

Advancing Free Trade for Asia-Pacific **Prosperity**

Research Outcomes

Summary of Research Projects and COVID-19 Policy Briefs 2020

Policy Support Unit

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Final Review of APEC's Progress Towards the Bogor Goals

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Since 1994, the Bogor Goals have been the driving force behind the pursuit of free and open trade and investment in the APEC region. The final review in 2020 marks the deadline set by APEC Leaders to meet the Bogor Goals. It demonstrates APEC's achievements and outlines areas for further work. The review also contributes to facilitating discussions on APEC's work agenda post-2020.

Findings

APEC economies have made substantial progress in several areas, but more can be done to tackle the unfinished business.

<u>Trade and investment flows involving APEC economies have grown tremendously since the launch of the Bogor Goals</u>

- APEC's total merchandise trade almost quintupled between 1994 and 2019, from USD 4.1 trillion to USD 19.0 trillion, averaging at 6.7% per year. But, the share of intra-APEC trade out of the total merchandise trade dropped slightly, from 71.9% in 1994 to 67.4% in 2019.
- While APEC's merchandise trade growth appeared to have slowed down after the 2008 Global Financial Crisis, it recovered in 2017 and 2018, outpacing GDP growth. This improvement is linked to stronger manufacturing in developing economies and higher energy prices. However, merchandise trade in 2019 contracted again.
- APEC's trade in commercial services also quintupled from USD 917.5 billion in 1994 to USD 4.7 trillion in 2019. The growth rate of trade in commercial services is almost the same as the growth rate of trade in goods, averaging at 6.7% growth per annum.

 FDI stocks in APEC have risen since 1994. FDI inward stocks grew at 10.8% per year from USD 1.5 trillion in 1994 to USD 19.6 trillion in 2019, and FDI outward stocks grew at 10.0% per year from USD 1.7 trillion to USD 18.7 trillion. APEC developing economies have increased their share of these FDI stocks vis-à-vis industrialized economies.

<u>Tariff rates have dropped significantly across the APEC region, but high</u> tariffs remain in some sectors

- The simple average MFN applied tariffs for the region went down from 13.9% in 1994 to 5.2% in 2019. As of 2019, APEC industrialized and developing economies applied average tariff of 3.2% and 5.9%, respectively.
- Tariffs applied to the agricultural sector in the region still remain high, averaging at 11.6%, compared to the 4.2% tariff applied to non-agricultural products. Some economies have even progressively increased tariffs for agricultural products between 1994 and 2019.
- APEC increased the prevalence of MFN duty-free products in the region. As of 2019, 48.5% of all products lines benefitted from the application of zero tariffs, in comparison to 24.9% in 1994. The average share of imports subject to MFN duty-free tariffs among APEC economies increased from 25.7% in 1994 to 61.6% in 2018.
- APEC economies also pursued extensive trade liberalization via the negotiation of bilateral and regional trade agreements. As of 2019, APEC has 177 RTA/FTAs in force, 66 of which are with other APEC partners.

Nowadays, there is a higher prevalence of NTMs

 The number of trade remedies in place by APEC economies has incremented throughout the years based on notifications at the WTO.
 In addition, the number of unresolved specific trade concerns related to sanitary and phytosanitary issues in the region is growing.

 According to the Global Trade Alert database, the APEC region enforced more measures affecting trade than those favoring trade.
 More trade-facilitating measures favored the sector of machineries and parts thereof, whereas trade-restrictive measures were most affecting the electrical energy and iron and steel sectors.

There is further openness in trade in services, but restrictions remain high in some services sectors. Restrictions in digital issues are increasing in recent years

- APEC economies demonstrated consistent progress in liberalizing trade in services. Over the years, economies have signed and enforced new RTA/FTAs that commit more market access and/or national treatment to services sectors than those established under the General Agreement on Trade in Services (GATS).
- APEC industrialized economies in general made more extensive commitments in GATS schedules than APEC developing economies.
 Most of the commitments by APEC economies are related to modes 2 (consumption abroad) and 3 (commercial presence). However, APEC developing economies offered further commitments to reduce the existing gap with industrialized economies, based on their revised offers in the context of the Doha Round.
- APEC economies further liberalized services sectors through bilateral
 or regional trade agreements, and 72% of RTA/FTAs put in place by
 at least one APEC economy include sectorial services commitments.
 APEC economies are increasingly making services commitments on a
 more comprehensive negative-list basis in their RTA/FTAs.
- APEC economies made unilateral decisions to reduce restrictions in services sectors. On average, architecture, engineering, sound recording, distribution, and computer services experience the lowest level of restrictions. However, restrictions remain relatively high in air transport, courier, rail freight transport, broadcasting, legal and accounting services. For all analyzed sectors, the level of trade restrictiveness is higher in APEC developing economies than APEC industrialized economies, but there are efforts to implement gradual

liberalization and deregulation by using pilot programs and regulatory sandboxes.

 There has been an increasing trend in the implementation of measures affecting cross-border data flows in the APEC region and the rest of the world in recent years. This could hamper economies' ability to benefit from digital technologies and restrict the development of digital trade.

Efforts to improve the investment climate have mixed results

- APEC economies gradually relaxed their FDI regulations from 1997 to 2010, with developing economies continuing to lift restrictions from 2010 to 2018. While APEC industrialized economies slightly tightened their FDI regulations between 2010 and 2018, there remain fewer restrictions in these economies overall.
- There is a growing perception among the business community that the restrictions on foreign investment have been increasing in APEC. This sentiment is more pronounced with respect to developing economies.
- However, APEC economies have actively engaged in the negotiation and conclusion of international investment agreements (IIAs).
 Developing economies, in particular, have contributed greatly to the expansion of IIA network.
- There has been a trend among APEC developing economies to implement measures to create a more favorable environment for investors, in particular relating to entry and establishment, and promotion and facilitation.

There are positive developments in trade facilitation: procedures have simplified and quality of logistics has improved

 The cost to import and export declined substantially between 2005 and 2018. The time to trade is shorter as well. Furthermore, customs clearance processes in APEC have also become more efficient. Yet, gaps between APEC developing and industrialized economies still remain.

- Logistics services improved in the APEC region between 2007 and 2018. Perceptions of improved quality of trade and transport infrastructure and of ability to track consignments are noted in both APEC industrialized and developing economies.
- APEC economies are making efforts to adopt new technologies such as single window systems.
- All APEC economies have accepted the WTO Trade Facilitation Agreement. Thirteen economies have fully implemented it as of March 2020, which is expected to facilitate trade by strengthening inter-border agency cooperation.

It is easier and more cost-efficient to do business in the APEC region, but there is still room for improvement

- Business regulations are simpler nowadays. The procedures needed and the time taken to start a business, register property and pay taxes have declined across APEC. However, APEC developing economies still have to simplify further procedures to be on par with the industrialized economies
- Investor protection laws in the region improved between 2005 and 2018. However, contract enforcements have become more expensive: the cost as a percentage of claim of enforcing contracts increased from 30.1% to 31.7% during the period.
- Quality of governance in the APEC region has noted mixed trends.
 While government effectiveness and regulatory quality have continually improved between 1996 and 2018, control of corruption has worsened.

More trade facilitating than trade restrictive measures have been implemented since the emergence of the COVID-19 pandemic

 Several APEC economies implemented a temporary reduction or elimination of import tariffs in order to facilitate the imports of medicines, medical supplies, medical equipment and personal

- protective products. Within the APEC region, 15 of these measures have been reported, 9 of which are still in place.
- Initially the pandemic motivated an increase in the application of temporary export restrictions, prohibitions, licensing and quotas.
 However, many of the initial restrictive measures have been terminated, in particular on export bans. Two-thirds of the NTMs still in place as a consequence of the pandemic are facilitating trade instead.
- Most of the measures implemented by APEC economies on trade in services in relation to the pandemic are facilitating trade. These measures are mostly targeting: (1) financial services, to increase liquidity and promote lending, and (2) telecommunication services, to provide spectrum boost and facilitate the provision of broadband services to household and firms.

APEC has enjoyed high economic growth and improved social outcomes as evidenced by declining poverty incidence, but needs to put more work in tethering economic growth with environmental sustainability

- APEC's real GDP grew at 3.9% per year between 1994 and 2019, faster than the rest of the world. APEC's GDP per capita grew at 3.1% per year for the same time period.
- APEC experienced a downward trend in male and female unemployment. As of 2019, APEC's total unemployment rate stood at 4.0%, compared to 4.6% in 1994.
- Access to social services has improved in APEC. The region's life expectancy at birth grew from 70.5 years in 1994 to 76.5 years in 2018. As of 2018, over 99% of APEC's population had access to electricity, while 87.3% of APEC's population had access to basic sanitation in 2017.
- Enrolment in tertiary education has increased, with gross enrolment ratio increasing from 20.5% in 1994 to 55.8% in 2018. APEC has also increased expenditures on education, with

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economies allocating on average 4.1% of their GDP on education as of 2018.

- Poverty has fallen significantly, with the number of poor people in APEC dropping from 1.4 billion in 1994 to 240.4 million people in 2018, reducing poverty incidence from 58.5% of the population to 8.3%. Nevertheless, there is a need to address growing inequality: in some economies, the income share of the poorest 10% has shrunk while the income share of the richest 10% has grown.
- Carbon dioxide emissions in APEC grew on average by 2.2% per annum between 1994 and 2016, but carbon dioxide emissions per dollar of GDP in APEC declined by 1.5% between 1994 and 2016, suggesting that production in APEC is becoming less carbon intensive.
- Regarding the conservation of natural resources, there has been an
 overall increase in forest land as a percentage of land area in the APEC
 region. However, forest land has reduced in some economies due to
 forest fires, unsustainable logging practices and switch of land use to
 agricultural and residential purposes.
- In terms of water resources, there has been a downward trend in renewable freshwater resources per capita, but an upward trend in wastewater treatment to release water in the environment in a safe manner or reuse it for other purposes.

APEC's Bogor Goals Dashboard 2020

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The Dashboard tracks the advancement in areas critical to promoting regional economic integration through a set of harmonized indicators, that show the evolution across time certain aspects of trade and investment liberalization and facilitation in quantitative terms. The Dashboard covers the period 2008–2019 and includes indicators available by December 2020.

Findings

In trade liberalization, APEC average tariff continues a declining trend, reaching 5.2% in 2019. The average tariff for agricultural products remains higher than that for non-agricultural products (11.6% and 4.2%, respectively). Progress in tariff liberalization is also seen through the percentage of zero-tariff products, which increased from 42.4% to 48.5% between 2008 and 2019, while the percentage of products with tariffs above 10% declined from 12.4% to 12.0% during the same period.

Efforts in trade facilitation show that it is faster and cheaper to trade nowadays. Compared to 2014, the time to export and import is nearly 10 and 14 hours faster, and the cost to export and import a container is around US\$20 and US\$23 cheaper.

On services, there is an increasing trend to include sectoral services commitments in bilateral or regional trade agreements. Regarding investment, while there has been no change in the perception of experts on the prevalence of foreign ownership and the effect of business rules on FDI in recent years, they have worsened in comparison to 2008.

Trends and Developments in Provisions and Outcomes of RTA/FTAs Implemented in 2018 by APEC Economies

Publication Number: APEC#219-SE-01.13 Link: https://www.apec.org/Publications/2020/03/Trends-and-Developments-in-Provisions-and-Outcomes-of-RTA-FTAs-Implemented-in-2018-bv-APEC-Economies

This report provides an overview of the evolution of the RTA/FTA network in the APEC region. It covers an analysis of the chapters on intellectual property, investment and rules of origin in four trade agreements that were put in force by at least one APEC economy in 2018. The agreements are: (1) China — Georgia FTA; (2) Comprehensive and Progressive Agreement

for Trans-Pacific Partnership (CPTPP); (3) Hong Kong, China – Macao, China FTA; and (4) The Philippines – European Free Trade Association (EFTA) FTA.

Findings

Despite the resurgence of trade-restrictive measures worldwide, APEC economies have continued to negotiate and implement new RTA/FTAs. Through such initiatives, they have advanced the improvement of market access conditions, the liberalization of trade in goods and services, and the promotion of investment within the region. In addition, economies have utilized these RTA/FTAs to improve rules in traditional trade areas and initiate discussions on new disciplines that are becoming more relevant for trade and investment.

RTA/FTAs are becoming more crucial for the APEC region. Back in 1998, only approximately a quarter of the region's trade occurred among RTA/FTA partners. In 2018, nearly half of APEC's trade happened among RTA/FTA partners worldwide. Economies are aware of the importance of trade agreements. In general, they have become more proactive in negotiating new agreements. In 1998, APEC economies only had 29 RTA/FTAs in force. Just 20 years later, in 2018, the number of agreements signed by an APEC economy shot up to 170, with 64 of them being intra-APEC RTA/FTAs. Consequently, the share of intra-APEC trade with RTA/FTA partners increased from 34.9% in 1998 to 64.3% in 2018.

It is becoming more common for new RTA/FTAs to include chapters on trade in services. Currently, over 70% of agreements signed by APEC economies contain services commitments. Furthermore, most of these new RTA/FTAs outlined their services commitments via a negative list approach. This indicates that APEC economies are increasingly willing to incorporate more comprehensive services commitments.

Economies are also more receptive to the incorporation of non-traditional trade-related topics into new RTA/FTAs. All four agreements analyzed in this report have chapters on intellectual property (IP). There seems to be an impetus among economies to find a balance between protecting and promoting innovations and making new technologies and products

accessible across borders. Likewise, all four agreements include clauses that allow the parties to apply criminal penalties for IP infringements in certain circumstances. While the depth of the IP chapters differs among the agreements, it is possible to find some common trends, such as the inclusion of IP disciplines regarding patents, copyrights, trademarks, geographical indications and plant variety protection.

Three of the agreements include a chapter on investment, but only the CPTPP goes far to include binding provisions. The scope of the investment chapter in the CPTPP is comprehensive: it seeks a balance between establishing favorable treatment for investors from participating parties and protecting the right of governments to implement measures to meet their environmental, health and other regulatory objectives. The CPTPP also includes a detailed ISDS mechanism with the caveat that it is not possible for investors to invoke it to challenge any government decision related to tobacco control measures.

Finally, all four agreements have a chapter on rules of origin. Three of them use product-specific rules to determine if a good meets the origin criteria. However, these rules differ due to the varied interests and sensitivities of the parties involved. Change of tariff classification and qualifying value content are used to determine the origin in most cases. Nonetheless, some agreements apply strict production process requirements to determine if a manufactured product satisfies the origin criteria. However, some agreements also include flexible provisions, such as a higher de-minimis value for non-originating materials or flexible product-specific rules that allow the use of many non-originating parts and components, to make it easier for parties to meet the origin criteria.

Assessment of Capacity Building Needs to Support WTO Negotiation on Trade Related Aspects of E-commerce

Publication Number: APEC#220-SE-01.20 Link: https://www.apec.org/Publications/2020/12/Assessment-of-Capacity-Building-Needs-to-Support-WTO-Negotiation

This study aims to contribute to the ongoing WTO negotiations on e-commerce and the capacity building activities that may arise from it. It comprises two main components. The database component was based on a review of publicly available submissions issued by the WTO members since 2018. In these submissions, WTO members explained their negotiating approach as well as the elements they believe should be included and discussed in the exploratory work and eventual agreement on e-commerce. Based on the review, the different policy issues relevant for e-commerce can be categorized into six focus areas. The case study component showcases specific policies or initiatives within these focus areas that could be used to enhance the potential of e-commerce. It sheds more details on the motivations as well as the practicalities of APEC economies' approaches.

Findings

Insights from database of laws and regulations

Focus Area A (Electronic transactions framework). As part of efforts to foster the digital economy, several APEC economies have introduced digital and digital-related strategies. In some economies, initiatives with implications on e-commerce are embedded within wider strategies. However, there have also been cases where economies have introduced standalone strategies on e-commerce.

There has been increased recognition of electronic authentication (i.e., electronic contracts and signatures) in the APEC region. Applicable laws generally specify the requirements that must be met for an e-signature to be recognized as valid and they could vary between economies. The terms 'e-signature' and 'digital signature' are often used interchangeably, but within the laws, a distinction between simple and enhanced e-signatures/digital signatures has consistently been made.

While many economies have electronic payment (e-payment) laws and regulations, there is often no single law that regulates it. Furthermore, the interpretation of e-payments are varied across the region. To further encourage the development and adoption of newer technologies in the

payment sector, some economies have introduced FinTech regulatory sandboxes.

Several economies have mandated or encouraged the adoption of e-invoicing through laws and regulations, considering that they are relatively more efficient as compared to the traditional, paper-based invoicing method.

Trade facilitation is another cog in the wheel of the e-commerce value chain given that while e-commerce transactions may be completed online, commerce involving physical goods would still have to be physically transported. In response, APEC economies have facilitated it by introducing paperless trading, blockchain technology, Authorized Economic Operator programs and single window systems.

Focus Area B (Openness and cross-border issues). Regulations on cross-border data flows establish conditions under which data exports of personal data can occur and/or are allowed. Across APEC economies, these conditions can be broadly classified as: (1) transfers based on consent, (2) transfers based on the existence of similar levels of protection and consent, and (3) transfers based on the accountability of the business operator that is transferring the data. Some economies are also part of international/regional frameworks that regulate or facilitate cross-border data transfers, including the APEC Cross-Border Privacy Rules (CBPR) System, while a few have been accorded adequacy decisions by the European Commission.

