriminatory measures	Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies
	Public procurement: Explicit preferences for local suppliers
	Public procurement: Procurement regulation explicitly prohibits discrimination of foreign suppliers
	Public procurement: The procurement process affects the conditions of competition in favour of local firms
	Memo: thresholds above which tender is mandated
	Memo: The procurement process below the value thresholds affects the conditions of competition in favour of local firms
	Foreign operators seeking interconnection benefit from regulated termination rates on a non-discriminatory basis (fixed)
	Foreign operators seeking interconnection benefit from regulated termination rates on a non-discriminatory basis (mobile)
	Foreign suppliers have non-discriminatory access to regulated rates and conditions for wholesale international mobile roaming services
	Foreign suppliers have non-discriminatory access to regulated rates and conditions for retail international mobile roaming services
	Other restrictions in other discriminatory measures
Barriers to competition	Decisions by the regulatory body can be appealed
	Firms have redress when business practices restrict competition in a given market
	State or provincial government control at least one major firm in the sector
	State or provincial government have special voting rights (e.g. golden shares) in any firms in the sector
	Publicly-controlled firms are exempted from the application of the general competition law
	Minimum capital requirements
	Restrictions on advertising
	The government can overrule the decision of the regulator
	Contracts for universal services obligations are assigned on a competitive basis (fixed)
	Contracts for universal services obligations are assigned on a competitive basis (mobile)
	Number portability is required (fixed)
	Time and conditions for porting are regulated (fixed)
	Number portability is required (mobile)
	Time and conditions for porting are regulated (mobile)
	Resale of public telecommunications services is allowed (fixed)
	Resale of public telecommunications services is allowed (mobile)
	"Use it or lose it" applies to spectrum
	Secondary spectrum trading is allowed
	Interconnection is mandated (fixed)
	Interconnection is mandated (mobile)
	Access to passive wholesale products is mandated
	Wholesale access prices are regulated, passive products
	A reference offer is mandated for wholesale access to passive products
	Access to active wholesale products is mandated
	Wholesale access prices are regulated, active products
	A reference offer is mandated for wholesale access to active products
	Access to wholesale leased lines is mandated
	Wholesale access prices are regulated, leased lines
	A reference offer is mandated for wholesale access to leased lines
	Fixed termination rates are regulated
	A reference offer is mandated for termination and interconnection
	Mobile termination rates are regulated
	A reference offer is mandated for termination and interconnection
Fixed call origination rates are regulated	

	A reference offer is mandated for fixed call origination
	Access to mobile networks is mandated
	Mobile call origination rates are regulated
	A reference offer is mandated for mobile call origination
	Retail prices are regulated (fixed)
	Retail prices are regulated (mobile)
	Vertical separation is required (fixed)
	Vertical separation is required (mobile)
	Memo: There is at least one dominant firm in the fixed wholesale access market, copper
	Memo: There is at least one dominant firm in the fixed wholesale access market, fiber
	Memo: There is at least one dominant firm in the wholesale fixed call termination market
	Memo: There is at least one dominant firm in the market for wholesale fixed call origination
	Memo: There is at least one dominant firm in the fixed retail market
	Memo: There is at least one dominant firm in the mobile termination market
	Memo: There is at least one dominant firm in the mobile origination market
	Memo: There is at least one dominant firm in the mobile retail market
	Other restrictions in barriers to competition
Regulatory transparency	Licensing agreements are publicly available
	Information on spectrum (regulations, spectrum management table, spectrum fees etc.) are publicly available
	There is a legal obligation to communicate regulations to the public within a reasonable time prior to entry into force
	There is an adequate public comment procedure open to interested persons, including foreign suppliers
	Range of visa processing time (days)
	Multiple entry visa for business visitors
	Cost to obtain a business visa (USD)
	Number of documents needed to obtain a business visa
	Number of working days to complete all mandatory procedures to register a company
	Total cost to complete all official procedures required to register a company (in % of income per capita)
	Number of mandatory procedures to register a company
	Other restrictions in regulatory transparency

