Research Outcomes
Summary of Research Projects 2017

Policy Support Unit
Asia-Pacific Economic Cooperation (APEC) was established in 1989. The 21 Member Economies are Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; the United States; and Viet Nam.

APEC Policy Support Unit (PSU) is the policy research and analysis arm of APEC, comprising openly recruited professionals working together with APEC Senior Officials, committees and fora, in improving the quality of their deliberations and decisions and promoting policies that support the achievement of APEC’s goals, by providing objective and high quality research, analytical capacity and policy support capability.

Research Outcomes is an annual publication of the PSU which provides a summary of research projects that the PSU has undertaken in a year. For past years’ publications, please visit www.apec.org/About-Us/Policy-Support-Unit/. If you have any feedback, please write to us at psugroup@apec.org.
## Contents

### Trade and Investment Liberalization and Facilitation
- APEC’s Bogor Goals Dashboard 2017 .................................................. 2
- Trade of Fishery Products & Fisheries Subsidies in APEC .................. 2
- Import Licensing Regimes: An APEC Snapshot & Considerations for their Use .......................................................... 3
- NTMs in ICT Products .......................................................................... 4
- Sector Studies on Environmental Services (Energy Efficiency Businesses, Environmental Damage Remediation Services, and Renewable Energy) .............................................................. 6
- APEC Services Competitiveness Roadmap (ASCR) Baseline Indicators .... 9
- Investment Facilitation Action Plan (IFAP) Implementation to Facilitate FDI in APEC: Updates in 2016 .................................................. 9
- Facilitating Digital Trade for Inclusive Growth: Key Issues in Promoting Digital Trade in APEC .......................................................... 10
- Promoting E-commerce to Globalize MSMEs ....................................... 12
- Supporting Industry Promotion Policies in APEC (Synthesis Report, and Case Studies on Australia, Mexico and Viet Nam) ....................... 13
- Trends and Developments in Provisions and Outcomes of RTA/FTAs Implemented in 2016 by APEC Economies ................................. 16

### Structural Reform
- APEC’s Ease of Doing Business: Interim Assessment 2015-2016 .......... 21

### Connectivity including Supply Chain Connectivity & Global Supply Chains
- Study on the Application of Global Data Standards for APEC Supply Chain Connectivity (Phases 1 and 2) ................................................. 23
- Peer Review and Capacity Building on APEC Infrastructure Development and Investment: The Philippines .................................................. 25
- Review of External Indicators to Monitor Progress for the APEC Supply Chain Connectivity Framework Action Plan (SCFAP) II .............. 27

### Economic and Financial Analysis
- APEC Regional Trends Analysis
  - May 2017: Globalization: The Good, the Bad, and the Role of Policy ......................................................................................... 28
  - November 2017: Declining Labor Share and the Challenge of Inclusion ...................................................................................... 30

### Sustainable Economic Development
- APEC Women and the Economy Dashboard 2017 .............................. 33
- Partnerships for the Sustainable Development of Cities in the APEC Region ..................................................................................... 34

Download full reports at:
[http://www.apec.org/About-Us/Policy-Support-Unit/PSU-Publications](http://www.apec.org/About-Us/Policy-Support-Unit/PSU-Publications)
The Bogor Goals Dashboard aims to provide easy-to-understand figures to track the advancement in areas critical to promoting greater regional economic integration. It displays a set of harmonized indicators laying out the evolution across time certain aspects of trade and investment liberalization and facilitation in quantitative terms. This Dashboard includes indicators gathered from respectable public sources for the period 2008-2016.

**Findings**

The Dashboard shows progress in trade liberalization in recent years. The APEC average tariff went down from 6.6% to 5.5% between 2008 and 2016. The improvement in tariff levels was explained by both agricultural and non-agricultural products. Similarly, the percentage of products with tariff above 10% declined from 16.2% to 13.4%. In terms of services, there was an increasing number of trade agreements including commitments on bilateral/regional services trade liberalization. On investments, the perception of business rules affecting negatively the arrival of FDI increased across the region.