Competition laws are being tested given new forms of collusion (e.g., via algorithms) and the wider use of data. Although most economies have competition laws in place, most of them do not have specific policies for competition issues associated with online platforms. Yet, in some cases, there are initiatives to adapt competition laws specifically to the digital environment.

APEC economies have taken different approaches toward network management practices (i.e., practices undertaken by internet services providers regarding the prioritization of certain traffic). Considering that there is an ongoing debate on the advantages and disadvantages of network management practices and network neutrality, some economies have adopted network neutrality principles/rules while others have not.

APEC economies have varying regulations pertaining to internet intermediary liability. Most economies have a conditional liability regime (often relying on safe harbors which exempt from liability if the intermediary adopts certain policies, for instance removing content upon request). The definition of what an intermediary is also varies considerably across APEC economies.

To better protect against unlawful or offensive content, various economies have issued laws and regulations to better regulate them. These include content that threaten domestic security, misinformation and child pornography.

Most economies have either an economy-wide policy, plan or law promoting an open government data environment, or an available open data portal. This has been influenced by the membership of some economies to open data or open government international frameworks.

Focus Area C (Consumer protection and privacy issues). All APEC economies have consumer protection laws and regulations. While enacted consumer protection laws broadly cover e-commerce transactions, only a few have made specific references to it or have legislations devoted to it. Coverage differs among the economies with respect to misleading, deceptive and/or fraudulent practices.

Many economies have enacted laws to deal with unsolicited commercial electronic messages or SPAM. Variations can be observed in terms of how consent is defined (i.e., express, implicit or assumed), what constitutes as SPAM, and whether the law extends beyond the economy.

Most economies have introduced laws on data privacy and protection. However, they differ in terms of what is defined as personal information. Some regulations offer extra level of protection for more sensitive data. Many economies have data protection authorities, but the number and

scope of responsibility vary by economy. Other aspects covered by the laws and regulations include those relating to data breach notification and appointment of data protection officers.

Focus Area D (Cybersecurity/network security). Different APEC economies have cybercrime legal frameworks embedded in their criminal laws, which often penalize crimes committed using a computer, computer network or other form of ICT. Additionally, some economies have laws and regulations that are specific to cybercrime and therefore, can complement the criminal acts.

Apart from cybercrime legislation, a number of economies have cybersecurity laws, which deal with a larger set of issues such as the protection of Critical National Information Infrastructure. Some existing cybersecurity laws also contain requirements for monitoring, preventing and handling cyber risks and threats.

A large majority of APEC economies have developed strategies to protect themselves against cyber threats. In contrast to cybercrime and cybersecurity laws which are specific to identifying, penalizing and setting legal procedures to combat illicit acts, the content of cybersecurity strategies is overarching and can include setting goals for a determined period of time, basic principles, as well as identification of key stakeholders and their respective responsibilities.

Focus Area E (Infrastructure related aspects). Telecommunications infrastructure plays the role of an enabler for e-commerce. The rules governing telecommunication services in the context of WTO are established in the General Agreement of Trade in Services (GATS), the GATS Annex on Telecommunications, and the WTO Telecommunications Reference Paper.

Most APEC economies have adopted full market entry liberalization for their GATS commitments on telecommunication services. Additionally, many have made more commitments via FTAs. Most economies have also adopted the Telecommunications Reference Paper with little variation in their GATS schedules.

<u>Focus Area F (Market access)</u>. Access to devices such as mobile phones and computers as well as their underlying parts and components is key for e-commerce. Recognizing its importance, most APEC economies have joined the WTO Information Technology Agreement, a tariff elimination agreement designed to facilitate such access.

A few APEC economies have put in place regulations such as those requiring the use of specific encryption standards, the licensing of encryption products and/or their exports. Several economies also require the regulation of electronic and/or IT products other than those related to encryption (e.g., licensing, pre-installed with specific software). Some of these regulations could have an inadvertent impact on market access.

For the most part, APEC economies do not tie market access to the provision of proprietary information of products (e.g., source codes, algorithms). In fact, some require parties to eliminate such conditions through trade agreements. Although this may be so, there are economies that still condition market access with the provision of proprietary information.

While digitally-enabled trade includes goods and services which in essence are traded electronically, the e-commerce value chain is also supported by another range of services that enable the value chain to function properly and efficiently. These include transport/logistics, computer related and professional services. Most or all APEC economies have made commitments in their GATS schedules regarding these services, with additional commitments being made through trade agreements as well. However, there continues to be variation in the extent of liberalization at the MFN level between economies.

Insights from case studies

<u>Focus Area A (Electronic transactions framework)</u>. Case studies cover 4 economies and consider 3 aspects: e-payments, electronic signatures and e-commerce laws. Specifically:

• Australia launched a New Payments Platform in 2014 seeking to

modernize e-payment systems. This case study highlights the value of educational outreach to raise awareness and encourage adoption of e-payments.

- Thailand's PromptPay hopes to improve efficiency and enable more people to participate in electronic transactions. This case study shows the importance of international engagements and adoption of international standards in promoting platform interoperability.
- China's E-Commerce Law provides insights on how the economy sets out to establish a framework for electronic transactions regarding legal rights and obligations of online businesses vis-à-vis their offline counterparts and the recognition of e-contracts.
- Chinese Taipei's Electronic Signatures Law underscores the value of providing legal recognition to electronic records and signatures, as well as key insights derived from the development process of the law, including the importance of involving multiple stakeholders and balancing their interests.

<u>Focus Area B (Openness and cross-border issues)</u>. Case studies cover 3 economies and consider 5 aspects: data portability, cross border data flows, IPR enforcement, ISP liability, and open banking. Specifically:

- Australia's Consumer Data Right (CDR) exemplifies the value of data portability as a means to increase data sharing, promote interoperability, customer mobility and ultimately boost competition in the e-commerce market. This case study highlights the value of early industry feedback and leveraging international best practices in order to help reduce compliance costs for implementing organizations. It also sheds light into the implementation of the CDR in Australia's open banking.
- Singapore has adopted different measures to enable cross-border data flows. These include the adoption of and use of DPTM, CBPR and ISO 27001 certifications. This case study exemplifies the value of privacy certification in signaling data protection adequacy.

 The Philippines' Intellectual Property Office has leaned towards existing international practices when setting new rules to combat online IPRs infringement and it is seeking to boost enforcement by proposing, among others, that e-commerce vendors be identified through their business registration numbers. This case study highlights the importance of cross-agency collaboration and public-private cooperation.

<u>Focus Area C (Consumer protection and privacy issues)</u>. Case studies cover 3 economies and consider 2 aspects: online dispute resolution (ODR) and data protection. Specifically:

- China's Regulation for Protecting Children's Personal Information aims to provide more detailed regulations to better protect children's personal data and include some key elements such as requiring companies and platforms to receive consent from parent/guardian prior to collecting children's information; additional legal liabilities beyond those which are pecuniary in nature; and encouraging selfregulation by the industry.
- China's Internet Courts are established to provide an avenue to resolve
 e-commerce disputes and provides learnings on how technology can
 be better integrated into the daily functioning of the judiciary so as
 to increase efficiency of proceedings. It also provides insights on
 how technology can be adopted without compromising on the courts'
 ability to provide impartial justice, and how the courts have continued
 to evolve across various metrics.
- Mexico's Concilianet was established as a pilot project in 2008 to test
 whether consumer conflict resolution processes could be migrated
 online using ICT. This case study showcases how an ODR mechanism
 can increase access to consumer justice, while at the same time,
 identifies its current limitations.
- Japan plans to establish a yet-to-be named cross-border ODR mechanism to complement the existing options which have been deemed as insufficient to address the growing number of transaction

issues. This case study illustrates the government's efforts towards realizing this objective and the progress to date.

Focus Area D (Cybersecurity/network security). Case studies cover 3 economies and consider 3 aspects: the establishment of a cybersecurity strategy, adoption of specific cybersecurity laws and related capacity building activities, and the role of the private sector in cybersecurity. Specifically:

- Chile's Cybersecurity strategy accelerated after a highly publicized breach to Banco de Chile in 2018. Since then, Chile has enlisted the expertise of the private sector to formulate and implement overarching plans. This case study exemplifies how the private sector can contribute to the ability of an economy to address cybersecurity.
- Japan has taken an aggressive approach to rapidly improve the economy's cybersecurity. This includes the development of cybersecurity legal framework, spurred by the need to fill gaps in the computer crime laws or criminal code and consolidate legal authorities. This case study exemplifies the importance of establishing appropriate cybersecurity laws, cooperation frameworks and strategy leadership among stakeholders, followed by addressing capacity building and cultural issues.
- The US has employed a multi-pronged approach to cybersecurity which involves the private sector closely, including through the establishment of Computer Emergency Response Teams, the development of standards-based NIST Cybersecurity Framework for critical infrastructure and the conduct of biannual 'Cyberstorm' cybersecurity exercises. The advent of new paradigms of doing things (such as remote working) and the Internet of Things (IoT) have further changed and complicated the cybersecurity threat landscape. The case studies showcase the importance of collaborating with and receiving support from the private sector and encouraging IoT safety and security by design.

Focus Area E (Infrastructure related aspects). Case studies cover

3 economies and consider 3 aspects: universal broadband access. **Recommendations** competition in the telecommunications sector and connectivity. Specifically:

- Korea views the provision of universal access to internet services as a way to close the digital divide. This case study showcases how Korea combines consistent long-term planning and carefully calibrated policies, including those facilitating the use of TV white space (TVWS) and cloud computing to achieve this objective.
- Mexico recognizes that improving broadband coverage and internet usage are essential ingredients for success in the digital economy This case study illustrates Mexico's efforts in achieving universal access and closing the digital divide, which include establishing independent regulators and ensuring competition, among others by addressing interconnection charges and adopting measures to address connectivity in remote areas.
- Chinese Taipei noted that both strong international telecoms connectivity and domestic universal broadband access are critical elements to its economic growth. This case study highlights the reforms undertaken by Chinese Taipei, which include the establishment of an independent regulator, the abolishment of interconnection charges and the launch of the Cloud Computing Application and Development Project

While this study has found variations in the state of economies' laws. regulations and initiatives across all focus areas, it has also found common baselines which capacity building activities could focus on. In addition, the study provides information on subject-matter case studies showcasing innovative approaches undertaken by different economies, which can better inform efforts to fine-tune e-commerce related policies.

Building upon the findings across all six focus areas and the case study component, the capacity building activities that APEC can consider undertaking could generally benefit two groups of economies, namely: (1) economies that do not yet have the necessary laws, regulations and initiatives pertaining to specific elements/aspects to develop one (e.g., e-invoicing, competition policies related to online platforms, cybersecurity laws); and (2) economies that already have existing laws, regulations and initiatives so that they can fine-tune them to better facilitate e-commerce.

Furthermore, in line with the public proposals for WTO negotiations on e-commerce reviewed under this study, possible capacity building activities across all six focus areas can include: (1) encouraging the adoption of international standards, practices, guidelines and recommendations in economies' laws and regulations; (2) improving mutual recognition and interoperability among the laws, regulations and initiatives; (3) strengthening international cooperation with regard to specific aspects of e-commerce: (4) instituting new approaches to regulations, including the use of technology to facilitate process; and (5) ensuring that laws, regulations and initiatives are practical, reasonable and can be operationalized efficiently.

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APEC Economic Policy Report 2020: Structural Reform and Women's **Empowerment**

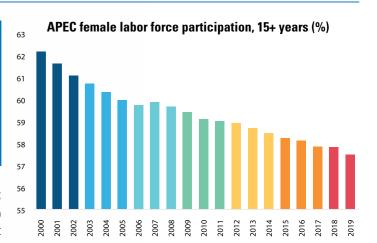
Publication Number: APEC#220-EC-01.3 Link: https://www.apec.org/Publications/2020/11/2020-APEC-Economic-Policy-Report

A flagship product of the APEC Economic Committee, the 2020 APEC Economic Policy Report aims to build capability in APEC economies to identify and implement structural reforms and supporting policies that empower women to engage fully and equally in economic activities, thereby contributing to inclusive growth and sustainable development.

This report examines trends in female labor force participation (FLFP) in the APEC region, as well as prevailing policies that impact on women's economic empowerment, in particular those related to: (1) access to education, training and skills; (2) access to credit, financial services and products; (3) maternity leave, return to work and access to childcare support; (4) discriminatory practices and restrictions in employment; and (5) freedom from violence and freedom of movement.

Findings

Female labor force participation. In general, the FLFP rate in the APEC region has been on a slight declining trend since the mid-2000s, in tandem with global trends. Nevertheless, in terms of employment levels, women have been able to narrow the gap with respect to men. In 1990, only 65 women were working as employees for every 100 male employees. Now, there are 78 female employees for every 100 male employees. Furthermore, while the proportion of female-to-male employers is still low at around 35 female employers for every 100 male employers, this is much higher than the levels in the early 1990s at around 23 female employers for every 100 male employers. These numbers suggest that women have been able to access better work opportunities, as the chances to advance to managerial or leadership positions have improved.



Note: Weighted by population. Source: World Bank, World Development Indicators.

Policies impacting women's economic empowerment. The game changer over the course of women's lives is, and has always been, equal access to education and employment, affordable childcare services, support mechanisms to counter violence, and leadership positions.

The majority of APEC economies have introduced or amended laws and regulations to mandate non-discrimination in access to education, training and skills development, safeguard the rights of girls and women to inheritance and ownership of properties, ensure that women can secure a job in the same way as men, prohibit discrimination in hiring based on gender, and protect women from domestic violence and harassment, including in the workplace.

However, the road to women's economic empowerment – despite the good intentions – still face many challenges. Many laws and policies still need to be enacted, implemented and enforced in the region, to increase women's participation in the fields of science, technology, engineering, and mathematics (STEM); widen women's access to labor and credit markets in a similar way to men; establish support mechanisms such as affordable childcare services and paid maternity, paternity and parental leaves and ensure equal pay for equal work or work of equal value to encourage women to enter and stay in the labor force; eliminate discriminatory policies and practices to facilitate women's representation

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in leadership roles in both public and private sectors; and respond to socio-cultural biases and mindsets that often lead to women shouldering a disproportionate share of unpaid care and household responsibilities.

Impact of COVID-19 on women. The pandemic has added another layer of complexity, particularly in the pursuit of women's equal access to employment and protection from violence. The economic fallout from the pandemic has forced the shutdown of a significant number of MSMEs, where women are more likely to be represented. MSMEs have to deal with substantially lower demand translating into cash flow shortages and continued rental and utilities expenses amid tighter credit conditions. Women are also more likely to work in affected sectors such as travel and tourism, retail, and accommodation and food services that require face-to-face interactions where telecommuting is not an option. In addition, women are likely to outnumber men in the informal economy, where health and unemployment insurance are non-existent, making them more vulnerable to business closures.

Exacerbating the risks to women's employment is the greater share of domestic responsibilities that women often shoulder. The imposition of lockdown measures covering schools and offices could mean that employed women will also perform childcare and household tasks while working from home, affecting their productivity, while some may be forced to give up paid work altogether.

The pandemic has also given rise to another effect: lockdowns have contributed to an increase in the number of cases of violence against women, which may be caused by heightened stress from confinement combined with financial strains from job and income losses. The sizeable reduction in manpower and other resources amid the spread of COVID-19 has adversely affected the provision of support services and temporary shelter to women victims, which can result in victims being confined with their abusers.

More than at any other time, the current economic downturn brought about by the pandemic should spur APEC economies into action, by re-examining policy priorities and enacting appropriate policy responses. These policy

initiatives may address, for example, short-term unemployment and credit issues, while laying the groundwork towards the refinement and reform of existing laws and regulations and their enforcement to make them more relevant, inclusive, effective and growth-oriented.

Recommendations

In terms of the structural reform process, good policies stem from good data. Good policies to improve women's access to education, employment, credit and leadership roles to advance women's empowerment, are informed by credible and updated sex-disaggregated data. Collecting and producing sex-disaggregated data requires appropriate systems to support and manage data collection; capacity building to include a gender perspective in surveys, data gathering and analysis; closer communication and coordination between statistical and gender experts; and allocation of resources to support data collection, follow-ups, review and sustainability.

Furthermore, government commitment, in particular at the highest level of policy decision making remains crucial. Leadership shown through political will to advance women's economic empowerment will facilitate the enactment of laws and regulations that help ensure access and opportunities for women across economic sectors. Likewise, leadership could enable the articulation of a 'whole-of-government' approach to implement effective policies to improve women's economic empowerment. These policies usually require the participation of several government agencies for effective implementation and enforcement.

Strengthening public and private partnerships, including with community-based organizations, women's rights groups, and non-governmental and international organizations, is also important in the structural reform process. They play an important role in the design and implementation of initiatives with the intention of opening up more opportunities for women and helping them to achieve their full potential.

Besides the recommendations on the structural reform process, this report has brought to the fore general recommendations for APEC

economies to consider over the medium to long term, keeping in mind that the prioritization of policies depends on economic conditions and other economy-specific factors; and specific recommendations that have arisen due to the adverse impact of the COVID-19 pandemic, including on women's employment, income security, and protection from domestic violence, which are urgent and actionable in the near term in many economies.