Table 5. List of measures in distribution services

<b>Distribution services</b>	
<b>Policy_area</b>	<b>Measure</b>
Restrictions on foreign entry	Foreign equity restrictions: maximum foreign equity share allowed (%)
	There are limits to the proportion of shares that can be acquired by foreign investors in publicly-controlled firms
	Legal form: only joint ventures are allowed
	Legal form: other restrictions
	Board of directors: majority must be citizens
	Board of directors: majority must be residents
	Board of directors: at least one must be citizen
	Board of directors: at least one must be resident
	Managers must be citizen
	Managers must be resident
	Screening explicitly considers economic interests
	Screening exists without exclusion of economic interests
	Memo: thresholds for screening projects
	Acquisition and use of land and real estate by foreigners is restricted
	Restrictions on the type of shares or bonds held by foreign investors
	Conditions on subsequent transfer of capital and investments
	Restrictions on cross-border mergers and acquisitions (M&A)
	Performance requirements
	Commercial presence is required in order to provide cross-border services
	Local presence is required for cross-border supply
	Licences for the distribution of certain products are subject to quotas or economic needs tests
	Licences for department stores or large-store formats are subject to quotas or economic needs tests
	Zoning regulation discriminates foreign suppliers against domestic competitors
	The number of sales outlets per firm is limited
	Restrictions on franchising
	Restrictions against foreign distributors to practice direct selling including e-commerce
	Memo: Free cross-border transfer of personal data or application of the accountability principle
	Cross-border transfer of personal data is possible when certain private sector safeguards are in place
	Cross-border data flows: cross-border transfer of personal data is possible to economies with substantially similar privacy protection laws
	Cross-border data flows: cross-border transfer is subject to approval on a case-by-case basis
	Cross-border data flows: certain data must be stored locally
	Cross-border data flows: transfer of data is prohibited
	Memo: Licence/authorisation is required to enter the market (department store)
Memo: The distribution of certain products is reserved for statutory monopolies	
Memo: Market share under monopoly in the sector	
Other restrictions on foreign entry	
Restrictions to movement of people	Quotas: intra-corporate transferees
	Quotas: contractual services suppliers
	Quotas: independent services suppliers
	Labour market tests: intra-corporate transferees
	Labour market tests: contractual services suppliers
	Labour market tests: independent services suppliers
	Limitation on duration of stay for intra-corporate transferees (months)
	Limitation on duration of stay for contractual services suppliers (months)
Limitation on duration of stay for independent services suppliers (months)	

	Other restrictions to movement of people
Other discriminatory measures	Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies
	Public procurement: Explicit preferences for local suppliers
	Public procurement: Procurement regulation explicitly prohibits discrimination of foreign suppliers
	Public procurement: The procurement process affects the conditions of competition in favour of local firms
	Memo: thresholds above which tender is mandated
	Memo: The procurement process below the value thresholds affects the conditions of competition in favour of local firms
	Domestic standards for distribution services deviate from international standards
	Foreign firms are discriminated against on trademark protection
	The pre-packaging of products is subject to mandatory nominal quantities
	Labelling provisions go beyond information requirements
	There are discriminatory access to certain settlement methods
	Online tax registration and declaration is available to non-resident foreign providers
	Other restrictions in other discriminatory measures
Barriers to competition	Decisions by the regulatory body can be appealed
	Firms have redress when business practices restrict competition in a given market
	State or provincial government control at least one major firm in the sector
	Publicly-controlled firms are exempted from the application of the general competition law
	Prices or fees are regulated
	Restrictions on advertising
	Minimum capital requirements
	Vertical agreements: Resale price maintenance is subject to regulation
	Vertical agreements: Territorial or customer group sales restrictions are subject to regulation
	Laws or regulations impose restrictions on the nature or content of contracts
	Freedom of choice of law applicable to a contract
	Domestic contract rule for cross-border transaction deviate from internationally standardised rules
	Laws or regulations explicitly protect confidential information
	Large retailers are subject to specific taxes
	Seasonal sales periods are regulated
	Regulation imposes an upper limit on shop opening hours
	Regulations limit the range of products a retailer may carry
	Retailers can set up their own recycling systems
	Laws or regulations provide electronic signature with the equivalent legal validity with hand-written signature
	Foreign certification entities are eligible for the qualified bodies to issue digital certificate for electronic signature
Other restrictions in barriers to competition	
Regulatory transparency	There is a legal obligation to communicate regulations to the public within a reasonable time prior to entry into force
	There is an adequate public comment procedure open to interested persons, including foreign suppliers
	Range of visa processing time (days)
	Multiple entry visa for business visitors
	Cost to obtain a business visa (USD)
	Number of documents needed to obtain a business visa
	Time required to obtain a construction permit (in calendar days)
	Total cost required to obtain a construction permit (% of warehouse value)
	Number of procedures required to obtain a construction permit (number)
	Licences are allocated according to publicly available criteria
	Restrictions related to the duration and renewal of licences
	Time taken for customs clearance (days)

	Pre-arrival processing is possible
	A de minimis regime is in place: Import duties (USD)
	Memo: a de minimis regime is in place: Internal tax (USD)
	The release of goods is possible before determination and payment of duties
	Other restrictions in regulatory transparency