This policy brief looks at the trend of trade in fishery products as well as various trade measures, including tariffs and non-tariff measures (NTMs), affecting them. It also discusses the current situation of fisheries subsidies within the APEC region and their implications on the sustainability of fish stocks.

**Findings**

**Trade of Fishery Products.** The world trade of fishery products is significant, reaching USD 310.4 billion in 2014. APEC accounted for about half of this amount and its fishery exports grew faster than those of the rest of the world between 2010 and 2014. APEC’s imports of fishery products grew by 6.0% per year in value terms in the same period.

**Trade Measures Affecting Fishery Products.** Implementation of trade measures could affect trade in the fishery sector. Average MFN tariffs for fishery products in the region stands at 6.8%, higher than that for non-agricultural products (4.6%). Besides tariffs, some NTMs also hamper the trade of fishery products and affect the sustainability of fish stocks. According to data from the Global Trade Alert, there are currently 36 NTMs affecting trade of fishery products among APEC economies. Most are in the form of bailout or state aid measures. Some may have a detrimental effect on marine resources as they could encourage overfishing and result in stock depletion.

**Fisheries Subsidies.** While some subsidies could be beneficial by managing fish stocks, others could be detrimental by encouraging overfishing thus affecting the sustainability of fishery resources. According to the Sea Around Us project and Sumaila et al. (2008, 2010, 2013), global fisheries subsidies reached USD 35 billion in 2009 of which 65% was accounted by APEC economies.

**Sustainability of Fisheries Resources.** Estimations of fish stocks indicated that a high level are either overexploited or in a state of collapse in the APEC region. The state of fish stocks around the world also shows worrying signs, as indicated by the global levels of fish stocks under serious risk. These alarming figures highlight the urgency of actions and international cooperation to ensure the sustainability of marine fisheries resources.

**Recommendations**

To move toward sustainable fishing and use of ocean resources, collaboration among international community is essential to address issues such as subsidies or other incentive programs that lead to overfishing. In July 2016, several international organizations such as the UNCTAD, FAO and UNEP jointly proposed a roadmap to end pointless fishing subsidies.
Some of the policies recommendations are:

- Additional efforts in data collection to better understand the nature and extent of fisheries subsidies in order to identify measures that incentivize overfishing.

- Eliminating capacity-enhancing subsidies that encourage overfishing and redirect resources to activities such as fisheries management, R&D and maintenance of marine resources.

- Introducing programs to better monitor the impact of various subsidies programs in order to identify those that have a positive impact in supporting sustainable fishing activities.

- Enhancing transparency, accountability as well as enforcement on fulfilling commitments pledged with various international organizations.

As fish stocks and vessels move across borders and also into international waters, solutions need to be implemented at the global level to improve the sustainability of fish stocks. APEC could lead efforts to address these issues in the multilateral fora and to propose initiatives to find a right balance between the exploitation of fish stocks allowing the production and trade of fishery products, and the long-term sustainability of these natural resources.

**Findings**

**Import Licensing.** Based on the WTO Integrated Trade Intelligence Portal, import licensing in the APEC region has been increasing over the years in spite of a slight drop between 2014 and 2015. A large proportion of import licenses maintained by APEC economies are non-automatic, and largely relate to managing import quantities and product standards. The average number of import licensing regimes per economy in both industrialized and developing economies also went up during the period 2008-2015, with the number higher for the former. In 2015, around 25% of such regimes in APEC focused on the chemicals and allied industries, and 23.8% in food-related sectors.

**Motivations for Implementing an Import Licensing Scheme.** Governments usually cite economic, social and/or administrative reasons to justify the implementation of an import licensing regime. Regimes imposed for economic purposes are mostly to control import quantities in order to protect the local producers and avoid a drop in prices. On some occasions, governments also benefit by collecting fees from importers who apply for such licenses. In the case of social considerations, licensing could be justifiable if they do not introduce an unnecessary distortion to trade. In fact, it can lead to quality assurance and greater consumer confidence since the issuance of the import license means that those products are meeting technical standards and sanitary requirements required by the authorities to be considered safe. Other social considerations are related to the need to control imports and conduct surveillance on certain products, for instance the control of alcohol, tobacco and drugs for public health reasons. Import licensing regimes are also used for administrative reasons; for instance, automatic licenses are usually applied to collect statistics.