The general recommendations in this report also prioritize enhancing women's participation in STEM fields, which has become more urgent in this technology-intensive, fourth industrial revolution era. Policies could target the concerns of women's low participation in STEM programs. More than two-thirds of women are currently employed in low and medium-skill jobs and these types of occupations are those that are most vulnerable to automation, as they involve tasks with repetitive features. It is also important to allocate dedicated resources for women in STEM fields in the form of research and scholarship grants, for example.

In terms of equal access to credit, there is a need to expand women's access to assets and credit, including financial products and services. It is important to widen women's access to credit by prohibiting discriminatory policies, reforming discriminatory laws and regulations and addressing biases. Access to credit provides women with income and security, affecting their decision and ability to engage in economic undertakings that could impact present and future socio-economic conditions, for themselves and their households.

APEC economies could do more to increase women's representation in political decision-making roles and managerial positions by adopting and implementing laws and good practices to support work-family balance and address discrimination and violence against women. Women's representation in political decision-making is essential to facilitate the formulation, implementation and enforcement of policies aimed at ensuring equal rights and opportunities.

It is critical to protect women's freedom from violence and harassment. Although a majority of APEC economies have laws that protect women

from domestic violence and harassment, there are associated concerns related to enforcement and reporting mechanisms that result in women remaining vulnerable at home, in public areas and at the workplace. In fact, enforcing laws that prohibit sexual harassment and domestic violence will support the use of women's full potential, facilitating their increased contribution to economic activities.

The report suggests paying special attention to enforcement efforts, in addition to the implementation of laws and regulations. Women are still behind men in terms of enjoying the same economic opportunities, in part because what is reflected in the laws and regulations (de jure) is not necessarily the same as what is happening in reality (de facto).

Equally important is to ensure inclusiveness in terms of opportunities and access, mindful that women from vulnerable groups may face additional layers of discrimination. There are prevailing issues of significant gaps in employment rates affecting indigenous women, those living in rural and remote areas, culturally and linguistically diverse women, and women with disabilities. These factors aggravate issues on lack of opportunities and access available to women.

APEC could be a venue to help shape the agenda on women's issues in the region. Through its relevant sub-fora, APEC could be at the forefront of the discussions on issues aiming to improve women's economic empowerment and guide economies towards the implementation of policies aimed at increasing women's participation in economic undertakings. APEC could enable the discussion of good practices and help economies to learn from successful experiences.

While the general recommendations contained in this report suggest policy interventions to advance women's economic empowerment and sustain efforts well into the medium and long term, this report also tackles the current reality of the COVID-19 pandemic and its near-term impact on women. The pandemic has accentuated the gender divide in all socio-economic aspects that affect women's empowerment: employment opportunities, credit access, digital skills, share of unpaid work, and vulnerability to violence, among others.

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Amid the ongoing pandemic, it is recommended that the government and private sector work together to implement policies that support training for women to have the necessary digital skills to help them cope with the new normal post-pandemic. Related to this, programs and other mechanisms could be put in place to support women to complete skills training while balancing care and household responsibilities. Affordable childcare services could complement the provision of skills training as well as the implementation of flexible and remote working arrangements to maintain productivity and encourage women and men, and particularly those who are parents, to stay in the labor force.

Ensuring support for MSMEs is critical. MSMEs, many of them owned or led by women, are exposed to liquidity and solvency risks as the significant cutback in demand amid movement restrictions has adversely affected business operations. Immediate policy actions that ensure continued flow of credit to MSMEs, including liquidity injections, rental and utility subsidies, loan restructuring and deferment of payments, tax relief measures, and other loan and credit guarantees could help them to stay afloat, minimizing the risk of an entire household going into poverty.

Assessment by the UN of an additional 15 million cases of domestic abuse for every three months of lockdown combined with reports of increased calls to crisis centres in some economies during the pandemic give additional urgency to the issue of domestic violence. Policies on violence against women should be enforced, along with ensuring that resources remain available for victims. Policy coordination between the central government and local governments should be strengthened to facilitate enforcement and monitoring of existing laws, allowing authorities to act in an immediate manner to protect women from violence.

Finally, it is relevant to support the continuation of flexible and remote working arrangements adopted in some economies to ensure continued labor productivity during COVID-19 lockdowns and the implementation of social distancing measures. Flexible work arrangements have become more widely accepted and offer greater opportunities for women and men to balance work and responsibilities at home or for women to more

easily re-enter the workforce after childbirth. However, it is imperative that flexible work arrangements are coupled with access to affordable childcare services to help women who have to shoulder a disproportionate burden of care work to maintain productivity levels and stay in the labor force.

APEC economies have been at the forefront of designing policies that seek to encourage increased labor force participation of women and advance women's economic empowerment. There has been significant progress in the last two decades. Nevertheless, inadequate laws, regulations and policies, gaps in implementation, as well as weaknesses in enforcement and monitoring, need to be addressed for women to actively and fully participate in the economy. Cultural biases need to be confronted by raising awareness on gender equality and promoting diversity and women's empowerment across all economic sectors. The inclusion of women in economic, financial, social and political activities will not only empower them, but will also power economies towards growth that benefits all.

Renewed APEC Agenda for Structural Reform (RAASR): Final Review Report

Publication Number: APEC#220-SE-01.12 Link: https://www.apec.org/Publications/2020/10/Renewed-APEC-Agenda-for-Structural-Reform-RAASR---Final-Review-Report

This final review report assesses the progress attained by APEC economies in their structural reform efforts under RAASR, and serves as inputs for the next iteration of APEC's structural reform agenda. The three pillars of RAASR are: (1) more open, well-functioning, transparent and competitive markets; (2) deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers, and people with disabilities; and (3) sustainable social policies that promote the abovementioned objectives, enhance economic resilience, and are well-targeted, effective, and non-discriminatory.

Findings

APEC collective progress

- Based on an agreed list of 20 external indicators to monitor progress on RAASR implementation, improvements were noted within 10 indicators, mixed performance was registered within 8 indicators, and no improvement was recorded in 1 indicator. For the last indicator, it was not possible to make data comparisons across time due to a change in their methodology.
- Despite the progress made, there continues to be room for APEC economies to improve business regulations and conducts (pillars 1 and 2). Between 2016 and 2019, the business environment in the APEC region improved. In the same vein, services trade has become less restrictive for all but three services sub-sectors. Although FDI regulations among APEC economies are becoming increasingly less restrictive, they have become more so within the primary sector. Some areas for improvements include simplification, evaluation of regulations, and addressing barriers that affect trade and investment.
- APEC has performed well in innovation and productivity efforts and should continue initiatives in this area (pillars 1 and 2). The labor productivity per person employed in the APEC region increased annually between 2016 and 2019. With the exception of a slight decline in 2018, year-on-year growth in productivity improved over the assessed period. APEC improved in terms of business sophistication and innovation. Notwithstanding, more efforts are needed in terms of cluster development and university-industry collaboration in research and development.
- To some extent, APEC's competitiveness in the labor and financial markets has improved. However, it is important to ensure that the region does not backtrack (pillars 1 and 2). APEC has performed well across all indicators measuring financial market efficiency. Similarly, labor market efficiency has improved in the region. However, further improvements (including avoiding backtracking) are needed in areas

such as reliance on professional management, pay and productivity, and hiring and firing practices.

APEC should further strengthen access to basic services and infrastructure and enhance fiscal and social policies, by identifying gaps to be addressed (pillars 1, 2 and 3). Between 2016 and 2018, APEC improved in terms of providing basic services and infrastructure. However, some improvements are needed as the accessibility of healthcare services fell between 2018 and 2019. In a similar vein, although the number of physicians per 1,000 people in the region improved between 2016 and 2018, there was variation across individual members.

In terms of access and quality of education, the tertiary gross enrolment ratio increased for APEC between 2016 and 2018. On the other hand, pupil-teacher ratio in both secondary and tertiary levels improved, but declined within the primary level. The OECD PISA scores showed improvement in the average scores for mathematics and science but noted a decline for scores on reading.

On access to ICT infrastructure, mobile cellular and fixed broadband subscriptions per 100 inhabitants as well as percentage of population using the internet increased on average between 2016 and 2018. But in terms of access to services made possible via internet such as digital payments, it is observed that although there was an increase in share of people making digital payments, the share of people receiving digital payments had fallen. On fiscal transfers, while an analysis of tax code and social protection indicators shows improvements for APEC collectively, there were variation in performance among individual members.

Further effort should be taken by APEC to increase the participation
of wider segments of society within its markets (pillar 2). Although
the labor force participation rate for elderly people improved and
youth unemployment fell between 2016 and 2019, the employment
to population ratio decreased over the same period. Furthermore,
the number of economies having laws/regulations to protect women

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against discrimination in employment and in accessing credit remained largely unchanged between 2016 and 2019, with the exception of one economy who has introduced regulations ensuring equal remuneration for work of equal value.

APEC individual economy progress

- A total of 80 priorities and 167 related actions were updated by 20 economies. When categorized into the three pillars of RAASR, 65% of priorities were associated with pillar 1, 49% with pillar 2, and 36% with pillar 3.
- Economies undertook a wide range of priorities and actions. They
 generally provided updates to priorities and activities identified
 in their individual action plans and mid-term review template
 submissions.

Pillar	Examples of objectives of various priorities and actions
1	Improving market access and trade liberalization Improving infrastructure Reforming markets and government-linked firms Improving trade facilitation Supporting the adoption of technology within firms Implementing good regulatory practices Promoting research and innovation
2	 Supporting youth employment through skills training Increasing financing to MSMEs Providing economic support to indigenous people Supporting the elderly Supporting women both at home and at work
3	Improving the quality of education and health and ensuring they respond to industry demands Promoting sustainable growth Enhancing social programs in terms of benefits and coverage

 Economies continued to make progress in advancing their priorities and related actions. Progress reported by economies include, but are not limited to, repealing existing laws/regulations, amending laws/ regulations, enacting or introducing laws/regulations, increasing citizen participation in rule-making, setting up/restructuring of organizations/agencies, increasing the resources directed towards specific initiatives, digitalizing processes, enhancing the number of beneficiaries in ongoing initiatives, and improving the provision of public services. Deeper analysis also reveals some economies making significant progress in aspects/elements not reported in previous submissions, reflecting that structural reform is an ongoing process and more can always be done to progress it further. Several economies reported that they have yet been able to determine the benefits of certain laws/regulations and initiatives as they are either not at the implementation stage yet or just implemented.

- Despite making progress, there were challenges in advancing some actions. Challenges cited by economies include no recent or available data for the identified indicators and falling short of the targets due to issues encountered during implementation (e.g., minimal capacity of stakeholders, lack of institutional framework, funding challenges, and need to tackle broader challenges in parallel). There have also been reorientation of certain actions in some economies due to changes in the external and domestic environment. In addition, later submissions have indicated the implications of COVID-19 on their actions. On the positive side, such observations have allowed economies to respond by making some changes.
- Economies are moving in the right direction in their efforts to monitor and evaluate priorities and actions, but there is room for improvement. Within certain constraints/limitations, these include ensuring that indicators evolve along with actions as they progress; improving the quality of information captured; identifying baseline conditions against which latest data and information are compared; and ensuring that latest data and information are as recent as possible. At a broader level, monitoring and evaluation can entail looking beyond identified indicators and include activities such as establishing and convening of a committee, expert panel and/or study, as have been undertaken by several economies.

Recommendations

The review of APEC collectively as well as economies individually shows that APEC has overall made good strides in advancing RAASR. Notwithstanding, the APEC Economic Committee (EC) could continue with some of the existing areas covered under the current agenda for reasons as follows: (1) lack of progress, backtracking or decline in some of the indicators/sub-indicators (e.g., university-industry collaboration in R&D, hiring and firing practices, and accessibility of healthcare services); (2) uneven progress across individual APEC economies in a number of indicators (e.g., labor productivity, pupil-teacher ratios, and density of physicians; (3) challenges faced by economies in moving certain actions forward; (4) indication of further plans by economies to implement identified actions post-RAASR; and (5) observation that identified priorities relate more to pillar 1 as compared to pillars 2 and 3.

There is room to enhance on the indicators used to monitor progress. In the area of inclusion, for example, while the set of existing indicators has been informative to show progress at regional and economy-wide levels, inclusion-related issues tend to be distributional in nature and therefore need to be complemented by monitoring indicators at a more micro level (e.g., household, firm, and labor force surveys). Depending on the form of the next structural reform agenda, the EC can identify additional indicators (on top of the existing ones) or a new set of indicators, so as to ensure that they are more relevant and fit for the purpose of monitoring its progress. Economies can also include relevant indicators in their individual action plans.

Apart from enhancing efforts in some of these existing areas, the EC needs to be adaptable to the changing landscape. Indeed, the independent report of the APEC Vision Group recommended that APEC advances robust and comprehensive structural reform through an ambitious successor program when the RAASR mandate expires in 2020. While economies have taken actions to ensure the relevance of RAASR in the fast-evolving landscape (e.g., convening of High Level Structural Reform Officials' Meeting and advancing priorities which leverage the digital economy), it is important to keep this momentum going both in the development and implementation of the next structural reform agenda.

In supporting RAASR implementation, the EC has continued to advance discussions on critical topics such as services, human capital development, infrastructure and the digital economy through the APEC Economic Policy Report. To build on these efforts, the EC can explore how recommendations arising from the policy reports can be better incorporated and operationalized in the next structural reform agenda.

The COVID-19 pandemic is a health and economic crisis of unprecedented proportions. It has underscored the crucial role of regional cooperation in mustering a coordinated approach to enhance economic recovery while minimizing the damage caused by the pandemic. As such, it is important for the EC to act decisively to ensure that a new structural reform agenda contributes not only to tackling the challenging tasks at hand, but also to building resilience in the region against similar shocks in the future.

To ensure that structural reforms are inclusive, it is important for APEC economies to recognize the need to implement structural reforms at different levels. The "Three Approaches" paper produced by the EC in 2018 indicates that core structural reforms need to be supplemented and optimized with structural reforms and supporting policies in specific areas generating positive externalities such as human capital development and social protection. It outlines a framework in which pro-inclusion structural reforms are integrated with supporting policies to effectively promote inclusion while maximizing economic growth. The EC could reinforce the importance of holistic approaches to structural reform efforts in the next agenda and work to promote this approach across the EC's work and in interactions with other APEC fora.

The RAASR Action Team, an informal group of delegates to take forward work on planning priorities related to the next structural reform agenda, has prepared input papers to inform the 2021 Structural Reform Ministers' Meeting. The input papers include a discussion on the potential impact of COVID-19 on structural reform, and how structural reform can mitigate future external shocks. The EC is encouraged to review the recommendations emerging from the input papers as it formulates the next structural reform agenda.

Connectivity Including Supply Chain Connectivity & Global Supply Chains

APEC Connectivity Blueprint: The 2020 Mid-Term Review

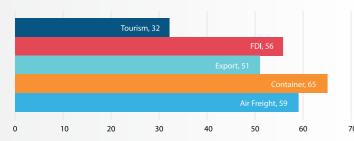
Publication Number: APEC#220-SE-01.17 Link: https://www.apec.org/Publications/2020/11/APEC-Connectivity-Blueprint---The-2020-Mid-Term-Review

This report reviews the progress achieved by APEC at the halfway mark of implementing the APEC Connectivity Blueprint 2015–2025. The goal is to strengthen physical, institutional, and people-to-people connectivity by taking agreed actions and meeting agreed targets by 2025, towards a seamless and comprehensively connected and integrated Asia Pacific.

Findings

The Asia-Pacific region has been at the centre of global flows and networks, supported by the surge of flows from the developing economies. For example, the flows and networks of trade, capital and people in Asia are said to have redefined globalization. Globally, APEC economies contributed 51% of exports, 65% of container flows, 59% of air freight, 56% of FDI, and 32% of tourism arrivals in 2018. These figures show the undeniable importance of connectedness for the region.

APEC share of global flows in 2018 (%)



Source: World Bank, World Development Indicators; UNESCAP online data; and APEC PSU calculations

In general, notable progress has been achieved in the three pillars of connectivity.

Summary of findings from yearly reviews, survey to APEC economies and fora, and external indicators

Physical Connectivity. The outlook for regional integration identifies the importance of digital infrastructure. However, despite the rise of the digital economy and e-commerce, most supply chains still rely on physical infrastructure. In response, economies have invested significantly in improving their infrastructure, particularly through public-private partnership (PPP) modalities. There was a consistent increase in the number and value of investments in transport infrastructure PPP projects from 2014 to 2019. For instance, the regional number of transport projects under the PPP model increased from 147 projects to 1,289 projects over that period. Many economies have also introduced PPP centres to further promote the use of the PPP model, with 13 economies having at least one PPP centre. The projects undertaken by economies have focused extensively on connectivity and energy infrastructure, and the initiatives showed priority in improving connectivity in rural and remote areas. Particularly in remote areas. resiliency can be improved through new technologies that are now becoming more accessible and widespread

In addition to investing large amounts in infrastructure, there is a need to ensure quality infrastructure. Infrastructure with strong quality elements will ensure that services are delivered efficiently, securely and sustainably. In response, most APEC economies have conducted comprehensive assessments to better evaluate infrastructure projects.