Table 6. List of measures in logistics services (storage and warehousing)

Logistics services (storage and warehousing)	
Policy_area	Measure
Restrictions on foreign entry	Foreign equity restrictions: maximum foreign equity share allowed (%)
	There are limits to the proportion of shares that can be acquired by foreign investors in publicly-controlled firms
	Legal form: only joint ventures are allowed
	Legal form: other restrictions
	Board of directors: majority must be citizens
	Board of directors: majority must be residents
	Board of directors: at least one must be citizen
	Board of directors: at least one must be resident
	Managers must be citizen
	Managers must be resident
	Screening explicitly considers economic interests
	Screening exists without exclusion of economic interests
	Memo: thresholds for screening projects
	Acquisition and use of land and real estate by foreigners is restricted
	Restrictions on the type of shares or bonds held by foreign investors
	Conditions on subsequent transfer of capital and investments
	Restrictions on cross-border mergers and acquisitions (M&A)
	Performance requirements
	Memo: Market share under monopoly in the sector
	Service provision is reserved for statutory monopoly or granted on an exclusive basis
	Licences are subject to quotas or economic needs test
	Memo: Licence/authorisation is required to enter the market
	Memo: Free cross-border transfer of personal data or application of the accountability principle
	Cross-border transfer of personal data is possible when certain private sector safeguards are in place
	Cross-border data flows: cross-border transfer of personal data is possible to economies with substantially similar privacy protection laws
	Cross-border data flows: cross-border transfer is subject to approval on a case-by-case basis
	Cross-border data flows: certain data must be stored locally
Cross-border data flows: transfer of data is prohibited	
Other restrictions on foreign entry	
Restrictions to movement of people	Quotas: intra-corporate transferees
	Quotas: contractual services suppliers
	Quotas: independent services suppliers
	Labour market tests: intra-corporate transferees
	Labour market tests: contractual services suppliers
	Labour market tests: independent services suppliers
	Limitation on duration of stay for intra-corporate transferees (months)
	Limitation on duration of stay for contractual services suppliers (months)
	Limitation on duration of stay for independent services suppliers (months)
	Other restrictions to movement of people
Other discriminatory measures	Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies
	Public procurement: Explicit preferences for local suppliers
	Public procurement: Procurement regulation explicitly prohibits discrimination of foreign suppliers
	Public procurement: The procurement process affects the conditions of competition in favour of local firms
	Memo: thresholds above which tender is mandated
	Memo: The procurement process below the value thresholds affects the conditions of



	competition in favour of local firms
	Discriminatory access to storage and warehouse facilities
	Domestic standards on transport packages deviate from international standards
	Other restrictions in other discriminatory measures
Barriers to competition	Decisions by the regulatory body can be appealed
	Firms have redress when business practices restrict competition in a given market
	State or provincial government control at least one major firm in the sector
	Publicly-controlled firms are exempted from the application of the general competition law
	Prices or fees are regulated
	Minimum capital requirements
	Restrictions on advertising
	Contracts for service provision are awarded through competitive bidding
	Memo: Absence of an airport facility
	Memo: Absence of a port facility
	Memo: Absence of a road facility
	Memo: Absence of a rail facility
	Limitations on working hours of operation for storage and warehouse facilities
	Other restrictions in barriers to competition
Regulatory transparency	There is a legal obligation to communicate regulations to the public within a reasonable time prior to entry into force
	There is an adequate public comment procedure open to interested persons, including foreign suppliers
	Range of visa processing time (days)
	Multiple entry visa for business visitors
	Cost to obtain a business visa (USD)
	Number of documents needed to obtain a business visa
	Duration of visa for crew: number of months allowed by the visa: aircrew
	Duration of visa for crew: number of months allowed by the visa: seamen
	Duration of visa for crew: number of months allowed by the visa: truck drivers
	Visas on arrival or visa exemption are available for temporary entry/transit of crew: aircrew
	Visas on arrival or visa exemption are available for temporary entry/transit of crew: seamen
	Visas on arrival or visa exemption are available for temporary entry/transit of crew: truck drivers
	Multiple entry visas are allowed for crew: aircrew
	Multiple entry visas are allowed for crew: seamen
	Multiple entry visas are allowed for crew: truck drivers
	Number of working days to complete all mandatory procedures to register a company
	Total cost to complete all official procedures required to register a company (in % of income per capita)
	Number of mandatory procedures to register a company
	Individual licensing/registration requirements are imposed on warehousing, freight forwarding and customs brokerage services
	Time taken for customs clearance (days)
	An advance ruling system is available
	A single window for customs procedures is available
	Pre-arrival processing is possible
	A de minimis regime is in place: Import duties (USD)
	Memo: a de minimis regime is in place: Internal tax (USD)
	The release of goods is possible before determination and payment of duties
	Other restrictions in regulatory transparency