**Costs of Import Licensing.** Import licensing regimes can act as a trade barrier. SMEs are amongst the most affected by such regimes; they tend to incur higher costs from import licensing compared to larger firms due to their limited access to information. It is also harder for them to meet the technical requirements for obtaining a license due to high fixed cost of technology and services needed to meet those conditions. This situation is more acute
in developing economies where resources are more limited. Import licenses are generally more trade-restrictive and less transparent than tariffs and could increase the risk of corruption. Several studies have shown that the distortions caused by import licenses are greater than the benefit of the regimes themselves, and most of the benefits from eliminating import licenses tend to accrue to the economy maintaining these measures.

**Recommendations**

The decision of whether to implement an import licensing scheme should be subjected to the “necessity” and “proportionality” tests. The former refers to whether the trade measure is necessary to achieve a policy objective, while the latter refers to whether the measure is the least trade distorting one to achieve the aforementioned objective.

In some cases, the implementation of an import licensing regime might not necessarily be the least trade distortive measure to achieve certain policy objective. In the case of automatic import licenses, it takes time and cost to apply for one and the additional cost will be transferred to consumers in the end. And instead of using these licenses as a means to collect data, customs authorities could obtain similar data directly from information available in import manifests and declarations. Similarly, any concern on imports based on animal, human and plant health or life; environmental reasons; safety grounds; intellectual property; and cultural or moral reasons could be addressed in ways more efficient compared to the application of import licenses. For instance, imported goods could go through simplified customs procedures by using risk assessment techniques to determine the cargo that would be subject to inspection at the port of entry or to ex-post verifications.

If the use of an import licensing regime is still preferred despite its associated costs, it is important to keep in mind the rules and principles of the WTO Agreement on Import Licensing Procedures which seeks to keep import licensing procedures as simple, transparent and predictable as possible to minimize distortions to trade. Recent trade agreements have also included provisions governing the use of import licenses, with the aim of increasing transparency and preventing them from becoming an unnecessary barrier to trade.

Relaxing licensing requirements would facilitate trade flows in the APEC region. APEC should continue to discuss initiatives aimed at improving transparency in import licensing regimes, and to explore good regulatory practices that could help governments achieve their policy objectives without implementing unnecessary trade restrictive measures.

This policy brief provides an insight into the trade of ICT products in the APEC region and the types of NTMs most commonly affecting these products, citing in some cases real examples of how trade flows were affected after the introduction of a specific NTM. Policy alternatives to NTMs are also covered.

**Findings & Recommendations**

**Trade of ICT Products.** Trade of ICT products is significant for APEC. APEC exports grew 4.1% per year between 2007 and 2015 (versus world ICT exports at 2.7% per year), and totaled USD 2.6 trillion in 2015 (around 75% of the world ICT exports). Likewise, during the same period, APEC imports grew at an average annual rate of 4.9% (versus world ICT imports at 3.3% per year), and totaled USD 3.0 trillion in 2015 (accounting for 73% of world ICT imports).

**NTMs in ICT Sector.** In 2002, the WTO Committee of Participants on the Expansion of Trade in Information Technology Products listed a series of NTMs reported by a number of Information Technology Agreement (ITA) participants that could be an unnecessary barrier to trade. Conformity assessment procedures were the most common NTMs, followed closely by standards and regulatory environment. Other measures listed were...
Policy Alternatives to NTMs Affecting ICT Products. There are alternative measures that could help governments achieve their policy objectives in a non-discriminatory and less trade restrictive manner.

- **Conformity assessment procedures**, while important to ensuring that products are safe for consumption, should not be stricter than necessary. These procedures should be less cumbersome for products that represent a low risk. In addition, it would be much cheaper and less of an impediment to trade for companies if authorities recognize the results of conformity assessments in other economies, for instance through mutual recognition of test results.