Economies have actively developed their ICT infrastructure to support the development of the digital economy and 'smart' infrastructure. The weighted average proportion of the population in the APEC region with access to fixed broadband networks (grew from 15.7% to 25.7%) and internet access (grew from 52.3% to 63.6%) increased between 2014 and 2019.

Efforts have been made to build the necessary infrastructure to generate and distribute sustainable energy efficiently. Economies have initiated several new projects and investments in energy infrastructure

development and the renewable energy sector. The quality of electricity supply — with respect to interruptions and reliability — also improved much more sharply in APEC economies than in OECD economies between 2014 and 2019. Average interruption frequency decreased from 7.3 times in 2014 to 3.5 times in 2018. Similarly, average interruption duration decreased from 10.0 hours to 5.5 hours over the same period. The cost of each kWh of electricity in the APEC region also fell between 2014 and 2019 from USD 0.15 to USD 0.14.

Institutional Connectivity. Efforts under this pillar aimed to improve trade facilitation, promote regulatory reform, increase digital flows, and build greater inclusiveness. The adoption of digital technologies was key within this pillar as well. Based on UNESCAP data, 10 APEC economies had fully implemented an Electronic Single Window (ESW) by 2019 — up from seven economies in 2015. Additionally, seven APEC economies had partially implemented an ESW by 2019 — up from five economies in 2015. The number of Authorized Economic Operators (AEOs) increased for both importers and exporters between 2014 and 2019. Specific to border agency cooperation, 9 out of 14 survey respondents reported to having an operational ESW system that connects to the Single Window systems of other economies. Most economies (10 out of 14 respondents) also recognized Trade Identification Numbers (TINs) for their AEOs and undertook efforts to integrate SMEs into their domestic AEO programs.

In addition, based on data from the World Bank's Doing Business initiative, traders in the APEC region spent less time to complete documentary and border compliance procedures for export and import. The time taken was reduced from 69 hours in 2015 to 59 hours in 2019 for export, and from 89 hours in 2015 to 75 hours in 2019 for import. Trade costs also decreased, with the cost to export and import reduced to a regional average of USD 422 and USD 476, respectively in 2019.

Regulatory and structural reforms have been instrumental in facilitating trade, investment and services. While only a few economies have participated in the APEC-OECD Integrated Checklist on Regulatory Reform, regulatory coherence and the use of Good Regulatory

Practices (GRPs) have improved over the years. The adoption of GRPs are visible through APEC economies' improvement in some indicators relating to two aspects of governance quality: open government and regulatory enforcement. APEC economies are also active members of several accreditation and standards organizations, which help to promote harmonization.

Many economies have also introduced structural reform initiatives, including the enactment of new laws and regulations to improve the e-commerce environment and expand the application of safe and trusted ICT. The number of secure servers in APEC economies (per 1 million people) increased exponentially from 754 in 2014 to more than 17,000 in 2019. Globally, APEC economies hosted more than 65% of secure servers (totaling more than 50 million) in the world. In the financial sector, the multilateral APEC Region Funds Passport framework provides opportunities to waive or diminish key regulatory impediments to cross-border trade in managed funds.

Essential structural reforms in services could further support GVC performance, particularly in services sectors that have a strong supporting role in the operationalization of firms. To ensure a wider positive impact from trade, gender-responsive policies are encouraged to help overcome institutional challenges and improve the facilitation of women's access to global markets. The survey found that 11 out of 14 economies surveyed have introduced initiatives to integrate SMEs into AEO programs.

People-to-People Connectivity. Cross-border science, technology and innovation exchanges promote high-quality innovation in the region. The number of intra-APEC cross-border students has increased, with the target of having 1 million intra-APEC tertiary-level international students by 2020 achieved in 2015 when there were 1.02 million tertiary-level cross-border students within the region.

Addressing the skills gap is important to develop a vibrant domestic economy. Mutual recognition of skills and credentials can play an important role in facilitating skilled labor mobility and addressing

Connectivity Including Supply Chain Connectivity & Global Supply Chains

labor and skills shortages. Several economies have implemented a Domestic Qualifications Framework as well as a labor market and skills-monitoring framework, while others have introduced similar substitutes. Additionally, reforms and cooperation in higher education can ensure that the quality of education is relevant to equip students with the skills and competencies required in a globally connected and knowledge-based society. Building entrepreneurship networks is also high on APEC economies' agenda as well as efforts to promote youth and women employment. This will address the issue of women and youth employability by helping to close the gap between education and skills.

In addition, travel and tourism facilitation initiatives have been implemented to develop the tourism industry among the APEC economies. The development of tourism facilitation policies and institutions serves to reduce the non-logistics costs and uncertainties associated with tourism. Many economies have implemented visa facilitation efforts through special visa waiver schemes and paperless platforms (including Single Window facility). Several economies have implemented domestic measures to ease visa restrictions for tourists and initiated programs to improve immigration processing. There have been significant visa facilitation efforts since 2014, with more than 32 origin-destination pairs in the APEC region having either lifted visa requirements or implemented measures such as e-visas or visason-arrival. Efforts such as these have helped to enable international tourist arrivals to APEC to continually increase since 1998. However, considerable increases are still needed to raise the number of tourist arrivals from 435 million in 2017 to the target of 800 million by 2025.

Business travel facilitation also helps to reduce the costs and uncertainties for business people to explore and maintain business opportunities and investments. The number of active APEC Business Travel Card (ABTC) holders has steadily risen since 1999, while the average pre-clearance processing time of ABTC applicants decreased from 45 days in 2006 to 19 days in 2019. Finally, APEC economies have enhanced knowledge sharing and cultural understanding through events, which also help to promote and improve cross-border trade, investment and tourism.

Summary of findings from connectivity index

The connectivity index that was specially constructed using 14 indicators to assess if there was progress from 2014 to 2018 within the three pillars show that the APEC average score increased from 0.44 in 2014 to 0.46 in 2018, an improvement of 4.95%. In comparison, OECD's progress was 4.57%, EU: 5.99%, and ASEAN: 5.06%. APEC's progress in the individual pillars was uneven. People-to-people connectivity exhibited the strongest progress at 9.09%, followed by physical connectivity (7.75%) and institutional connectivity (2.64%).

Recommendations

The current COVID-19 pandemic shows how the three pillars of connectivity — physical, institutional and people-to-people — are strongly intertwined. The disruptions in supply chains are not because of inadequate or damaged infrastructure facilities, but rather because employees are unable to work due to health-related restrictions. For example, truck drivers, warehouse staff, and port workers may be affected by quarantine measures. The shipping sector, in particular, has been severely affected as vessels may need to be placed under guarantine for weeks before entering ports, causing delays, congestion, and high demurrage costs, with some cargo being ruined or damaged as a result. Additionally, certain sectors like tourism and the airline industry are expected to face serious challenges in the years ahead as international airline passengers are expected drop by 44-80% in 2020. International travel is looking pretty bleak for the foreseeable future: IATA estimated that global passenger traffic (business and tourism) will not return to pre-COVID-19 levels until 2024.

Global supply chain configurations are expected to adjust. Thus, there is a possibility of long-term shifts in global supply chains. In this context, it is of great importance to ensure supply chains remain open, resilient and stable. Businesses are now incentivized to strengthen their supply chains to become more resilient and agile. However, this could also lead to supply chains that are less efficient as businesses may need to embrace redundancies in anticipation of certain risks. Some experts have highlighted the possibility of re-shoring or near-shoring, leading

future supply chains to become more regional. To improve connectivity, manufacturers and suppliers could also adopt digital technologies more extensively to allow greater digital collaboration.

Companies may now need to rely on 'shorter' supply chains to minimize the risks of disruptions and to be closer to final customers. The process of automation may also enable certain leading firms to reshore their production facilities. This re-orientation of supply chains at the regional and company level will also create shifts in FDI patterns. Economies may need to strengthen their manufacturing base to remain competitive and to also attract and retain foreign investors and pursue high-tech manufacturing. Learning from economies that were most successful in surviving past global recessions, it was observed that although they had high levels of technology or well-developed digital economies, their base in manufacturing and production were also still strongly maintained.

The big question is how to recover quickly and emerge stronger from the current situation. Flattening the recession curve and maintaining open trade policies should be the primary goal for economies. Some have already initiated trade facilitation policies to promote recovery.

Moving forward, the following recommendations may be considered by economies to maintain strong progress and recovery under the Connectivity Blueprint:

- Maintain an open environment to global trade and investment.
 While highly connected economies may be more vulnerable to economic shocks, they are able to recover more quickly as recovery starts to build in their respective networks. Improving connectivity of supply chains will become essential for economic recovery.
- Improve digital connectivity is an important element to build resilience. Being digitally connected allows firms to expand their supplier networks, enabling greater flexibility, and to have a more transparent supply chain that supports collaboration. This will allow firms to be more agile, to recover more quickly, and to resume normal operations faster.

- Adoption of digital technology will allow faster progress in the three
 pillars of connectivity. Application of digital technology will allow
 interoperability of single windows, integration of SMEs under AEO
 programs, broader internet access to reduce digital divide, as well
 as providing seamless facilitation of business people and travellers.
- Continue to support APEC's regional economic integration agenda by implementing measures that support resiliency within GVCs. This may mean strengthening 'regional' value chains as geographical proximity may provide additional agility and resilience to existing supply chains. Regional value chains should be seen as building blocks and complementary to GVCs.
- Re-orientation of supply chains at the regional and firm level will create shifts in FDI patterns that may require economies to strengthen their manufacturing base to remain competitive and to also attract and retain foreign investors.

Do Public Capital Investments Have an Impact on Economic Growth?

Publication Number: APEC#220-SE-01.1 Link: https://www.apec.org/Publications/2020/01/Do-Public-Capital-Investments-Have-an-Impact-on-Economic-Growth

This policy brief aims to help economies better understand the relationship between capital investment and growth. It complements existing literature by examining the relationship between different types of capital and growth using a global dataset. It also provides some key takeaways for the APEC region.

Findings

Drawing from the estimation by Aschauer (2000) on the positive impact that public capital investment has had on growth for 46 low- and middle-income economies, this study carries out a similar regression analysis for 139 economies over the period 1970–2014. It also uses the Cobb-Douglas

Connectivity Including Supply Chain Connectivity & Global Supply Chains

production function to relate output to capital and labor. Three types of capital are considered as inputs to the production process: (1) private physical capital, (2) human capital, and (3) public physical capital.

The regression results reveal that human capital exerts a stronger influence on output per capita than private and public capital. A 10% increase in human capital is expected to increase output per capita by 4.4%, while a similar change in private and public capital will increase output by 2.9% and 1.9%, respectively.

Further comparison is carried out in terms of output elasticity, which refers to the impact of infrastructure on output growth. The higher the number, the more sensitive growth will be to changes in infrastructure. The results show human capital to have the highest return with an output elasticity of 33.1%, followed by private capital (21.9%) and public capital (14.1%).

To better compare with the results by Aschauer (2000) which covers lowand middle-income economies, the study also analyzes a restricted dataset covering only low-income developing and emerging market economies. The results are as expected and similar to earlier results: human capital has the largest impact on output per capita. However, Aschauer (2000) finds private capital to be the most important form of investment contributing to economic growth, while our regression find it to be important but less so in comparison to human capital. Nevertheless, both studies find positive returns for all three types of capital.

Recommendations

• Human capital investment is an important component of economic growth. The regression results show that human capital investment has the largest impact on economic growth across the 139 economies. In the 2017 APEC Economic Policy Report, the region was identified to have significant gaps in human capital development with a third of the region's economies registering net secondary enrolment rates below 60%. One of the recommendations was to improve access to and quality of education and training. APEC economies have responded well to these gaps by increasingly capitalizing on this growth booster

through skill development programs to upgrade their workforce.

• Private and public capital investments have positive and significant impact on economic growth. In recent years, there has been an increased attention on the decay of public infrastructure in advanced economies, which has been associated with the slowdown in infrastructure investment. Within the sample of economies covered in this study, public capital investment levels are low across the low-income developing, emerging market and advanced economies, with values ranging around 5% and 6% of GDP. On the other hand, private capital investment levels can reach 20% of GDP in advanced economies, 14% of GDP in emerging market economies, and 9% of GDP in low-income developing economies.

Private capital ownership can be seen as a complement to public capital. This is evident from the growing importance of PPP in the provision of public infrastructure, which shows how private sector involvement could help governments to deliver infrastructure more efficiently. Additionally, focusing on 'core' infrastructures, such as highways, water and sewer lines and mass transit, will strengthen private investment productivity in other sectors that benefit from these core infrastructures. In short, core infrastructure capital can create an environment to facilitate private production.

Drawing on the findings that a 10% increase in investment in private and public capital will boost economic growth (by 2.9% and 1.9%, respectively), it seems plausible that the impact of public infrastructure on growth could be stronger if the efficiency of public investment procurement is strengthened.

Measuring efficiency in infrastructure provision. In terms of scope
for future research, there may be value in evaluating the impact
of different capital investment (i.e., 'core' infrastructures such as
highways, telecommunications and primary school education) on
economic growth. Should such disaggregated data be available for the
APEC region, more in-depth evaluations can be carried out to provide
detailed sectoral analysis.

Sustainable Economic Development

APEC Strategy for Strengthening Quality Growth (ASSQG): Final Assessment Report

Publication Number: APEC#220-SE-01.18 Link: https://www.apec.org/Publications/2020/11/APEC-Strate-gy-for-Strengthening-Quality-Growth---Final-Assessment

This report captures the final assessment of the performance of APEC members and fora in implementing the ASSQG, which is built on the 2010 APEC Growth Strategy and introduces the three Key Accountability Areas (KAAs) of institution building, social cohesion, and environmental impact.

Findings

Since 2015, both APEC members and APEC fora have made progress in a number of areas that are relevant to pursuing quality growth. Many APEC members have improved regulatory quality, increased economic participation of women as well as other vulnerable groups, and introduced mitigation measures to reduce carbon emissions. Meanwhile, APEC fora have also implemented actions to improve regulatory quality and trade facilitation around the region, promote greater innovative and digital entrepreneurship in order to improve upward mobility, and promote more environmentally sustainable practices in the international trading system.

Nevertheless, there remains considerable scope for additional efforts from both APEC members and APEC fora. Although all members face shared obstacles in achieving quality growth, specific issues can also differ among them. Common challenges include maintaining a flexible and responsive regulatory system, promoting upward mobility among marginalized or vulnerable groups, promoting trust, and reducing carbon emissions while maintaining economic growth. Given the cross-cutting nature of many of the issues confronting the region, APEC fora should endeavor to expand and strengthen regional cooperation and cross-fora collaboration in order to better address the regional challenges towards achieving growth that is balanced, inclusive, sustainable, innovative, and secure.

<u>Progress on Growth Strategy.</u> APEC members achieved mixed progress across the five growth attributes between 2015 and 2019.

Progress on five growth attributes

Balanced growth: Most members managed to adjust their current accounts to a more sustainable level, making the external macroeconomic environment more balanced as a whole.

Inclusive growth: Overall poverty levels have gone down, stemming mostly from reductions in developing APEC members; nonetheless, concerns regarding income inequality remain. Regarding inclusive employment, gender divergences narrowed in terms of labor force participation, unemployment rate, and vulnerable employment, although the differences remained large.

Sustainable growth: Improvements were made in environmental and resource productivity, along with steady investments in the development and adoption of green technologies; however, the rising level of carbon dioxide emissions signify that more efforts are required to achieve a greener economy.

Innovative growth: Members have been ramping up their innovative capacity, legal institutions, and ICT infrastructures, with significant technological catching up by some economies.

Secure growth: This has been reinforced with stronger food security and public health capacity, although the region was not prepared. Members also broadly improved their governance in terms of political stability, government effectiveness, and control of corruption.

Progress on Institution Building. The progress made by the APEC region on institution building is somewhat mixed. There are many areas of institution building in which the region made substantial progress, including improvements in regulatory quality, enforcement of property rights, and investor protection. The depth of financial systems across the region have also generally improved. However, there are other aspects of institution building in which there was a general decline across the region since 2010. Most importantly, the integrity of many institutions is perceived to have worsened over the assessment period, with several APEC members exhibiting quite significant declines. In addition, judicial independence and the quality of legal frameworks are also perceived to have generally declined, especially since 2015. The perceived integrity of institutions is a fundamental aspect to developing and maintaining a high-quality and effective institutional framework.

As reported in the self-assessment responses to the ASSQG survey, many APEC members implemented a number of measures over the ASSQG assessment period to improve their institutions. For example, progress has been made in improving the quality and efficiency of their overall regulatory environments, strengthening institutions in trade and

investment facilitation, and developing the strength of financial sectors, and efficiency and transparency of tax systems. In addition, APEC fora implemented a number of initiatives that focus on improving economic institutions around the region, such as the development of the APEC Cross-Cutting Principles on Non-Tariff Measures; launching of the APEC Framework for Securing the Digital Economy and the APEC Collaborative Framework on Online Dispute Resolution of Cross-Border Business to Business Disputes; and reducing regulatory burden through the APEC Ease of Doing Business Action Plans.

Progress on Social Cohesion. While APEC members and fora have implemented measures and initiatives to improve social cohesion within their specific areas, significantly more work needs to be done. Economic and social marginalization in the region still persists, with inequality in access to economic opportunities, education, and healthcare dampening otherwise stellar progress in raising overall living standards. Income gaps between the rich and poor have widened, with more than half of income gains over the past years going to the richest quarter of the population. Overall levels of interpersonal and institutional trust are low, and are further being eroded by misinformation and fake news.