## Annex B – Breakdown of the pilot APEC Index per policy area

Table 7. Breakdown of the pilot APEC Index per policy area (2019)

Economy	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	APEC Index
Peru	Computer services	0.112	0.091	0.038	0.000	0.046	0.287
Chinese Taipei	Computer services	0.080	0.030	0.038	0.000	0.015	0.163
Viet Nam	Computer services	0.128	0.076	0.038	0.015	0.046	0.303
Chile	Telecommunication	0.068	0.014	0.011	0.106	0.030	0.230
Peru	Telecommunication	0.087	0.027	0.028	0.048	0.030	0.222
Chinese Taipei	Telecommunication	0.165	0.014	0.028	0.145	0.008	0.360
Chile	Distribution services	0.036	0.016	0.005	0.000	0.049	0.107
Peru	Distribution services	0.081	0.027	0.016	0.017	0.028	0.171
Chinese Taipei	Distribution services	0.057	0.011	0.022	0.000	0.014	0.104
Viet Nam	Distribution services	0.131	0.030	0.034	0.042	0.033	0.270
Peru	Logistics storage and warehouse	0.106	0.037	0.027	0.021	0.164	0.355
Chinese Taipei	Logistics storage and warehouse	0.066	0.015	0.027	0.011	0.070	0.189
Viet Nam	Logistics storage and warehouse	0.132	0.037	0.027	0.053	0.094	0.343

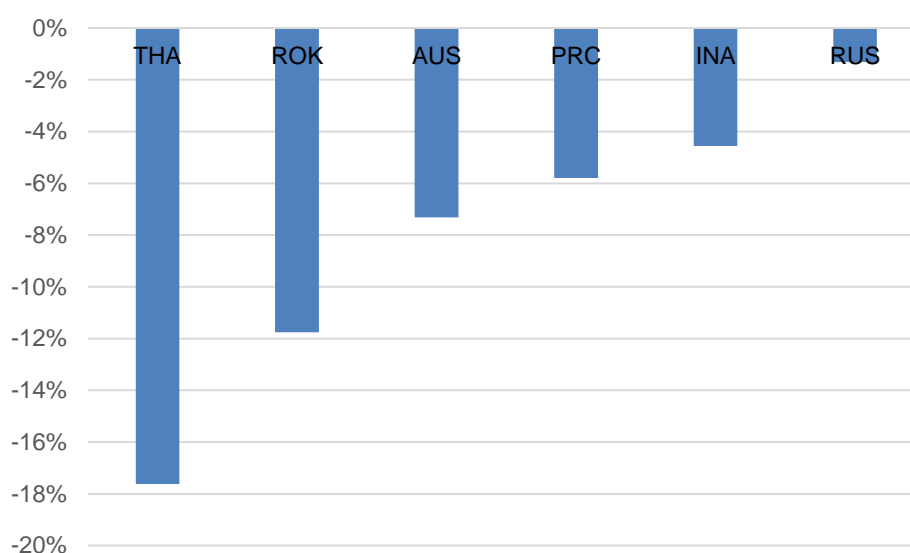
Source: APEC Index regulatory database (2019)

## Annex C – Opening-up indicators for APEC economies

This Annex presents the extent of services liberalisation among APEC economies as measured by the share of reduction in the OECD STRIs for 2019 compared to the 2014 benchmark. Only those economies are presented that have undertaken services liberalisation during this period.