- If an economy needs to adopt a **standard**, the authorities should seek the opinion of ICT firms and take into account international standards where available, such as those from ISO, IEC and ITU. Mutual recognition of technical standards will facilitate trade and allow foreign products to participate in the domestic market.

- **Import licensing schemes** are reasonable when the benefits outweigh the costs of implementing them and when they are strictly necessary to achieve a policy objective in the least trade distorting manner. If the intention of an import license is based on health and safety concerns, in order to facilitate trade, an alternative might be to use risk assessment techniques at customs to determine if the cargo should be subject to inspection at port of entry or to ex-post verifications. To collect information, authorities could also record information directly from import manifests to substitute the use of such licenses.

- The adoption of **local content requirements** has often been justified as a way to create jobs and support infant industries in order to help them become competitive. However, it is possible to support competitiveness by introducing other measures, such as those endorsed by APEC Ministers in 2013 which include: creation of a business-friendly environment and support of investment infrastructure development; spurring innovation through R&D, research collaboration and effective protection of intellectual property; education and workforce training; and facilitating access to firms, especially SMEs, to supply chains, capital and emerging technologies.

- **Discriminatory export incentives** tend to be expensive for the government in the long run as it encourages lobbying and exposes governments to regulatory capture. If the intent of these incentives is to improve export performance and diversify exports, a more cost-effective way could be by promoting macroeconomic stability and economic openness, together with the development of infrastructure and human resources, as well as the creation of competent export and investment promotion agencies, and making available market information systems.

With tariffs going down, attention should be on NTMs that are affecting trade negatively. APEC was in the forefront of promoting negotiations of the ITA and the extended ITA. In the same way, APEC could find some common ground among its members on NTMs and present initiatives to eliminate or reduce certain practices affecting trade of ICT products at the regional, plurilateral or multilateral level. APEC can play an important role in examining policies that could assist economies to achieve their objectives in a less trade-restrictive manner, and in finding ways to continue promoting transparency in NTMs. Additionally, in the face of technology developments such as the Internet of Things which are increasing the ICT product scope and coverage, APEC can continue to promote discussions on good regulatory practices that cover such developments.
Energy Efficiency Businesses

This study aims to build and enhance understanding of energy efficiency services among APEC economies, with a view to identifying key challenges.

Findings

The APEC region represents approximately 60% of the world’s primary energy demand. Actions taken in the region play a significant role in determining the world’s greenhouse gas emissions. All APEC economies have individual energy or emissions intensity targets and have collectively set a target equivalent to reducing energy intensity by 45% between 2005 and 2035.

Energy efficiency (EE) is the provision of more services per unit of energy consumed. Investment in EE in 2016 stood at USD 231 billion in 2016, an increase of 9% over the past year. It was estimated that at least 70% of this investment is in the form of EE equipment, with the remainder on EE services.

Energy efficiency services include consultancy, energy audits, finance, design, installation, maintenance, training, and monitoring and verification of energy savings. EE service businesses are dispersed in a number of industry categories under the UN Central Product Classification.

Energy Service Providers (ESPs) is an umbrella term referring to commercial or non-profit businesses providing a broad range of energy solutions, while ESCOs or Energy Service Companies, are a type of ESP that receive performance-based compensation depending on energy savings achieved. ESPs face regulatory challenges such as a bias toward the supply side, lack of recognition of the ESP industry and lack of fiscal support to the industry. The industry may also encounter market challenges such as financial and performance risks, high transaction costs, difficulties in obtaining credit, and management challenges like lack of trained personnel, long project cycles, hurdles doing business across borders and competition with in-house EE teams.

The key drivers for EE in APEC economies are:
- National policies and priorities on energy intensity
- Structural factors such as share of industrial sector in economy, innovation, supply chain
- Energy efficiency infrastructure including prevalence of energy management system, presence of ESPs and EE equipment manufacturing firms
- Availability of finance for efficiency improvements to end-users and ESPs.