During the assessment period, APEC members have implemented measures to improve access to healthcare services, quality education and employment opportunities for the poor, women, youth, the elderly, and vulnerable groups such as people with disabilities, indigenous peoples, and those living in rural and remote areas, initiatives to accelerate the reduction of the population below the poverty line; and policies to advance cooperation on urbanization and sustainable city development. Members have also promoted unity and social cohesion through developing a shared multicultural identity as well as taking a whole-of-government approach to ensure that human well-being drives policy making. Meanwhile, APEC projects relating to social cohesion involved improving the economic opportunities available to women. including promoting women entrepreneurship, advancing women in STEM education and careers, and supporting more women in leadership roles. Several APEC projects focused on improving upward mobility for young people, especially relating to youth entrepreneurship, while a few projects aimed to prevent marginalization of people with disabilities.

In addition, there were many APEC projects that focused on capacity building and skills training, particularly for MSMEs, in order to improve workforce inclusion in the digital age.

Progress on Environmental Impact. In terms of the environmental impact KAA, although some progress was made in implementing both mitigation and adaptation measures across the region, much work still remains to be done. For instance, many APEC members actively participate in major international environmental agreements and have committed to developing policies and regulations in order to reduce their environmental impact by a specified date. However, as of December 2019, less than half of APEC members appear to be on track to meet the commitment made under the Paris Agreement. In addition, while the share of electricity generated from renewable sources has risen in the APEC region, this regional share is lower than the world average. Greater and more targeted investments in climate resilient infrastructure, including waste management systems, are also needed in order to build better resilience to climate change among the APEC economies.

APEC members have implemented a number of measures over the ASSQG assessment period to reduce their negative environmental impact. These include bans on plastic products, the development of emissions trading schemes, and the implementation of energy management systems. The survey responses also revealed the many challenges that APEC members face in continuing to reduce carbon emissions while maintaining economic growth. APEC fora also implemented several initiatives over the assessment period that tended to focus on specific trade-related environmental concerns, such as, marine debris, illegal logging, and pollution. However, given the global nature of climate change, APEC could play a greater role in addressing this urgent issue, such as by initiating discussions on establishing regional carbon credit exchange mechanisms.

Recommendations

Developing effective institutions, building social cohesion, and mitigating environmental impact are long-term and deliberate processes — they will not happen overnight. As an international forum, APEC is well placed

to focus on sharing knowledge and experiences, building capacity, and developing regional commitments towards enhancing quality growth.

APEC members can collaborate through the forum to develop innovative initiatives that promote quality growth throughout the region. Indeed, APEC members pointed to these actions as the forum's role in advancing progress on the KAAs. APEC's strength is in providing a forum for discussion, sharing, and consensus that eventually leads to commitments and policy action. APEC is where ideas can be incubated and where priorities can be crystallized.

While measurable progress has been achieved in some aspects of the ASSQG, much work needs to be done. Governance and accountability need to be strengthened, rising inequality and distrust need to be addressed, and climate change needs to be reversed. COVID-19 has exposed the gaps in the APEC region's previous patterns of growth; it also presents opportunities to address these gaps and build the foundations of quality growth in the future.

Implementing Inclusion: APEC Case Studies on Inclusive Policies

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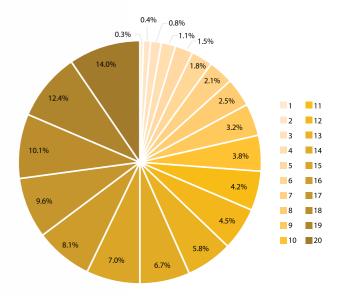
This report discusses inclusion in the context of APEC: what it means, how economies have implemented it, and where it fits into APEC's work. It begins with a discussion of APEC Leaders' priorities on inclusion along with a review of the distribution of the benefits of economic growth and its linkages with inclusion. This is followed by a synthesis of the case studies on inclusive policies provided by eight APEC economies with a view of distilling how they contribute to and operationalize inclusion. It then outlines a role for APEC as a forum for implementing and operationalizing the Leaders' repeated calls for greater inclusion and inclusive growth in the region.

Findings

Inclusion has always been in APEC's agenda. From the first APEC Ministerial Meeting in 1989 until now, it has been understood that the forum's work on promoting economic growth, trade and investment were meant to generate opportunities that will enable all people to contribute to and benefit from economic growth. In 2017, APEC Leaders reiterated their call for 'effective economic, financial and social inclusion' and enunciated their vision of a 'more inclusive APEC community by 2030.'

The region had achieved rapid economic growth and poverty reduction over the past 30 years, thanks in part to efforts and policy commitments achieved through APEC. However, inequality in the region in terms of income gaps have been growing and persistent. While the region has been highly successful in growing the economic pie, it has not achieved the same success in distributing the pie equitably.

Distribution of real income gains by ventile in APEC, 1990-2018



Note: Ventile groups are arranged from poorest 5% (ventile 1) to richest 5% (ventile 20). Aggregates are weighted by population. Each slice accrues to 5% of the population. Data cover Australia; Canada; Chile; China; Indonesia; Japan; Korea; Malaysia; Mexico; Papua New Guinea; Peru; the Philippines; Russia; Chinese Taipei; Thailand; the United States; and Viet Nam. Source: World Bank, PovcalNet database; APEC PSU calculations.

This study was initiated in 2019 when COVID-19 was not yet in anyone's vocabulary. However, the pandemic and the resulting economic downturn in 2020 have shown how urgently the region needs to act on inclusion. They illustrate how inequality and economic insecurity can exacerbate public health and economic vulnerabilities. They also demonstrate that universal and equitable access to healthcare, skills development, and social protection are essential not only for coping with the pandemic but also for making economies more resilient to other crises.

Eight Key Contributing Economies (KCEs) — Canada; Chile; China; Korea; Malaysia; New Zealand; Russia; and Chinese Taipei — have provided case studies of their inclusive policies to share experiences and impacts. These cover polices that improve access to human development such as healthcare, education, and social protection. Some KCEs have implemented policies that ensure access to economic opportunities for underprivileged populations such as women, the elderly, youth, and indigenous peoples. Ensuring equitable distribution of economic benefits — such as through empowering workers or affirmative action — have also been a policy action for KCEs

The case studies provided by KCEs describe the challenges and context that led to an inclusive policy response. They also provide information on the measured impacts of these inclusive policies, some lessons learnt, and potential follow-through. Some good practices and factors for success that have been identified include: mainstreaming inclusion in planning and policymaking; investing towards inclusive growth; whole-of-government policymaking with local implementation; overcoming discriminatory sociocultural norms; developing and incorporating an inclusion framework; and monitoring and measuring progress.

Recommendations

While most inclusive policies are implemented domestically, APEC can contribute towards greater inclusion by leveraging its strengths as a forum for discussion, sharing, and consensus that eventually leads to commitments and policy action. To achieve Leaders' vision of a more inclusive APEC community by 2030, APEC needs to:

- Operationalize Leaders' mandate on inclusion into APEC fora work.
 APEC Leaders have repeatedly enunciated their vision of making
 economic growth work for all, and they have made it clear that APEC
 should contribute to this endeavor. The mandate and agenda are clear,
 but how APEC can implement it is less so. The first step would be for
 each fora to develop concrete plans on how they can contribute to
 inclusion within their area of expertise. These action plans could then
 be incorporated into more specific fora work plans and strategies.
- Facilitate cross-fora collaboration. Several APEC fora already have a clear mandate to work on issues related to inclusion. For example, the Economic Committee (EC) through RAASR pillars 2 and 3 has a mandate to reduce structural barriers to economic opportunity and ensure inclusive growth. The Policy Partnership on Women and the Economy (PPWE), Human Resources Development Working Group (HRDWG), and Health Working Group (HWG) are respectively working on issues related to gender inclusion, skills development and social protection, and healthcare access. These separate efforts need to be more coordinated and deliberate, and cross-fora collaboration can contribute in this regard. An example is the EC's work on APEC Economic Policy Report, for which it has collaborated with the HRDWG (skills development and employment), Finance Ministers' Process (infrastructure and digital inclusion), and PPWE (women's economic empowerment) on matters related to structural reform and inclusion.
- Mainstream inclusion in APEC projects and discussions. Inclusion in APEC will not happen automatically, but will be the result of deliberate and conscious action. If APEC will be serious in implementing Leaders' mandates on inclusion, this will have to be mainstreamed in all of APEC's operations. One aspect of inclusion i.e., women's participation and gender is already mainstreamed in APEC project deliberations and funding criteria, and it would be beneficial and in line with the Leaders' mandate to extend this mainstreaming to all aspects of inclusion. While not all projects and discussions will necessarily have a gender or inclusion angle, a conscious effort to consider it and try to find an appropriate application is a step in the right direction.

- Monitor and measure progress. An important aspect of all
 implementation plans is having clear milestones and deliverables that
 will enable the monitoring and measurement of progress. The success
 of the 1994 Bogor Goals in trade liberalization and facilitation benefited
 from the clear steps and indicators outlined in the Osaka Action Agenda
 that followed shortly after. Similar clarity with regard to inclusion will
 help realize the Leaders' vision of an inclusive APEC community by 2030.
- Work with, and expect more from, the private sector. In several communications with Ministers and Leaders, ABAC has raised the alarm regarding widening inequality in the region and its impact on the consensus for globalization and continued economic growth. These concerns are real and immediate, and they have rightly called on governments in the region to ensure inclusion and put flesh in Leaders' directives for a more equitable region. A concrete role for businesses and the private sector in this initiative will complement these calls. What is the role of the private sector in ensuring equitable access to skills development and upskilling, healthcare and medicines, and decent and secure jobs? How can the private sector help reverse the trend of job insecurity and precariousness under the Fourth Industrial Revolution? APEC needs to work closely with ABAC and the private sector at large in identifying opportunities for collaboration and synergy of efforts.
- Share experiences and best practices. APEC can serve as a platform to share best practices and experiences to inform policies and programs. Across the region, many economies face common challenges related to inclusion, and sharing experiences can help economies identify gaps and areas for improvement. As can be seen in the case studies, many economies have taken the initiative to implement relevant policies and measures to ensure the inclusiveness of economic activities. Economies with relevant experience can share their best practices and insights with other member economies through APEC fora.
- APEC Leaders have enunciated an ambitious agenda for inclusion, just as they did with trade liberalization and facilitation in the 1990s. As with the experience with the Bogor Goals, the push towards greater

inclusion will not be easy, challenging conversations may occur, and difficult tradeoffs may need to be considered. There may even be pressures urging APEC to tone down its work, revert to business-as-usual, and relegate the Leaders' mandates to footnotes and platitudes. As what it did in pushing economic openness in the 1990s, APEC will need to keep the momentum going and keep on committing to greater inclusion in the post-COVID-19 world. It will need to use its strengths as a forum for regional cooperation and an incubator of ideas if it is to achieve the vision of an inclusive APEC community by 2030.

Overview of the SME Sector in the APEC Region: Key Issues on Market Access and Internationalization

Publication Number: APEC#220-SE-01.3 Link: https://www.apec.org/Publications/2020/04/Overview-of-the-SME-Sector-in-the-APEC-Region

An update to an earlier study conducted in 2010, this report provides an overview of the SME sector across the APEC region and discusses the market access and internationalization of SMEs. It looks at policies that aim to raise the level of engagement of SMEs in cross-border activities, particularly through increasing exports as well as some of the current initiatives in place among the economies to improve their internationalization. It also provides recommendations to increase the internationalization of SMEs.

Findings

Definition. Although the definition of an SME varies between members, the number of employees is a basic criterion for classifying businesses as SMEs in nearly all APEC economies. Other criteria used across the region include the amount of sales or revenue and/or the amount of assets or capital, with around half of the APEC members also using which sector or industry the business operates as a classification standard. In addition, 15 APEC members have size standards to classify micro, small, and/or medium-sized enterprises. Most APEC economies have a legislatively mandated or

officially decreed definition of SMEs, while some have a working definition that may be adjusted accordingly by the various agencies implementing SME policies.

Data. A key finding is that there are nearly 150 million businesses considered to be SMEs across the APEC region, accounting for around two-thirds of employment. In most APEC economies, over 98% of enterprises are considered to be SMEs, with more than half having shares over 99%. The wholesale and retail trade sector, followed by service sector industries, comprise the highest share of total SMEs in most APEC economies. SMEs account for over 60% of total employment in the majority of APEC economies, with several having shares over 80%. Employment by SMEs tends to grow at an annual rate of around 1.0% to 2.5% among the APEC economies. Although growth in employment by large enterprises typically outpaces that of SMEs, SMEs contributed over 60% to net employment growth in half of the APEC economies over the past 5-10 years with several economies having shares above 90%. In addition, SMEs typically contribute between 40% and 60% of GDP or value added in most APEC economies.

A lack of comprehensive and uniform data on exports by firm size in many economies presents a major challenge for conducting analysis on SME exports across the APEC region. The study finds that SMEs as a share of total goods exporters varies widely across the APEC members, but generally accounts for over 70% of total exporters in those economies for which there are data. Similarly, the contribution of SMEs to total goods export value also varies quite substantially across the economies, with several having shares below 15%, while others have shares above 25%. Data from the World Bank Enterprise Surveys for selected APEC members reveal that in many of those economies covered by the survey there are more than three times the number of manufacturing firms engaged in exporting than there are exporting services firms.

In nearly all of the APEC economies for which there are data on goods exports, annual growth in the number of large exporters outpaced that of SME exporters over the past 5-10 years. However, SME exporters accounted for a substantial share of net growth in the total number of goods exporters, with nearly all of the APEC members for which there are data having shares above 70%. In terms of export value, most APEC members experienced

annual growth rates of over 4%, although growth in the value of goods exports from large enterprises outpaced that of SMEs in more than half of the APEC economies.

Barriers to trade. SMEs often face a number of barriers — both internal and external — in order to participate in international trade. Although large enterprises also encounter many of the same external barriers, the WTO has found that the ability of SMEs to export is more adversely impacted by trade costs (both fixed and variable) than that of large firms. E-commerce and participating in regional and global value chains can allow SMEs to overcome some of the major obstacles to trade, thereby offering channels through which SMEs can more easily internationalize. However, many of the same barriers to trade still remain as challenges for SMEs to enter into GVCs, while ICT-enabled trade can present its own unique obstacles for SMEs

Internationalization. The specific barriers that SMEs face in participating in a greater level of international trade can vary by sector and by an SME's level of experience with respect to internationalization activities. Thus, the heterogeneity that exists within the SME sector presents a major obstacle for policy formulation and underscores the importance of designing targeted initiatives to achieve policy goals. The report highlights a number of programs that are in place across the APEC region to help SMEs become more internationalized, ranging from providing financial assistance to export-ready SMEs to initiatives that support further integration of SMEs into global value chains.

Recommendations

• Collect comprehensive data by firm size, especially for exports. Over the past 10 years, some APEC economies have introduced periodic enterprise surveys to collect data on enterprises, including by firm size. These surveys enable them to better assess the characteristics and contribution of SMEs and to analyze changes in the sector over time. Since effective policies depend on current and accurate data, all economies should strive to collect and publish data on enterprise characteristics in a timely manner using best practices in data collection and methodology.

- Continue to improve the overall business environment and reduce barriers to trade. Economies are encouraged to continue improving the overall business environment, including reducing the time and costs for new firms to enter the market and improving access to information about credit. Economies should also continue their efforts in trade facilitation and in further reducing tariffs.
- Implement targeted policies to improve the internationalization of SMEs. A clear understanding of the needs of the target group – based on size of firm, level of international experience, and economic sector of operation – is essential in order to develop policies and initiatives that reach those SMEs most in need of support. Consultation with the SME sector is therefore vital throughout the entire policymaking process in order to ensure that specific needs are in fact being addressed so that SMEs can achieve a greater level of internationalization.
- Share best practices, build capacity, and aim to harmonize SME data
 within APEC. The SME Working Group is encouraged to continue
 sharing best practices and building capacity throughout the region.
 Economies could also consider harmonizing SME data to enable
 cross-economy comparison of SME performance in the region.
 Comparable data on SMEs would contribute to better monitoring
 of regional cooperation efforts and achievements towards greater
 internationalization of SMEs. In addition, economies can exchange
 best practices in policy initiatives that promote and support the
 internationalization of SMEs.

Circular Economy: Don't Let Waste Go to Waste

Publication Number: APEC#220-SE-01.2 Link: https://www.apec.org/Publications/2020/01/Circular-Economy---Dont-Let-Waste-Go-to-Waste

This policy brief considers the transformation to a circular economy as a response to the growing waste crisis. It discusses the waste problem

in APEC and presents the benefits of circular practices in ensuring almost zero waste generation. Policies to enable the smooth adoption of circular economy principles are discussed, and APEC's role in the area is highlighted.

Findings

Economic inefficiency of waste. APEC economies are responsible for a large share of global solid waste: 43% of global solid waste originated from APEC economies in 2016. There is a particular cause for concern in developing APEC economies, where daily solid waste generation per capita is expected to increase by 46% between 2016 and 2050. While the growth is not expected to be as high for industrialized APEC economies, their current waste generation is already at a high level of 1.9 kg per person per day. Albeit lower than their share in 2016, APEC economies are still expected to be responsible for a significant 37% of global solid waste in 2050.