**Figure 10. Opening-up indicators for computer services**

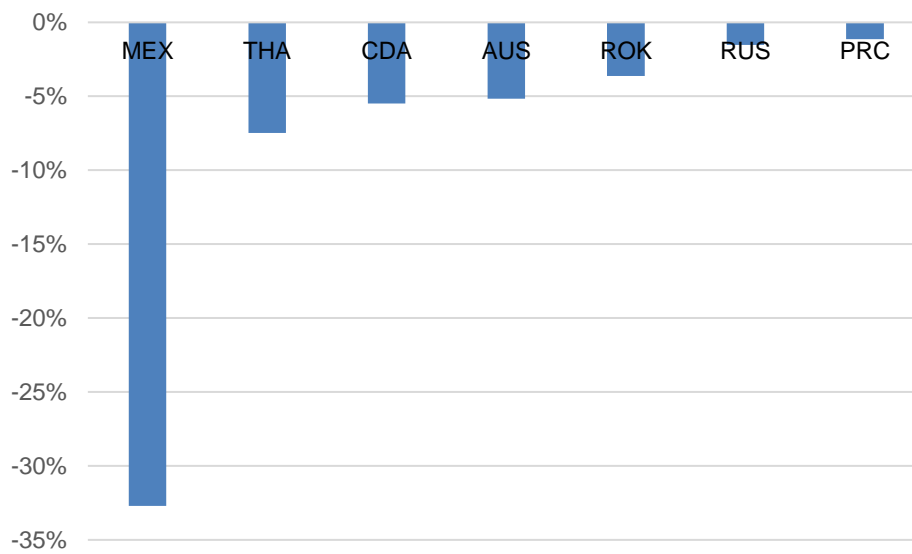
Percentage of decrease in the OECD STRI values for computer services between 2014 and 2019



Source: OECD STRI database (2019, 2014)

**Figure 11. Opening-up indicators for telecommunications services**

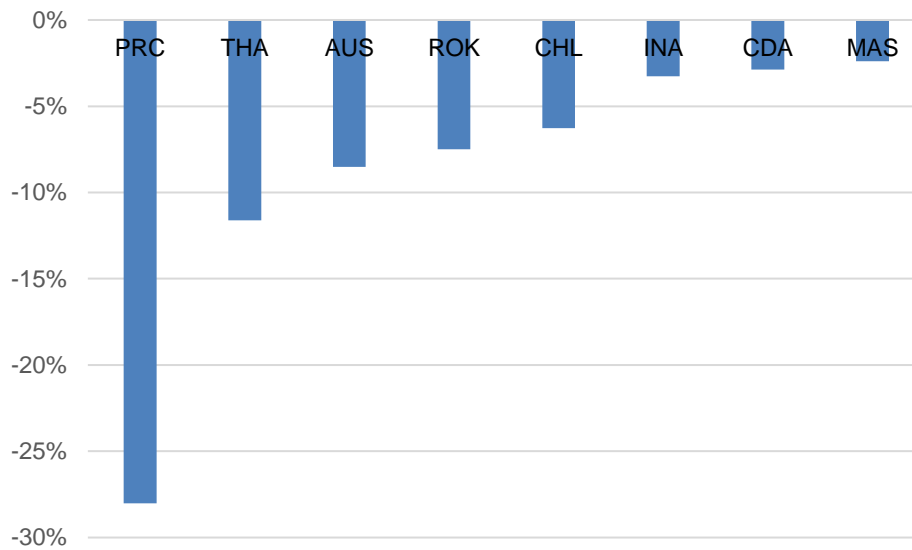
Percentage of decrease in the OECD STRI values for telecommunications between 2014 and 2019



Source: OECD STRI database (2019, 2014)

**Figure 12. Opening-up indicators for distribution services**

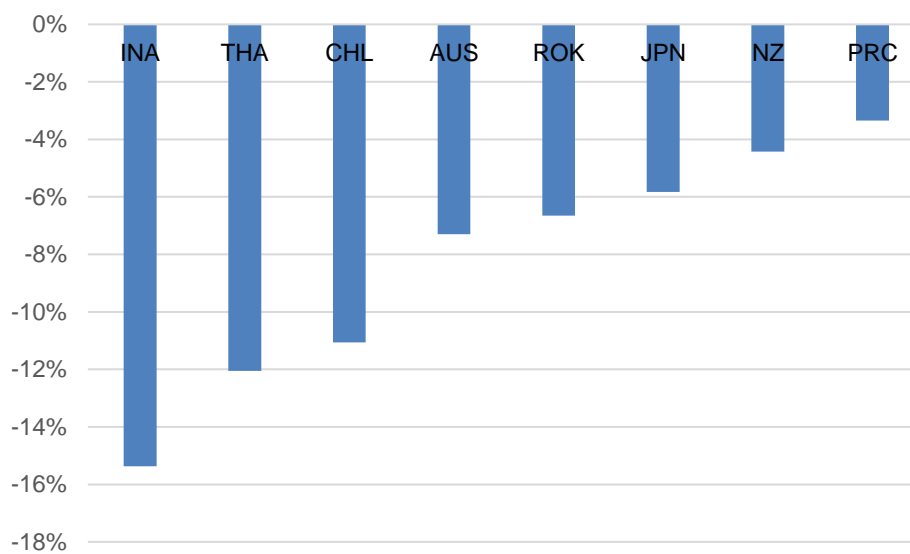
Percentage of decrease in the OECD STRI values for distribution services between 2014 and 2019