Environmental Damage Remediation Services

Remediation services encompass the treatment, removal and disposal of contaminated material, typically soil, water and groundwater, building decommissioning and demolition works, and decontamination of workplaces, buildings, vessels or other internal occupied spaces. Goods and services associated with remediation services delivery include technical and scientific consulting, construction and engineering, equipment and chemical manufacture, research and development, and others.

This study provides an overview of the remediation services sector, followed by
details of the sector in each APEC member economy. It then concludes with possible next steps for the development of the sector.

Findings & Recommendations

In the remediation services sector, although there are considerable differences in terms of state of regulations, demand for services, level of awareness and capacity to absorb new service providers across APEC economies, some trends are apparent:

- Soil and groundwater contamination issues in APEC economies are strongly related to the industrialization history of the economies and waste management practices. Legacy contamination from past extractive industries, waste disposal and industrial activities is one of the main causes of contamination-related issues in many of the economies.

- Key driver for the development of the remediation services sector is a robust regulatory framework. Less than half of APEC member economies have specific regulations on management of contaminated land management and/or remediation either at a national level and/or sub-national level, while most of the rest either have regulations under development or have only related non-legally binding guidelines. Some have adopted guidelines or standards from other APEC economies or non-APEC economies.

- Level of technical expertise and maturity of the remediation services sector are typically higher in more industrialized and developed economies where transparent regulations and effective enforcement exist. There is potential for these economies to share and export their expertise to economies which are developing their remediation services sector. Trade in the remediation sector is currently generally limited to the initial site assessment and planning phases of a remediation project, where multinational environmental firms, usually with a local presence, provide technical and scientific consulting services.

- Discovery of legacy contaminated sites in developed and developing economies and the continuing industrialization and pollution in developing economies present opportunities and challenges for the development of the remediation services sector in APEC economies. Opportunities include the potential for increased active soil and groundwater contamination management and corresponding development of the remediation services sector, while challenges hindering the realization of the opportunities include the lack of transparent regulations and effective enforcement.

There is increasing recognition of the negative environmental and socio-economic impacts caused by pollution. Without a viable remediation services sector and corresponding local technical expertise, some APEC economies may find themselves faced with costly clean ups (i.e., higher costs arising from spread of contamination due to lack of management, and lack of local expertise and cheaper technologies), as well as increased socio-economic costs (i.e., impaired or unproductive lands and higher healthcare costs).

With the environmental remediation services market expected to grow in the coming years, there is strong business impetus for developing the sector, at the same time bringing about the development of other associated goods and services. Work on liberalization of trade in the sector would require regulatory authorities in the individual economies to recognize the need to not just liberalize and reduce trade barriers in the sector but also the associated goods and services.

To facilitate the process of developing and putting in place relevant regulations and a systematic approach for contamination management, APEC economies may benefit from working together and facilitating dialogue among themselves, such as sharing from economies with mature remediation services sectors. Economies which are recipients of development funds from international financial institutions with requirements for managing environmental and social risks for high-value projects (which could include contamination management and/or remediation requirement), such as the IFC Performance Standards, could also make use of these international standards either as benchmark or to develop their own national standards.

In many economies, the level of technical expertise in the remediation services sector were not fully investigated as part of this study, mainly due to lack of publically available information and time constraints. Further work to examine the current degree of technical expertise and gaps across the spectrum of remediation and related services would aid in the identification of key services within the remediation sector requiring support. This would then set the stage for trade liberalization and facilitation as well as cooperation in environmental services across APEC economies.
This study seeks to build and enhance understanding of environmental services in the renewable energy (RE) sector, specifically in the power generation sector which uses technologies associated with solar photovoltaics, wind turbines, and hydroelectricity. This includes services in project development and project financing.

Findings & Recommendations

Freer trade in environmental goods and services have considerable potential to promote sustainable development by lowering the costs of preventing and abating pollution as well as meeting targets in mitigating greenhouse gas emissions. Most liberalization efforts in forums such as the WTO and APEC to date have sought to overcome barriers to trade in environmental goods, and less effort has been expended to liberalizing trade in environmental services. It is apparent that the range of services that go into making RE deployment projects viable are much wider than the traditional “core” of environmental services as defined by division 94 in the UN Central Product Classification (CPC) system.