About 59% of waste in APEC economies was mismanaged (i.e., dumped into unspecified landfills, open dumps, waterways, other or unaccounted locations) according to data from the World Bank. A large portion of the mismanaged waste, about 66%, arose from developing APEC economies. Often, mismanaged waste, including plastics, are dumped into inland waterways which then empty into the oceans.

All these plastics in the oceans are expected to cost USD 1.3 billion per annum to the tourism, fishing, and shipping industries in the APEC region. Though the health cost of mismanaged waste has not been calculated for APEC, recent work in this area found that about 400,000 to 1 million residents in developing economies die yearly due to the harmful effects of mismanaged plastic waste.

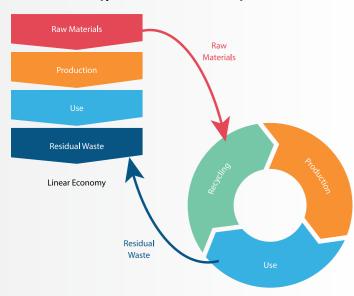
Proper waste management is a cost-effective strategy to address these issues. A study of five APEC economies found that mismanaged household waste costs the economy approximately USD 375 per tonne, while implementing an integrated waste management system for the same region costs only USD 50 to 100 per tonne and is therefore at least four times more economical

What is a circular economy? The concept of a circular economy has been gaining traction in recent years as a comprehensive response to the growing costs of the waste crisis.

The circular economy model is defined as 'a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling.'

Economies, firms and households often practice a linear model of production that follows a 'take-make dispose' pattern. In the linear model, raw materials are extracted from nature, transformed into products, and consumed; unneeded byproducts or residual matter are then disposed as waste. The circular economy model, on the other hand, closes the loop so that almost no residual waste is released into the environment.

Types of material use life cycles



Economy with Feedback Loops



Circular Economy

Source: Adapted from van Buren et al. (2016)

<u>Transition to a circular economy: benefits and barriers</u>. Pursuing the creation of a circular economy has three benefits:

- Less dependence on external sources of raw materials. Population growth and increasing affluence have strained the supply of raw materials, while natural disasters and trade tensions have demonstrated the vulnerability of supply chains to external shocks.
 Adopting the circular economy could reduce uncertainties over the domestic supply of scarce resources.
- Generation of new types of employment and businesses. New business models could emerge from existing businesses that tweak their practices to be more environmentally friendly. New business opportunities could also arise from innovations based on the circular economy. The Economic Research Institute for ASEAN and East Asia (ERIA) finds that opportunities brought by the circular economy would create 1.5 million jobs in the manufacturing, agriculture and forestry sectors in Asia over the next quarter century.
- Potential reduction in environmental degradation. The over-reliance
 of economic growth on natural resources has driven an unsustainable
 demand for raw materials. Devoid of any intervention, the United
 Nations Environment Programme expects a 200% increase in the
 consumption of minerals, fossil fuels and ores between 2000 and

2050. The circular economy provides opportunities for reducing the pressure on natural resources not only through sharing and recycling but also by expanding the life-cycle of products and their parts through reuse, repair, refurbish, remanufacture and repurpose.

Despite the benefits, there are evident barriers to setting up a circular economy:

- High upfront costs are expected in the short run when revamping business practices and investing in necessary infrastructure. Policies that encourage investment by providing incentives and subsidies could help shoulder the costs. However, in the long run, businesses are expected to enjoy reduced vulnerability to resource price shocks.
- A circular economy will lead to more complex international supply chains since resources flow in both directions. Greater cooperation across businesses would allow for better management of these supply chains. To facilitate this, incentives have to be aligned across the supply chain so that businesses are actively considering the sustainability of the materials they use.
- The transition to a circular economy requires the sharing of smart
 infrastructure and advanced technologies that is often hindered
 by weak intellectual property rights and data privacy concerns,
 among others. This challenge to innovation can be addressed by
 encouraging adoption of laws and measures that develop a safe
 sharing environment. Greater transparency and openness would
 also allow for easy transfer of these ideas across economies.
- Profitability of the circular economy requires a strong demand from consumers, which only arises if consumers are well informed about the concept and can easily recognize a business's circularity. There is hence a need for awareness raising and education on the circular economy and its benefits. Governments could also encourage adoption of labelling and certifications.

<u>Closing the loop.</u> The challenges that hinder the transition to a circular economy need to be addressed with sound and targeted policies.

While every economy is at a different stage of implementing a circular economy model, some policies necessary to deal with the broad challenges and more generally to facilitate the transfer to a circular economy are elaborated below.

 Develop well-designed regulations. Well-designed regulations are necessary to facilitate the easy movement of materials without increasing the burden on the innovating private sector. Some of these regulations could include laws on end-of-life reuse or remanufacturing, removal of distorted subsidies on resources, and creation of comprehensive anti-trust and data protection frameworks for smooth cooperation across businesses.

Governments have a clear role in developing policies supportive of innovation, creating an investment-friendly environment, and encouraging collaborations between businesses, educational institutes and research organizations to foster work on circular economy. Moreover, governments could develop policies to encourage clustering of industries that are dependent on each other to enable easier quality and safety control, and sharing of services like waste treatment and renewable energy production.

- Encourage standardization. New technologies and circular economy infrastructure require standardization to ensure common protocols across economies and businesses, and especially to maintain quality across highly globalized supply chains. The French Standardisation Association published a voluntary standard in 2018 to help businesses understand the concept of a circular economy and provide guidelines to implement circular economy projects. An ISO technical committee for the circular economy also aims to produce an internationally agreeable framework to govern the circular economy that will include production, distribution, disposal and assessment, among others. Central and local governments have an important role in encouraging adoption of circular economy standards to guide implementation, signal quality and improve competitiveness.
- Raise public awareness. To encourage change, there is a need to change people's mindsets and that starts with education. Circular

economy oriented thinking should be introduced early on at schools to ensure students are equipped with the technical and creative skills necessary for this new economy. In Finland, circular economy education begins very early and continues up to the university level where students learn about technical and soft skills, among others, necessary to transform the economy into a circular one. Apart from education, governments and the private sector need to increase awareness through campaigns and by organizing events, competitions and workshops to educate the public.

- Set credible benchmarks. It is necessary to measure the circular economy to recognize progress and set global benchmarks that businesses and economies can work towards. Some existing indicators can be used to guide circular economy policies, for example, carbon emissions, life-cycle analysis and resource intensity. The European Commission published a monitoring framework in 2018 that provides a list of key indicators that will capture the important elements and complexities of transforming to a circular economy. Several efforts are also underway at the economy level. Similar research efforts are needed to develop innovative indicators that can provide a complete picture of a circular economy.
- Promote best practices and knowledge-sharing. Governments, businesses and civil society groups that are committed to the circular economy have been communicating the benefits of shifting to a circular economy. SITRA (an independent Finnish public foundation), the Ellen MacArthur Foundation (a UK based charity) and the European Commission are some organizations that are actively

involved in communicating benefits, innovations and redesigned policies to encourage building a global circular economy. Moreover, committed economies could develop platforms to allow exchange of ideas and knowledge sharing on the topic. Documentation of successes and failures in implementing circular economy principles at the economy, industry, and firm levels would also allow for better understanding of the determinants of success.

Recommendations

As a forum representing about 60% of the world's GDP, APEC can play an important role in transforming the global economy into a circular one. APEC could discuss how a circular economy model could be implemented in the context of the region. This can aid in developing a fitting framework that will foster transformation to a circular economy while accounting for the region's diversity. While a number of APEC for have been actively working in this area, there is a need for more discussions on a cross-fora level to develop initiatives that will help restructure all dimensions of the economy into a circular one. APEC provides a platform to facilitate these discussions and can encourage sharing of information and best practices across industries and economies. Given the importance and cross-fora nature of the topic, it may be beneficial to elevate circular economy discussions to a higher level within APEC to ensure that related initiatives are properly coordinated, implemented, and monitored. Work in this field will significantly contribute towards reducing environmental impact and help transform the mindsets and behaviors of industries, businesses and people to prioritize sustainability.

Economic & Financial Analysis

APEC Regional Trends Analysis

Published in May and November every year, the biannual report provides an overview of the APEC region's economic prospects through an indepth analysis on recent macroeconomic and financial developments and the trade and investment trends and measures recently implemented by APEC economies. Each report carries a theme chapter which looks at current pertinent issues facing the region. A special update was published in July to reflect the latest economic situation.

May 2020 – What Goes Around Comes Around: Pivoting to a Circular Economy; Uncertainty Tests APEC's Resilience amid COVID-19

Publication Number: APEC#220-SE-01.4 Link: https://www.apec.org/Publications/2020/05/APEC-Regional-Trends-Analysis---What-Goes-Around-Comes-Around

Findings & Recommendations

What Goes Around Comes Around: Pivoting to a Circular Economy

- The COVID-19 pandemic has highlighted the world's interconnectedness, showing how a virus can quickly circle the globe and how policy decisions made years ago can affect us now. This applies to waste as well: the waste we throw away has a tendency of coming back in our air, water and food, directly affecting our livelihoods, economy and health.
- The traditional model of economic production follows a linear pattern: resources are gathered, processed and consumed; byproducts are disposed as waste and do not re-enter the productive chain. A more efficient system would ensure that consumed resources are brought back to a state of reusability, so that waste is minimized.
- One such system that minimizes waste and optimizes resource

use is the circular economy model, where reuse, repurposing and recycling of materials are built into production and logistics. In this model, waste is an opportunity.

 Rethinking business models in terms of the circular economy presents opportunities for efficiency, innovation and sustainability.

Examples of business models:



Sharing platforms

Enables access to and sharing of underutilised products, e.g., ride sharing services



Product as a service

Sells usage of a product instead of units of the product, e.g., hours of lighting instead of light bulbs



Circular supplies

Develops products/components that are recyclable and reusable, e.g., reusable containers



Product life extension

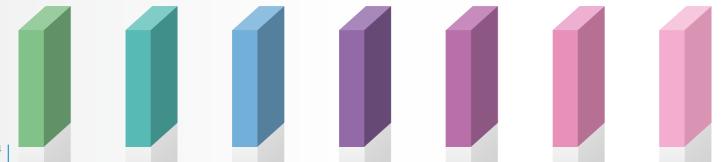
Prolongs the life of a product through better design and maintenance, e.g., lifetime warranties



Resource recovery

Uses byproducts and waste in other production processes, e.g., "zero waste manufacturing"

 Firms applying circular economy principles have shown their ability to address short-term supply shortages while reducing waste.



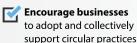
Economic & Financial Analysis

During the COVID-19 pandemic, firms applied the circular supplies. product life extension, and resource recovery models to guickly produce urgently needed medical supplies such as face masks and personal protective equipment.

- Adopting circular economy principles on a larger scale will have global implications. Highly interlinked global supply chains will necessitate collaboration and cooperation across multiple actors in the supply chain. Likewise, specialization will render new opportunities for businesses in the refurbishing, repairing and recycling industries.
- Regional cooperation, and APEC in particular, has an important role to play in facilitating the transition to a circular economy.

APEC policymakers can:

Encourage standardisation of definitions on processes. technologies and materials involved to maintain quality across global value chains



Develop indicators

to measure progress and set global benchmarks that businesses and economies can work towards

Raise public awareness through early education and awareness campaigns

Uncertainty Tests APEC's Resilience amid COVID-19

- Economic and trade growth in the APEC region has been slowing down in 2019, even before the onset of the COVID-19 pandemic. The region's GDP growth slowed down to 3.6% in 2019 from 4.2% in 2018, due to uncertainty arising largely from persistent trade and technology tensions.
- A trading environment weakened by tensions, tariff measures and other trade restrictions has resulted in significant contractions in the volume and value of merchandise trade. Growth in the volume of merchandise exports was substantially lower in 2019 at 0.6% compared to 4.3% in 2018, while the value of merchandise exports

contracted by 1.9% in 2019 from a growth of 8.9% in 2018.

- The APEC region became the epicentre of the COVID-19 pandemic when it struck, infecting more than 4.1 million people worldwide as of mid-May 2020, around half of that number from the APEC region.
- The COVID-19 pandemic is a health and economic crisis of unprecedented proportions, prompting economies across the globe to impose containment measures, bringing economic activity to a near-standstill. The severity of the pandemic as well as extreme uncertainty as to its duration and lingering economic effects have led to the projection of a global economic contraction of 3.0% in
- Mirroring the downward direction of the global economy, the APEC region is expected to contract by 2.7% in 2020, equivalent to an estimated output loss of USD 2.1 trillion. This is worse than the near-zero growth recorded amid the 2008-2009 global financial crisis.
- A global economic rebound is forecasted for 2021, with the APEC region growing by 6.3%. This rebound hinges on the containment of the pandemic by the second quarter and the effectiveness of economic stimulus measures to support economic recovery.
- Getting back on the path of economic recovery post-pandemic requires a coordinated approach that could only be achieved through regional cooperation. APEC as a region needs to bolster health systems, improve social protection, exercise prudent fiscal management, and maintain monetary stability to be able to deploy emergency measures during episodes of crisis.
- APEC also needs to enhance regional cooperation mechanisms to facilitate the free flow of information and the supply of essential products as well as to implement coordinated stimulus measures as needed. This has been emphasized by the APEC Ministers Responsible for Trade when they directed the Senior Officials to develop a coordinated strategy for collecting and sharing information on policy

actions and economic measures implemented by APEC economies to respond to the challenges brought about by the pandemic.

 Achieving economic growth that is sustainable and inclusive remains paramount, but as the COVID-19 pandemic has taught the world, preparedness in the face of any crisis, pandemic or shock is equally important. Toward this end, regional cooperation remains crucial in boosting health and economic resilience to prepare for the next pandemic.

The APEC region could work together towards a regional pandemic policy toolkit that covers the following:



Preparing for a health emergency



Investigating and monitoring for potential outbreak



Sustaining health services



Preventing further waves of outbreak



Preparing for recovery

July 2020 Update – Deeper **Contraction Calls for Decisive** Action

Publication Number: APEC#220-SE-1.11 Link: https://www.apec.org/Publications/2020/07/APEC-Regional-Trends-Analysis-July-2020-Update

Findings & Recommendations

- The APEC region is now projected to contract by 3.7% in 2020 or an output loss of around USD 2.9 trillion due to the negative economic impact of COVID-19. In 2021, APEC is expected to rebound to a growth of 5.7%, but extreme uncertainty surrounds the near-term outlook.
- The strength of economic recovery hinges on the development of vaccines and treatments, prevention of further waves of the pandemic, continued fiscal and monetary support, and the resolution of trade conflicts
- Regional cooperation plays an important role towards ensuring that APEC economies are future-ready and regional economic growth is inclusive, sustainable, and resilient.

APEC as a region needs to:



health systems



Improve social protection



Facilitate free flow of information and supply of essential products



Implement coordinated stimulus measures as needed

Economic & Financial Analysis

November 2020 – New Virus, Old Challenges and Rebuilding a Better Asia-Pacific; APEC amid COVID-19: Navigating Risks and Opportunities toward Resilience

Publication Number: APEC#220-SE-01.19 Link: https://www.apec.org/Publications/2020/11/APEC-Regional-Trends-Analysis---November-2020

Findings & Recommendations

New Virus, Old Challenges and Rebuilding a Better Asia-Pacific

 This year has been like no other in recent memory, with a novel coronavirus dominating lives, economic activity and policy decisions.
 Hundreds of thousands are dead, trillions of dollars of output have disappeared and millions of jobs have been lost.

While COVID-19 is new, it has exposed old challenges:



Environmental degradation



Growing inequality



Digitalization challenges

 COVID-19 has mercilessly exploited old challenges of environmental damage and growing inequality that have not been adequately addressed. Environmental damage through deforestation, logging and mining increases our exposure to diseases by increasing humanto-animal contact. Infectious diseases with zoonotic origins, such as COVID-19, are a side effect of unsustainable practices. The frequency and severity of diseases are also affected by changes in climate patterns, with rising temperatures providing ideal conditions for the spread of pathogens and disease vectors.

- COVID-19 has been hardest on the most vulnerable in our societies.
 It has exposed social and economic inequalities, which have been magnified in the disproportionate impact of the crisis on the poor, women, the youth, ethnic minorities and indigenous peoples, and other vulnerable groups. Persistent poverty and barriers to access to healthcare, skills development and economic opportunities interacted with the virus, resulting in severe public health and economic outcomes.
- Meanwhile, the nature by which COVID-19 spreads and the responses to contain it have accelerated the process of digitalization, with adoption of digital solutions no longer an option but a necessity. However, digitalization comes with its own challenges: cybersecurity, data privacy and digital fraud, along with outdated regulations and economic structures.
- In a year like no other, the region has been compelled to rethink how it works, how it learns, and what it prioritizes.