Source: OECD STRI database (2019, 2014)

### Figure 13. Opening-up indicators for logistics (storage and warehousing) services

Percentage of decrease in the OECD STRI values for logistics services (storage) between 2014 and 2019

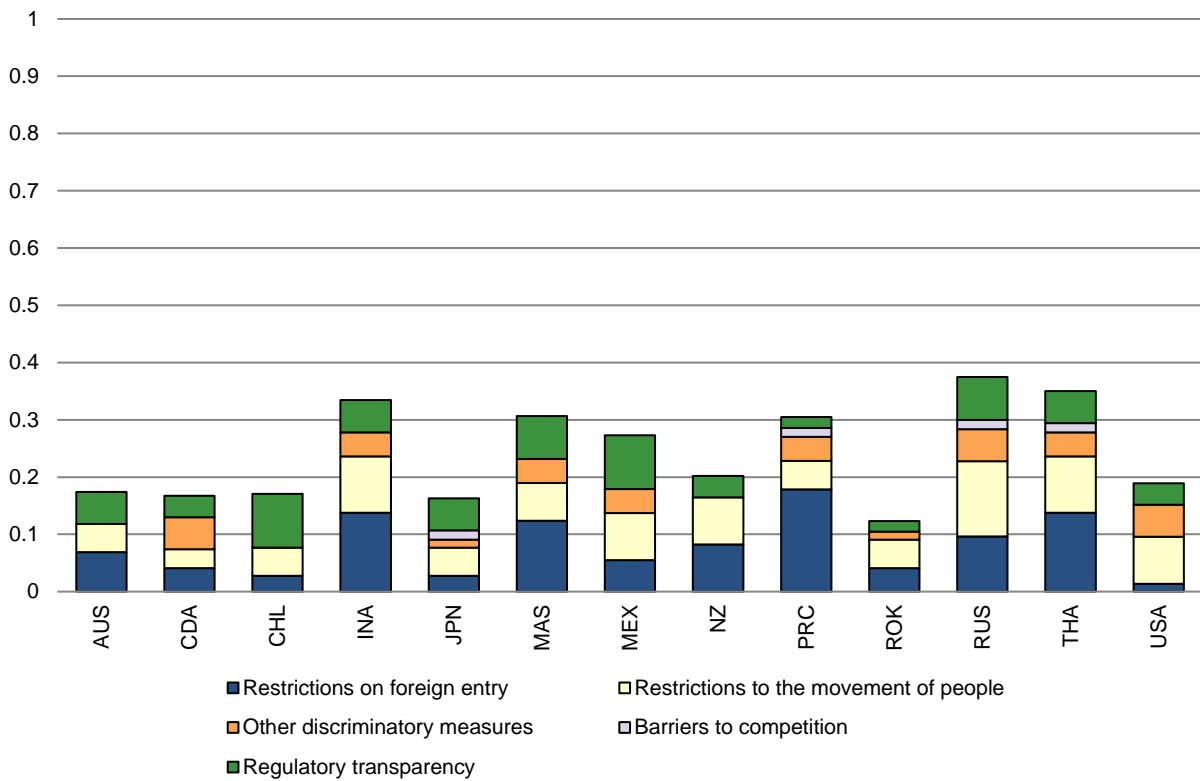


Source: OECD STRI database (2019, 2014)

# Annex D – Coverage of APEC economies in the OECD STRI

This Annex presents the 2019 OECD STRIs for APEC economies currently covered by it.<sup>12</sup>