Trade in environmental goods and services are inextricably linked and trade in services such as scientific and technical consulting services, professional services, and construction and engineering services are critical to RE projects in the solar photovoltaic, wind and small hydro sectors. Barriers to trade in RE services slow the deployment of technologies utilizing RE technologies such as solar photovoltaics, wind and hydro-power. The installation and operation of RE equipment can be technically complex processes, and require host economies to possess specific knowledge and skills which are costly to acquire.

Even though RE services have much evolved over the past few decades with the development of new RE technologies such as those considered in this study, the traditional definition of environmental services offered by municipal authorities that emerged out of the WTO Services Sectoral Classification List (the “W/120” list) drawn up in 1991 for the purpose of negotiating the General Agreement on Trade in Services (GATS) (such as water treatment, collection of hazardous and non-hazardous waste, remediation, sanitation and similar services) has remained without any updates in the classification systems. Thus, with respect to the RE sector focused in this study, one recent report remarked that “the only explicit reference made to renewable energy in version 2 of the CPC is found in ‘engineering services for power projects’ (CPC 2 83324)”.

Economies have generally made relatively few commitments in environmental services in GATS, and many economies have made no commitments under Mode 1. More liberalization of trade in RE services seems to have occurred in various regional trade agreements (RTAs). According to one OECD study, about 40% of all market-access commitments for environmental services in surveyed RTAs had been improvements on prior GATS commitments. Given the rapid growth in the RE sector and the increasing importance of trade in RE services, it is to be hoped that increased efforts are applied in three key directions.

- Trade policy analysts and negotiators need to revise (and expand) the scope of what ought to be liberalized under the category of “environmental services”, in keeping with the fast-evolving developments in the RE sector. Many services that are not currently considered as “environmental” are in fact critical inputs to RE projects. It is important that negotiators consider how these services “cluster” and constitute an interrelated set that cohere and play an integral role in RE projects.

- More empirical evidence and analysis need to be marshalled to help negotiators and policymakers be aware of the benefits of freer trade in RE services. An example of this is along the lines of work initiated by the OECD to quantify the restrictions on trade in services.

- A need to push liberalization efforts in Modes 3 and 4, both of which hold great potential for encouraging SMEs in many emerging economies to fully participate in global value chains related to RE goods
and services. Rapid changes in IT and RE technologies also suggest that Mode 1 may increasingly be important to trade in RE services, as remote sensing and other IT-based “real time” services become increasingly common across borders.

Liberalization of trade in RE services benefit both importers and exporters, given the evidence that trade restrictions on services undermine the competitiveness of firms of the host economies while increasing the costs of pollution abatement and environmental improvement. Ultimately, international trade in services and the movement of people need to be liberalized in a coherent and coordinated manner for the benefit of economies in their development and environmental goals.

The APEC Services Competitiveness Roadmap (ASCR) and its accompanying Implementation Plan contain APEC-wide actions and mutually agreed overarching targets to be achieved by 2025. This report is prepared to facilitate the implementation of ASCR and to monitor its progress. It contains a compilation of baseline indicators and measures corresponding to each APEC-wide action and overarching targets. Accompanying the report is a detailed database on the baseline indicators and measures.

This report analyzes the implementation of IFAP for the period 2015-2016, primarily from the progress reports submitted by APEC implementing economies and in part from secondary sources and comparative measures such as the World Bank's Doing Business (DB) reports.

**Findings & Recommendations**

**FDI.** Investment trends in the APEC region show the relative strength of FDI inflows into APEC economies, with M&A sales dominant while greenfield investments remain an important component. The continued inflow of FDI into APEC, amid weakened growth as a legacy of the 2008 global financial crisis, reflects investors’ optimism, underpinned by strong economic fundamentals and a general leaning toward investment-friendly measures. Global FDI flows, particularly in 2015, have been surprisingly robust, given global economic uncertainty and trade slowdown.