The APEC region needs to:



Invest in green jobs and infrastructure, and internalize environmental impact into economic production and consumption



Ensure equitable access to healthcare, education, infrastructure, and technology



Maximize the potential of the digital economy, while tackling its challenges

APEC amid COVID-19: Navigating Risks and Opportunities toward Resilience

- The APEC region contracted by 3.7% in the first six months of 2020, a sharp reversal from the 3.4% growth seen in the same period in 2019. Household consumption, a reliable source of growth for APEC economies declined by 7.1% while investments contracted more at 11.2% during the same period.
- Growth in the volume and value of merchandise trade recorded bigger contractions during the period January—June 2020 compared to year-ago levels, while commercial services plunged. Trading activity in the APEC region was adversely affected by the combined impact of the temporary closure of borders, disruptions in global supply chains, and persistent trade and technology tensions that began to escalate in 2018 with the imposition of tariff and retaliatory measures.
- A key contributing factor in the continued weakness in trading activity is the proliferation of trade-restrictive measures. The period covering mid-October 2019 to mid-May 2020 saw the number of measures implemented by APEC economies that served to restrict the flow of trade go up to 57, dominating measures that facilitated trade, which totalled 21.
- Absent vaccines and therapeutics, economies have to grapple with the trade-off between continuing to impose movement restrictions at the risk of long-term economic scarring, or reopening the economy at the risk of a resurgence in infections, which in turn, could negatively feed on consumption and business sentiment and thus, hold back economic activity.
- Prolonged stay-at-home measures, mandatory or voluntary, to safeguard health amid an ongoing pandemic, have translated into significant cutbacks in consumption and investments. As a result, the APEC region is expected to contract in 2020 by 2.5%, equivalent to an output loss of around USD 1.8 trillion. GDP growth projections for 2021, at 5.2%, reflect an economic rebound for the APEC region

although at a lower rate compared to earlier forecasts.

- Economies could greatly benefit from continued fiscal and monetary support measures to the health sector, households and businesses, particularly amid continuing uncertainty centred on a possible resurgence of the virus and negative spillover effects of sizeable reductions in global consumption, investment, trade and remittances.
- There are risks ahead, but there are also opportunities to build back better, stronger and more resilient economies.

Policy considerations for APEC economies:



Moving towards digitalization



Investing in greener technologies



Strengthening supply chains, logistics management and trade relations



Continuing fiscal and monetary support



Advancing women's economic empowerment by expanding women's access to education and skills development, employment, and credit

The COVID-19 pandemic is an unprecedented global health and economic crisis. In 2020, it devastated hundreds of millions of lives and the resulting economic fallout was felt across the APEC region, recording one of the worst contractions over the past 50 years. As economies struggle to cope, what has become increasingly clear is that there is no trade-off between public health and the economy. Economic recovery will very much depend on efforts to effectively contain this pandemic.

This series of eight policy briefs and other research conducted offer insights into the multifaceted impacts of the pandemic, the unprecedented measures taken, the opportunities to rethink the way our economies work, and finally what APEC as a regional economic forum can do to recover from the crisis.

APEC in the Epicentre of COVID-19

Publication Number: APEC#220-SE-01.6

Link: https://www.apec.org/Publications/2020/04/APEC-in-the-Epicentre-of-COVID-19

COVID-19, 4IR and the Future of Work

Publication Number: APEC#220-SE-01.9

Link: https://www.apec.org/Publications/2020/06/COVID-19-4IR-and-the-Future-of-Work

Women, COVID-19 and the Future of Work in APEC

Publication Number: APEC#220-SE-01.21

Link: https://www.apec.org/Publications/2020/12/Women-COVID-19-and-the-Future-of-Work-in-APEC

Supporting MSMEs' Digitalization Amid COVID-19

Publication Number: APEC#220-SE-01.10

Link: https://www.apec.org/Publications/2020/07/Supporting-MSMEs-Digitalization-Amid-COVID-19

Promoting Trade in Medical Goods to Tackle COVID-19 Challenges

Publication Number: APEC#220-SE-01.7

Link: https://www.apec.org/Publications/2020/04/Promoting-Trade-in-Medical-Goods-to-Tackle-COVID-19-Challenges

Export Restrictions and Food Security in the Context of the COVID-19 Pandemic

Publication Number: APEC#220-SE-01.8

Link: https://www.apec.org/Publications/2020/05/Export-Restrictions-and-Food-Security-in-the-Context-of-the-COVID-19-Pandemic

Food Security Response Measures to COVID-19

Publication Number: APEC#220-SE-01.13

Link: https://www.apec.org/Publications/2020/10/Food-Security-Response-Measures-to-COVID-19

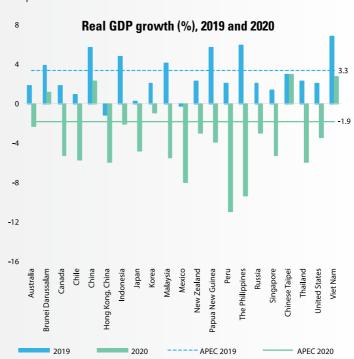
Managing Risks in Global Value Chains: Strengthening Resilience in the APEC Region

Publication Number: APEC#220-SE-01.14

Link: https://www.apec.org/Publications/2020/12/Managing-Risks-in-Global-Value-Chains

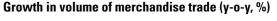
Economic Crisis

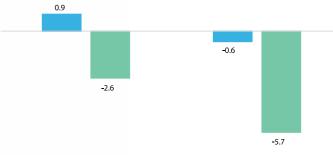
Economy. The movement restrictions and border closures implemented by APEC economies at the onset of the pandemic to curb the spread of COVID-19 led to a contraction in the region's GDP growth by 3.7% in the first six months of 2020, a sharp reversal from the 3.4% growth seen in the same period in 2019. This was the first time that the region's economy had contracted in three decades. Better-than-expected growth outturns in the second half of 2020 with the gradual economic reopening amid massive fiscal and monetary support lifted APEC GDP to a smaller decline of -0.2 percent. For the whole year 2020, APEC GDP contracted by 1.9 percent. However, GDP growth across APEC has been uneven, with a few economies returning to positive territory by the end of 2020, others contracting less than expected, but some plunging deeper into recession.



Note: Quarterly data not available for Papua New Guinea. Source: Economy sources; IMF World Economic Outlook (April 2021): APEC PSU calculations.

<u>Trade</u>. The volume of merchandise exports contracted by 2.6% in 2020 from a modest growth in 2019 while the volume of merchandise imports posted a bigger decline of 5.7%. On the other hand, the value of merchandise exports and imports declined anew by 4.7% and 6.3%, respectively, during the same comparable period.







Growth in value of merchandise trade (y-o-y, %)



Note: Due to unavailability of data, APEC average trade volume growth does not include Brunei Darussalam and Papua New Guinea. Source: UNCTAD Statistics (trade volume): WTO (trade values): APEC PSU calculations.

Compounding the contraction in merchandise trade, commercial services recorded a more sizeable decline, reflecting the toll of border closures and stay-at-home measures due to COVID-19 on the services sector, especially travel and tourism, which is one of the most affected sectors.

In APEC, exports of commercial services fell by 22.3% in 2020 compared to a 2.4% growth a year ago, while commercial services imports turned more negative with a 23.7% decline during the same period.

Investment. Latest data reveal that global FDI went down sharply by 42.7% in 2020 to about USD 859 billion compared to the level fetched in 2019, as gloomy economic prospects resulted in a significant moderation in investments. This weakness in investment is seen to extend until 2021. A recovery is expected in 2022; however, further waves of the pandemic in some economies could delay the return to growth in FDI.

Human Cost: Lives and Livelihoods

<u>Infections and deaths</u>. As of mid-December 2020, COVID-19 had infected more than 73 million people, and more than 1.6 million had died worldwide. The APEC region accounts for around 33% of global COVID-19 infections and 35% of global deaths.

Employment and the future of work. The public health crisis has led to staggering losses in economic output and jobs. As of September 2020, the unemployment rate in the region averaged 4.8%, with more than 74 million people looking for work.

Yet certain jobs can be lost. Lockdown measures to control the spread of the virus can hasten the uptake of Fourth Industrial Revolution (4IR) technologies that could automate — and possibly eliminate — certain jobs. Firms are facing pressures that can tip the balance towards more automation due to COVID-19. Firms will need to restructure and reorganize to adjust to the post-pandemic economic environment that will involve restrictions on human interaction and risk mitigation regulations.

Before the pandemic,

firms adopt automation to:



Lower labor costsSavings from capital investment outweigh labor costs.



Keep up with market innovation4IR technologies are developing rapidly.



Speed up routine tasksAutomation of repetitive processes found in blue- and white-collar jobs.

After the pandemic, firms may speed up automation to:



Reduce risksProtection from liability to workers.



Observe new guidelines Social distancing is now required.



Cushion financial impactAutomation as a cost-saving measure.

Constraints to labor supply — such as the withdrawal of workers who are elderly or have pre-existing conditions — will encourage firms to explore the feasibility of automation. Likewise, government policy meant to ameliorate the economic impacts of the pandemic — such as lower interest rates or subsidies for digitalization — can reduce costs for automation and further tip the balance towards uptake of 4IR technologies. Certain routinized 'white collar' front- and back-office environments could also see accelerated automation in response to the COVID-19 crisis at a rate exceeding that of manufacturing sectors.

Policymakers will need to conduct a careful, sector-by-sector and gender-based analysis of jobs at risk of automation that factors in the

'New Normal'. This assessment should consider traditional dynamics while also accounting for COVID-specific variables such as post-pandemic economic considerations, emerging challenges faced by workers, and unintended impacts of crisis-response policies.

As employers balance these factors in deciding on whether to automate, policymakers need to address the impact of these decisions on the jobs, income, and welfare of workers. Access to skills development and labor market information will ensure that workers have access to opportunities in the post-pandemic digital economy. Social protection will be crucial in ameliorating job precariousness and income uncertainty in the 4IR New Normal.

Some policies may have unintended consequences and encourage automation



Low interest rates intended to encourage bank lending and keep firms operating could also encourage them to invest in automation.



Immunity passports could constrain labor supply and increase uncertainty.



Support packages for MSMEs could encourage business' adoption of digital solutions.



Restrictions on labor mobility can discourage the hiring of workers.

Policymakers need to promote 4IR innovation while addressing social risks



Expand social safety netsProtect workers' livelihoods and ensure their basic needs are met.



Monitor automation trendsWork closely with the private sector for a deeper analysis of 4IR issues.



Support upskilling and retraining Adapt skills training programs

Adapt skills training programs to the needs of the post-pandemic digital economy.



Humanise 4IR ecosystemsPut people first in digital economy policy.

MSMEs' digitalization. MSMEs are particularly vulnerable to the economic impacts of the pandemic. Targeting economic relief for small businesses has therefore been a critical component of policy interventions in APEC economies. These interventions have included a range of fiscal and monetary policies, as well as initiatives promoting digital adoption.

Further digital adaptation by MSMEs will be required with the COVID-19 crisis pushing more consumers online and accelerating the adoption of e-commerce. While the immediate benefits of digital interventions may vary between sectors and firms, adoption of digital solutions can help MSMEs in areas such as: (1) managing transactions at a distance; (2) delivering goods efficiently; (3) facilitating access to financial services; and (4) engaging with new and existing customers.

Promoting the digitalization of MSMEs can help address a number of the economic challenges posed by COVID-19; however, the process of adopting new digital approaches to selling does not come without risks. Despite the clear benefits, it is crucial to recognize the complex challenges that digitalization presents, including: (1) cybersecurity and data privacy concerns; (2) exposure to digital fraud; (3) online misinformation; (4) asymmetric market power and platform dominance; and (5) persistent digital divide and infrastructure-related issues.

Supporting MSMEs' digitalization efforts amid COVID-19, therefore, requires policymakers to adopt a two-pronged set of interventions that allows MSMEs to reap the benefits of the digital world while overcoming the challenges of digitalization.

<u>Women</u>. The economic repercussions from COVID-19 are expected to have a disproportionate impact on women.

Women workers and women-led MSMEs may bear the brunt as the sectors hardest hit by the pandemic are those where women are more likely to be working. Women-led MSMEs also tend to be smaller and are more likely to be informal, so they may be adversely affected by the economic fallout from COVID-19. Women's limited access to financing

and capital compared to men's prior to the pandemic may be further impacted by additional constraints on liquidity.

COVID-19 has shown that caretakers' work is essential. Increases in demands for unpaid care work may further widen gender gaps in the labor force if women's productivity declines or they opt to leave the labor force due to rising unpaid care responsibilities, as predicted.

The pandemic puts certain workers at a disadvantage



Women



Elderly



Vulnerable



Cultural norms often dictate that women shoulder a greater share of household chores and responsibilities. Working from home has an impact on their productivity and may incentivise firms to automate occupations that have a high proportion of female employment.

The pandemic may also accelerate the deployment of 4IR technologies, increasing the risk of job displacement of routine and manual jobs that employ high numbers of women across APEC economies. At the same time, women are not currently well positioned to capitalize on the booming technology industry in the COVID-19 environment with their low representation in STEM fields.

One of the most alarming effects of COVID-19 on women is the rise in gender-based violence. Such violence has increased with more people confined to their homes. Technology is also enabling new forms of gender-based violence in the online sphere, including the workplace.

To address the disproportionate impact of COVID-19 on women and existing laws and policies that discriminate against women, some recommendations for immediate interventions are:

- Strengthen social protection measures to bolster the care economy and support informal workers, as appropriate to local contexts
- Consider emergency funding for individuals experiencing genderbased violence
- Introduce reskilling and upskilling training programs targeted at women workers
- Support digitalization of women-owned MSMEs by boosting skills and access to financing
- Expand opportunities for women-owned MSMEs to compete for government procurement opportunities
- Expand occupational safety and health measures to address violence and harassment.

Recommendations for longer term interventions to address women's economic inclusion include:

- Explore hybrid finance models, such as a STEM Equity Fund, to stimulate increased public-private sector collaboration for addressing the gender inequities in STEM sectors
- Implement long-term structural reform measures to address systemic barriers to women's economic inclusion
- Invest in digital infrastructure to increase access and create opportunities for women.

Unprecedented Monetary and Fiscal Measures

<u>Fiscal response</u>. Government spending went up from 2.8% in the

first half of 2020 to 4.0% in the second half, reflecting sustained fiscal measures implemented by economies to provide support to various sectors. At the onset of the COVID-19 pandemic, APEC economies quickly and massively rolled out fiscal measures, ranging from 1.0 to over 20% of GDP, depending on fiscal space, to bolster the health system, and provide targeted liquidity support to households and businesses, including MSMEs.

Summary of immediate and short-term response to address COVID-19			
Healthcare system	Enhance healthcare capacity - Procurement of medical supplies and equipment - Increasing hospital capacity - Implementing mass testing Support health workers - Enhancing compensation - Providing life insurance and hazard pay		
Households and workers	Provide direct financial assistance and relief packages - Direct support through cash transfers and food and care packages - Extending unemployment insurance - Temporary work or workfare programs - Temporary relief for debt, utilities and rental payments		
Businesses	Mitigate impact on affected industries - Wage subsidies and payroll support - Tax deferrals and tax relief - Regulatory forbearance and debt payment deferments - Soft loans and loan moratorium		
MSMEs	Allocate funds to support MSMEs - Emergency low-interest lending facilities - Tax deferrals and refunds - Loan guarantees and moratorium - Temporary support for rental and utility payments		

Source: IMF policy response tracker and economy sources.

Monetary response. In part due to benign inflation conditions, monetary authorities were able to complement fiscal stimulus with the swift and significant deployment of measures to support households and businesses amid liquidity and solvency issues. As of end-2020, APEC economies that use interest rates as their main policy lever moved to substantially reduce their monetary policy rates.

Aside from lowering monetary policy rates, APEC economies also implemented conventional and non-conventional monetary measures together with macro-financial measures to maintain the flow of credit and ensure liquidity while, at the same time, boosting market confidence to keep financial markets strong, sound and stable as global uncertainty rose with the unabated rise in COVID-19 cases.

Monetary measures					
Conventional	Non-conventional		Others		
Reduced monetary policy rates	Purchased bonds (government and/or corporates)		Relaxed temporarily loan-loss provisioning requirements		
Lowered reserve requirement ratios	Introduced bilateral swap arrangements		· ·		Waived bank charges
Established liquidity/ credit-enhancing facilities			Deferred payments for loans, mortgages, and credit card bills		
Expanded list of eligible collaterals for loans					Easier access to central bank facilities
Macro-financial measures					
Regulatory forbearance		Macro-prudential			
Loosened capital or regulatory requirements		Eased lending to certain sectors (e.g., microfinance, agriculture)			

Increased lending growth

Source: IMF policy response tracker and economy sources.

Reclassified loans temporarily

Extended period of loan deferments

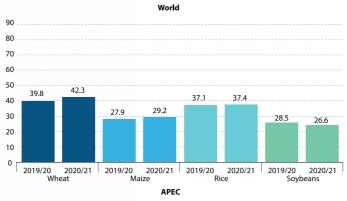
Food, Medicine and Resilience in Global Supply Chains

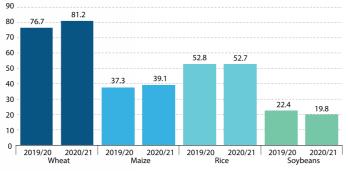
Food security. Since the COVID-19 pandemic started, few export restrictions have been observed in APEC economies. Although three economies implemented temporary export restrictions on an economy-wide basis — a ban on eggs, a quota on rice, and quotas on grains such as wheat and maize — these had all since ended. As of 4 August 2020, there were just a few economies worldwide that have active export

restrictions on certain food products in response to COVID-19, suggesting that most governments are not currently resorting to restrictive trade policies and are instead maintaining trade in agricultural products.