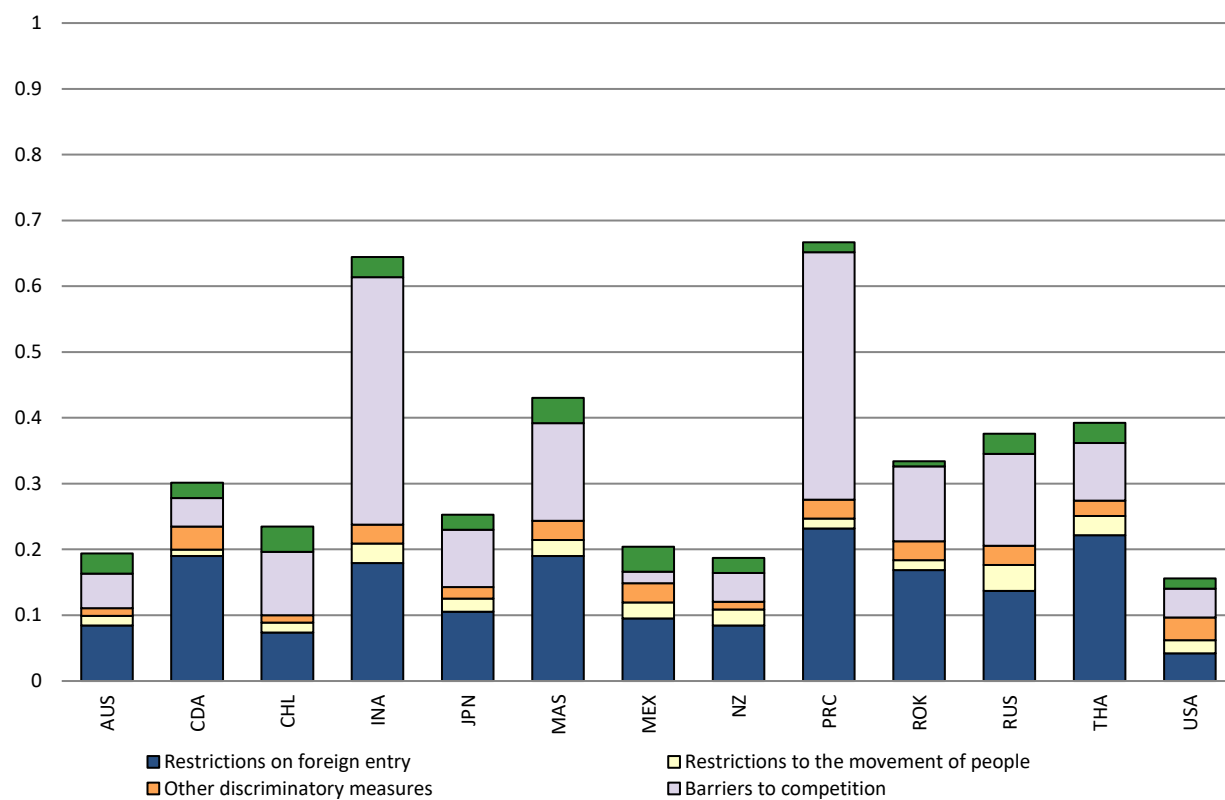
Figure 14. APEC economies covered in the OECD STRI for computer services, 2019



Source: OECD STRI regulatory database (2019)

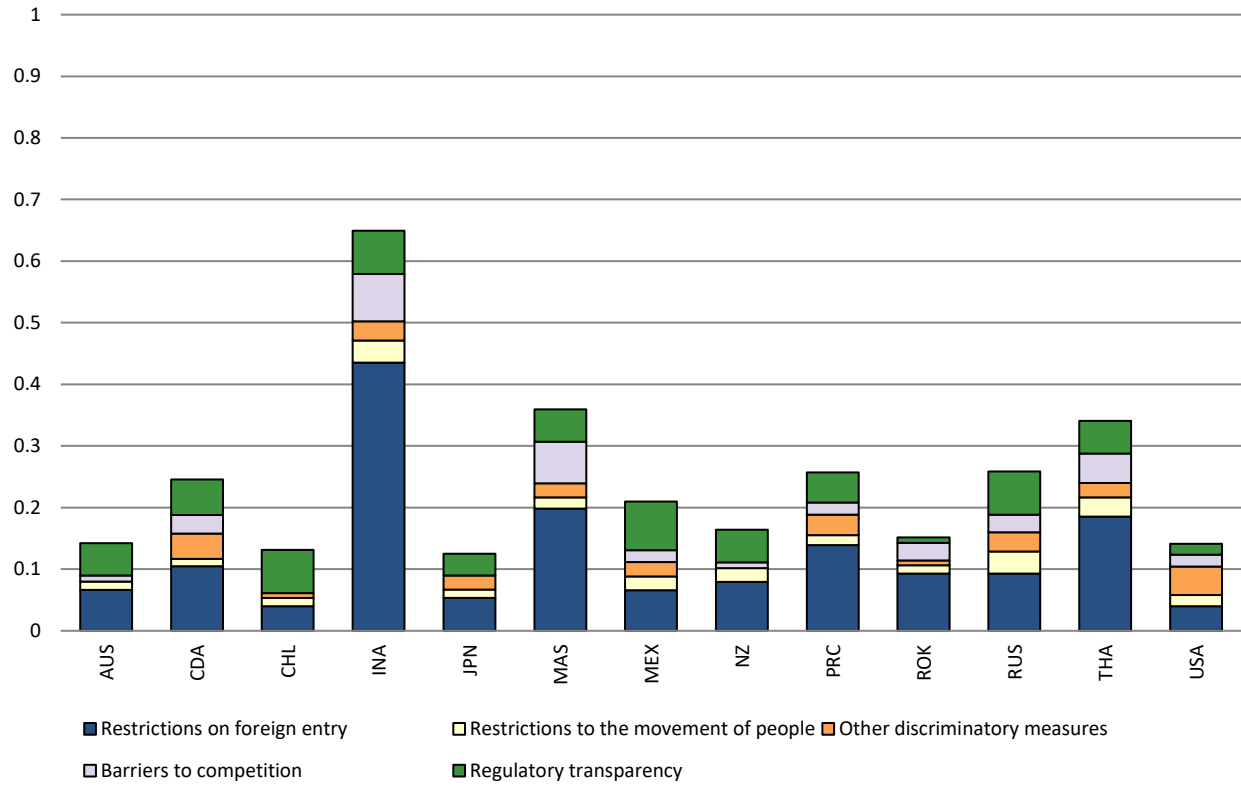
<sup>12</sup> Australia, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Russia, Thailand, United States. Work on adding further APEC economies is currently in progress.