**IFAP.** APEC economies should continue their efforts to facilitate productive investment, both foreign and domestic. The IFAP principles launched in 2008 still serve as a useful guide. As reported by APEC implementing economies, specific actions have been undertaken along the three priority themes of e-transparency, reducing investor risk and simplifying business regulation. These include the establishment of single windows providing one-stop and one-window service for investment application and registration; the provision of timely and relevant advice on changes in regulations, procedures and requirements; the availability of more efficient means of resolving disputes; the adoption of new technologies; and the streamlining of registration and licensing systems. There remains a need to continually look for new ways to improve the business and regulatory environment by implementing actions based on these priority themes.

**Next steps.** There is room for significant improvements, especially in making investment-related information available online; protecting investors by instituting relevant laws and enhancing the clarity of existing regulations; as well as streamlining registration and licensing requirements and
Facilitating Digital Trade for Inclusive Growth: Key Issues in Promoting Digital Trade in APEC

Series: Issues Paper No. 12
Publication Number: APEC#216-SE-01.16
Published Date: April 2017

This paper discusses a framework for understanding the digital economy using a value chain approach. It discusses the opportunities spawned by digital technologies as well as the challenges and risks to various layers of the internet ecosystem. The paper also tackles the enablers of growth in digital economy, and discusses the limitations of existing WTO rules for trade in digital products and emerging rules on e-commerce from various preferential trade agreements.

Findings & Recommendations

Internet value chain. The paper describes the internet value chain using the AT Kearney model, which breaks it into five main segments: 1) creation of content rights, 2) online services, 3) enabling technology-servicestext went here, 4) connectivity, and 5) user interface.

Opportunities spawned by the internet. Many entrepreneurial business ideas have become realities thanks to the internet. The internet expands the market for SME products, provides market intelligence and improves efficiency. Enterprising individuals and SMEs can use e-commerce platforms as sales channels to facilitate international economic exchange and enter overseas markets. The internet also helps in reducing costs for SMEs. Apart from SMEs, the internet facilitates the inclusion of the elderly and benefits people to have control over their own time or not to be confined to a specific location. Digital democracy is another benefit from the internet. The adoption of digital technologies in the public sector has also transformed government services.

Challenges in the digital economy. Benefits aside, the internet has raised concerns such as on the loss of privacy, the lack of security, or the potential displacement of many jobs either through artificial intelligence (AI) or nearshoring and emerging onshoring strategies of multinational firms. The emergence of powerful and dominant technology businesses, the loss of tax revenues due to greater ease in profit shifting especially by multinational technology firms, and increased difficulty in authenticating where the real value originated or was generated are additional reasons for some economies’ unease. To understand the multiple challenges in the digital economy, the paper looks at the five layers of the internet ecosystem: infrastructure, logical, application, content, economic and social layers, as well as governance layer that affects the other five.
**Enablers of growth in digital age.** The factors influencing the ability of economies to fully participate in digital trade can be categorized into three broad areas, namely those pertaining to: 1) infrastructure, 2) factors including regulations and availability of ICT skills that facilitate the supply of internet and/or digital services, and 3) factors that facilitate the access or demand of internet services. Based on these factors, an ‘enablers’ ranking index is built which can be correlated with indicators of the size of the digital economy such as internet penetration and digital intensity. The implication of the result is that progress in improving ‘enablers’ can translate to a greater participation in the digital economy and economic growth.

**Evolution of E-commerce rules in trade agreements.** There is work to be done to improve the WTO rules. Services rules or GATS, in particular, were written prior to the wide use of digital products, smart objects and Internet of Things and a host of new but now common online services. It was written at a time when the delineation between goods and services was more clear-cut. One of the perennial issues that has stymied progress in e-commerce discussion at the WTO is the classification of digital products. Most WTO members agree that services delivered electronically such as professional services are to be governed by GATS. But what about digital products that have traditionally been traded on a physical carrier medium but are now traded electronically?

While the debate on whether digital products should be classified as goods or services at the WTO continues, FTAs moved forward by: 1) defining digital products, first as ‘products that are digitally encoded and transmitted electronically’ (for example, US–Chile), and later expanding the definition to include ‘digitally-encoded products that are fixed on physical carriers’ (US–Singapore, US–Australia, Korea–Singapore), and 2) deciding to limit duties on and discrimination against digital products. By limiting discrimination against digital products, many FTAs adopted the principle of technological neutrality (i.e., a product is the same regardless if delivered offline or electronically).