Global stocks of staple food commodities such as wheat, maize, rice, and soybeans are generally healthy as evidenced by their stock-to-use ratios for the world in the 2019-20 marketing year. Based on the projections for marketing year 2020-21, these ratios are expected to improve slightly across most of the major food commodities, mainly due to higher output levels with both maize and rice production heading for record levels. Except for soybeans, the APEC region has much higher stock-to-use ratios for the major food staples than the world average.

Stock-to-use ratios of staple food commodities (%)



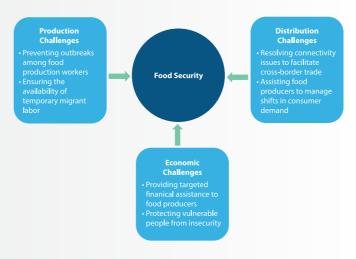


Note: Stock-to-use ratios are ending stocks divided by domestic consumption. Data shown for marketing year 2019/20 are forecasts and for 2020/21 are projections. Source: United States Department of Agriculture, Production, Supply and Distribution (PSD) online database, 11 June 2020 Release.

International prices for wheat, maize, and soybeans declined in the first half of 2020 and remain lower than their level a year earlier. After experiencing large increases in price volatility from mid-March throughout much of April as the COVID-19 crisis took hold around the world, global prices for major food commodities became more stable in May and June. Examining commodity prices over the past three years, price volatility is trending upwards for the export prices of maize and rice, while trending downwards for wheat and soybeans.

Despite the fact that global food stocks for the main staple commodities are generally healthy and international price volatility is also relatively low, the COVID-19 pandemic has caused major disruptions to the production of several other food products, particularly those that require intensive use of labor under certain conditions, creating bottlenecks along the food supply chain. In this context, major challenges relating to food production and processing, such as outbreaks of COVID-19 among food production workers and the unavailability of temporary migrant workers, could have an impact on food security in the region.

Food security challenges in the context of COVID-19



There are also many issues impacting food distribution channels as a result of the pandemic. Most of these obstacles stem from measures that economies have introduced in order to help prevent the virus from

spreading. Lockdowns implemented in many APEC economies have disrupted both domestic and international food supply chains, creating difficulties in getting food products to markets as well as causing a notable shift in consumer demand. Most relevant for cross-border trade are the shipping delays due to reductions in freight capacity and increased safety protocols at the border.

Economic issues affecting food security include cash flow problems of food producers and processors as a result of disruptions to the food supply chain, and the ability of vulnerable groups to afford food. Although international prices for staple commodities are generally stable, prices for more labor-intensive, high-value food products are increasing due to the production and distribution challenges disrupting the supply chain for these products. As a result, consumers are facing higher market prices for food.

APEC members have implemented a number of policy measures to address the challenges currently being faced, but will need to remain vigilant and proactive in order to build greater resiliency in food systems. The following are particularly important to address food security in the context of the COVID-19 crisis:

- Implementing temporary and targeted measures to assist actors along the food supply chain, especially workers in affected industries and vulnerable populations
- Promoting public-private partnerships that seek to improve food security through greater resiliency in the food system, including investments in infrastructure, such as improved access to broadband, as well as the development and adoption of digital technologies, such as e-commerce strategies and supply chain management solutions
- Pursuing initiatives across the region to keep food trade open, accelerate the processing of food shipments, and expedite customs clearance of food products
- Recognizing that food trade is an essential component of food security and avoiding protectionist measures such as export restrictions and measures that are not based on evidence and scientific risk assessment.

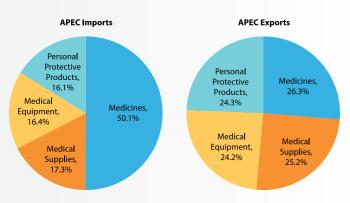
Medical goods. Global trade in medical goods to support the fight against COVID-19 is significant, amounting to nearly USD 1 trillion. APEC economies account for 40.8% (USD 404.5 billion) of the global import value of medical goods and 28.8% (USD 271.8 billion) of the global export value.

Trade in medical goods – World and APEC				
Imports (USD billion)	2015	2016	2017	2018
APEC	281.5	292.2	361.3	404.5
World	702.5	713.0	901.3	991.1
Share of APEC in World Imports	40.1%	41.0%	40.1%	40.8%
Exports (USD billion)	2015	2016	2017	2018
APEC	205.1	204.7	245.1	271.8
World	667.7	672.5	859.9	944.2
Share of APEC in World Exports	30.7%	30.4%	28.5%	28.8%

Note: Medical goods are classified into four categories: (1) medicines (pharmaceuticals); (2) medical supplies, such as hydrogen peroxide, disinfectants, gauze, surgical gloves, plaques for x-rays, syringes and catheters; (3) medical equipment, including sterilizers, microscopes, x-ray devices and thermometers; and (4) personal protective products, namely, hand soap, hand sanitizers, face masks, protective visors and other cleaning products. Source: International Trade Centre - Trade Man: APEC PSU calculations.

Medicines dominate imports of medical goods in APEC. Exports of medical products are more equally distributed among all product categories.

Distribution of APEC trade in medical goods by category, 2018



Source: International Trade Centre - Trade Map: APEC PSU calculations

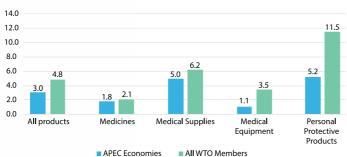
Source: WTO - Tariff Database Facility and Tariff Analysis Online: APEC PSU calculations.

Medicaments consisting of mixed or unmixed products top the list of medical goods imported by the APEC region in 2018, representing 28.8% of the total. Many of the products often mentioned by medical experts in the media as important for the prevention, testing and treatment of COVID-19 appear in the top 10 list of products imported by APEC, such as (1) plastic face masks; (2) hand sanitizer; (3) needles, catheters and similar products; and (4) diagnostic and laboratory reagents. These account for 18% of the APEC imports of medical goods.

The list of 10 most exported medical goods by the APEC region in 2018 features many of the same goods found in the top 10 imports list. Medicaments consisting of mixed or unmixed products, mentioned earlier as the most imported medical product, are also the most exported. Of note. a significant share of APEC exports of medical goods in 2018 is made up of products that are currently in high demand due to the COVID-19 crisis. Face masks made of plastic and textile materials: hand sanitizer: needles. catheters and similar products; and diagnostic and laboratory reagents together represent 30.2% of the APEC exports of medical goods.

In terms of tariffs, the latest data available from the WTO show that the average MFN tariff in the APEC region is 3%, lower than the average for all WTO members (4.8%). Most APEC economies apply low MFN tariffs to medicines and medical equipment (1.8% and 1.1%, respectively), but impose higher tariff rates on the medical supplies and personal protective products (5.0% and 5.2%, respectively) that are essential to tackling the COVID-19 challenges.

Average MFN tariffs by product category (%)



A review of the 10 products with the highest average MFN tariffs in the APEC region shows that all are medical supplies or personal protective products. An example is undenatured ethyl alcohol with strength of 80% or above, a common ingredient in hand sanitizers; it is important for hygiene, and helps prevent the transmission of COVID-19 as it is effective in killing microorganisms, fungi and viruses. However, it has the highest average MFN tariff among all medical goods in APEC, at 76.6%. Ten APEC economies impose MFN tariff rates equal or higher than 10% on ethyl alcohol and on face masks made of textile materials

Further, important medical supplies worn by medical staff such as gloves made of vulcanized rubber, protective spectacles and visors, and clothing made of plastic sheeting appear in the list of products with highest average MFN tariffs in APEC. Other personal protective products such as plastic face masks, hand soap and other cleaning products also show high average MFN tariffs.

Trade policy is an important tool to facilitate access to medical goods to cope with the challenges raised by COVID-19 and APEC is a relevant forum to strengthen efforts in this area. APEC economies could discuss collective initiatives to permanently reduce or eliminate tariffs on medical goods; commit to avoid the implementation of any unnecessary traderestrictive measures, particularly export restrictions affecting trade in medical goods; and commit to maintain supply lines open and functional.

Supply chain resilience. Businesses are likely to struggle when faced with systemic, economy-wide risks to global value chains, particularly those resulting from unexpected events like the COVID-19 pandemic Indeed, the pandemic has been devastating to economies in the APEC region, as the pandemic-related movement restrictions brought some supply chains to a halt, and stalled the manufacturing of several products (e.g., automotive, electronics and medical goods).

Given that firms and economies are exposed to systemic risks as they engage in global networks, there is a need to build resilience into their value chains. Resilience here refers to the ability to return to normal operations quickly and it is of particular importance for the APEC region where several key business hubs exist.

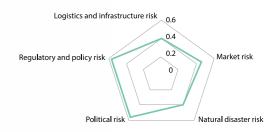
Five pillars are used in constructing an index to measure supply chain strength or resilience.

Strength against	Measures that limit
Logistics and infrastructure risk	Economic and social disruptions that can occur to supply chain processes when the markets or actors that connect supply chain operators to each other do not perform as expected.
Market risk	Economic and social effects of economic fluctuations that disrupt prices, output or other economic fundamentals.
Natural disaster risk	Economic and social consequence of the occurrence of a natural disaster.
Political risk	Economic and social effects of the possibility that economic activity may be impeded by the occurrence of political or violent conflicts inside or outside the economy.
Regulatory and policy risk	Economic and social effects of unexpected changes in regulatory stance, or inconsistency in enforcement, which would otherwise increase business uncertainty, and thus the transaction costs associated with value chain processes.

The index shows that the APEC region performs relatively better compared with a number of major regional or economic groupings in terms of: (1) market risk and (2) regulatory and policy risk. A deeper look however shows a wide gap between the highest-performing economy and the lowest

While APEC economies have developed a strong foundation to deal with the crisis, more needs to be done. The APEC region should redouble its commitment to strengthening the institutions, structures and facilities that are key to stronger economic resilience in the face of systemic risks.

APEC value chain strength index



Note: Scores have been normalized in this index where 0 is the lowest possible score and 1 is the highest

Opportunity to Rethink: Environmental Implications and Other Challenges

New virus, old challenges. The COVID-19 virus is new, but it has mercilessly exposed old challenges that have not been adequately addressed: environmental degradation, growing inequality and digitalization challenges.

LESSON 1: PROTECT THE ENVIRONMENT

60% of infectious diseases are caused by the crossover of pathogens from animals to humans

> Impacts of unsustainable economic practices (e.g., deforestation, pollution)



More animal-human contact



Climate conditions also affect the spread of diseases:

- Malaria and dengue thrive in areas with high humidity and excessive rainfall
- Before the 1970s, only 9 economies had experienced severe dengue outbreak. Now the disease is endemic in more than 100 economies
- Rising temperatures can also release harmful viruses that have been locked in the permafrost

Improper waste management creates a breeding ground for diseases.



400.000 - 1.000.000 people die annually due to diseases caused by mismanaged waste in developing economies



Mismanaged COVID-19 waste could lead to additional infections

LESSON 2: ADDRESS RISING INEQUALITY

COVID-19 has been hardest on the most vulnerable in our societies: The poor, women, the youth the least educated and skilled, minorities, indigenous peoples, and other vulnerable groups.







Unable to afford healthcare

Lack access to infrastructure and technology

Hold precarious

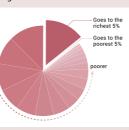
COVID-19 HAS ONLY MADE AN EXISTING PROBLEM WORSE

Decades of economic growth have resulted in increasing affluence and poverty reduction, but its distribution has been far from equitable; In 30 years, more than 50% of income gains have gone to the richest quarter of the population; the poorest quarter got 4%.

Distribution of 30-year income gains

EACH SLICE OF THE PIE WENT TO THE SAME PROPORTION OF THE POPULATION

This pie represents the total increase in incomes between 1990-2018. The slices represent its distribution to equal 5% portions of the population. Over 30 years, the total income pie has increased, but it hasn't exactly been sliced equally



THE YOUTH COULD SUFFER LONG-TERM SCARRING

Disrupting access to education and skills training can scar future career paths resultingin lower wages, fewer career development opportunities and diminished prospects for better jobs.

THE PANDEMIC HAS EXACERBATED EXISTING GENDER INEQUALITIES AS WOMEN ARE MORE LIKELY TO



Be employed in jobs

that require face-to-face

interactions





Be engaged in informal employment with no social protection

Be disproportionately burdened with household chores and unpaid care

LESSON 3: MAKE DIGITAL WORK FOR ALL



E-commerce and digital payment services are helping MSMEs do business while customers remain at home



Households rely on digital platforms for communications purchases and access to services



Public health authorities are using digital tools for COVID-19 contact tracing and monitoring of cases

plastic recycling initiative, to turn recycled plastic into face shields and masks. Nike, the prominent shoe manufacturer, has redirected recycled material, earmarked for the production of new Nike Air soles, into the production of personal protective gear. Batelle, a non-profit institute engaged in scientific research, has developed a way to decontaminate N95 masks using vaporized hydrogen peroxide, thereby allowing masks to be used 20 times over before their quality and safety is compromised.

Businesses could benefit, or even stand to profit significantly, from adopting these and other similar innovations, especially given that prices of raw materials are expected to increase as the pandemic lingers and supply chains are strained.

The Role of Cooperation



Regional cooperation, particularly APEC, will have a key role in the rebuilding process. The COVID-19 pandemic has shown the importance of a coordinated and cooperative response to regional and global crises. Economies will need to share experience and information, develop trust, and build avenues for cooperation and policy coordination. APEC can be the forum where priorities and policies are discussed and commitments are made toward an inclusive, sustainable and resilient Asia-Pacific region

BUT DIGITALIZATION ALSO COMES WITH CHALLENGES



Cybersecurity

and fraud









Consumer protection and privacy

Automation and job precarity

Fake news and

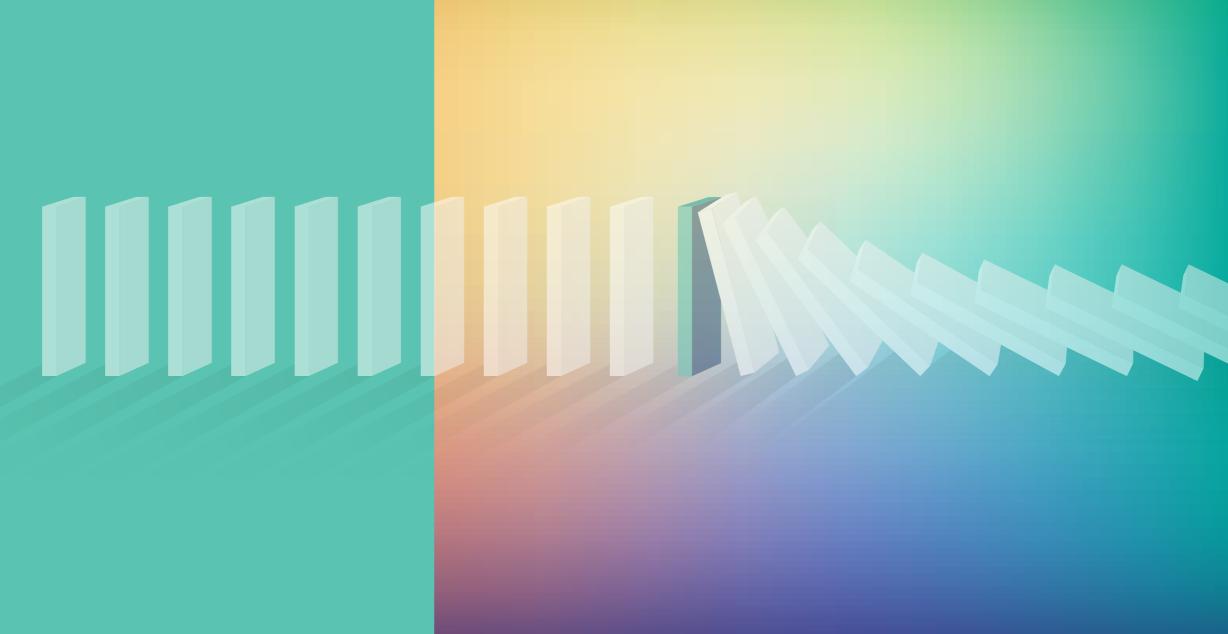
Circular economy. With crisis comes opportunities. The current pandemic provides opportunities to use innovation to adapt to current resource constraints in a sustainable manner. For instance, firms applying circular economy principles have been able to help fill the shortages of critical medical supplies needed in the battle against COVID-19 by adopting innovative and sustainable practices.

The circular economy is an economic model where reusing, repurposing and recycling of materials are built into production and logistics. Under this model, waste is an opportunity.

Some producers of protective and medical equipment are using machines developed by Precious Plastic, an open-source hardware

StatsAPEC is APEC's statistics portal with data dating back to APEC's inception in 1989. It consists of the Key Indicators Database and Bilateral Linkages Database. The Key Indicators Database includes over 120 GDP, trade, financial and socioeconomic indicators, allowing for an analysis of trends across a number of topics. The Bilateral Linkages Database facilitates detailed analysis of bilateral trade flows between APEC economies and within APEC. APEC aggregates are available for most indicators in StatsAPEC, making it easy to examine the region as a whole.

StatsAPEC is available at statistics.apec.org.





Asia-Pacific Economic Cooperation

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