Figure 15. APEC economies covered in the OECD STRI for telecommunications services, 2019



Source: OECD STRI regulatory database (2019)

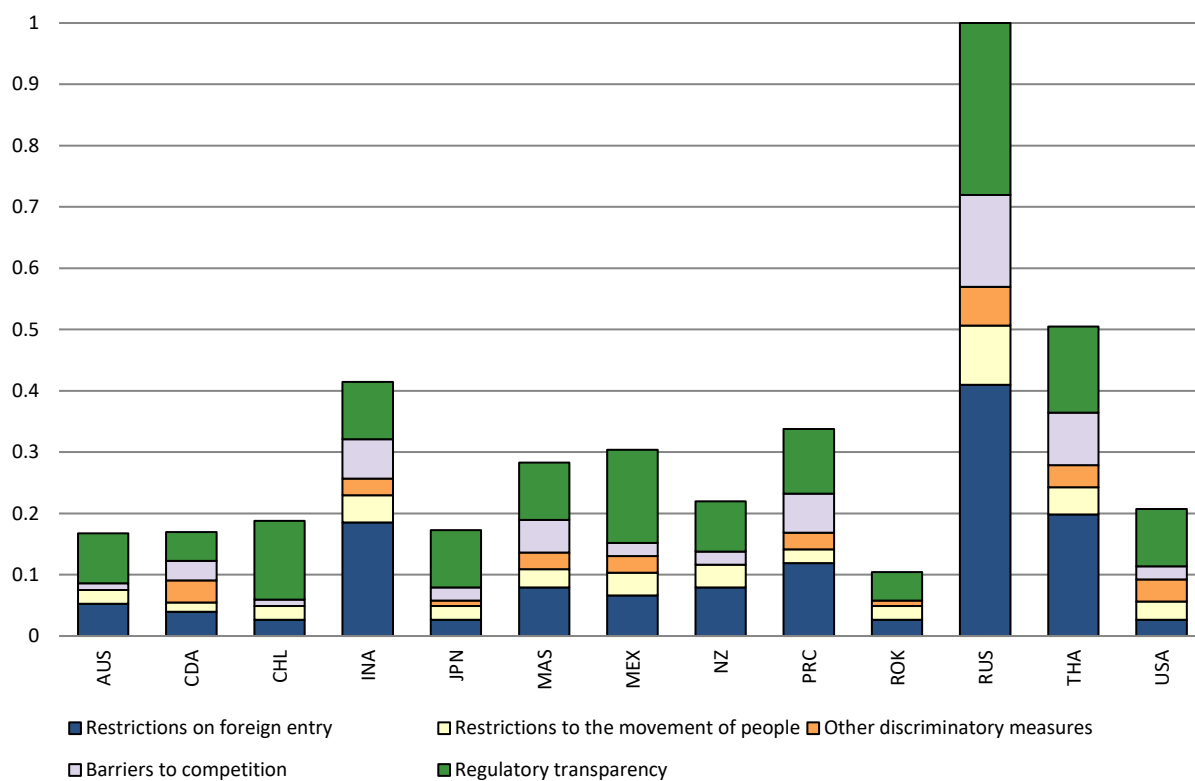
Figure 16. APEC economies covered in the OECD STRI for distribution services, 2019



Source: OECD STRI regulatory database (2019)



Figure 17. APEC economies covered in the OECD STRI for logistics services (storage and warehousing), 2019



Source: OECD STRI regulatory database (2019)