**Recommendations**

**Capacity building.** APEC economies are at different stages of development. The digital divide between developed and developing APEC economies is evident particularly with regard to infrastructure and human resources, as well as in their capacity in privacy legislation and enforcement. APEC could help promote digital trade in the region in the following ways:

- Continue trade policy dialogues with policymakers, the research community, other international organizations and the private sector that carry the burden of compliance as well as reap the benefits from digital trade. Among the suggested topics are opportunities and risks in the digital economy; emerging data regulations and rules in trade agreements; net neutrality; platform economics, competition policy, systemic risks; fiscal taxation of digital businesses; mutual legal assistance treaties; impact of digital transformation on jobs and work; and allocation of liabilities.

- Continue allocating capacity building resources for APEC’s work in trade facilitation and other complementary trade policies to e-commerce.

- Capacity building on improving the investment environment to accelerate bridging the digital infrastructure divide.

- Build understanding on why payments’ infrastructure and people’s access to it differ across economies, what factors help in the use of bank accounts or credit cards, and how APEC can improve financial inclusion.

- Increase information technology literacy since this is a critical prerequisite for participation in digital trade. APEC can build on the success of the APEC Digital Opportunity Centers, an initiative by Chinese Taipei to provide basic computer and internet access training. Economies can also look at ways to enhance digital literacy at an early age, especially in rural areas.

The paper is not an exhaustive discussion of the issues in the internet and digital economy but it highlights the need for further dialogue, especially between policymakers, the private sector as well as other stakeholders that
Trade & Investment Liberalization & Facilitation

influence the governance across the complex layers of the internet. Sustained work on this topic would help paint a better picture of the risks and their impact and cost, and hopefully avert the fragmentation of the internet.

Promoting E-commerce to Globalize MSMEs
Publication Number: APEC#217-SE-01.29
Published Date: November 2017
Link: https://www.apec.org/Publications/2017/11/Promoting-E-commerce-to-Globalize-MSMEs

This study looks at the constraints faced by SMEs to participate in e-commerce, particularly cross-border e-commerce, drawing from focused group discussions that were conducted among e-commerce stakeholders in five economies (Brunei Darussalam; China; Malaysia; Korea; and Chinese Taipei).

Findings & Recommendations

The case studies gave a sketch of the e-commerce ecosystem and the multiple stakeholders involved that help make the system work smoothly and efficiently. Regulations that adversely affect any of the players in the ecosystem impact the whole, including the buyers and sellers, some of whom are SMEs. Still few SMEs are able to take advantage of the potential of e-commerce. In Malaysia, less than 26% of SMEs are selling online. Many lack awareness of business possibilities through e-commerce and even lack basic business skills such as knowledge of excel. Even SMEs that have some years of experience selling online need more tailored training in e-commerce selling strategy, in branding and packaging their products, in the smart use of videos or pictures for online marketing, as well as appropriate ad words. Online business is more demanding with respect to quality, not only of the product itself but also how they are presented in the web.

Initial introductions to e-commerce for SMEs usually happen through social media like Facebook or Instagram. But SMEs have problems scaling up once business picks up. Value added service providers, such as inventory management application providers or web ‘decorators’ help SMEs transition to a more commercialized setting as in technology-enabled marketplace platforms. But joining the latter has its own challenges.

Marketplace e-commerce platforms facilitate access to a wider market, and particularly in the case of cross-border trade, provide the necessary regulatory information collection that SMEs need to sell abroad. The complexity of regulations and the disproportionate cost in money and time to collect, understand and meet these regulations is a major hurdle for SMEs. Marketplace platforms partly provide the necessary minimum information by already limiting the products that can be sold in specific economies through the websites. But SMEs still face the challenge of meeting requirements on sustainability, and industry and product standards.

While it is relatively easy to join marketplace platforms catered to the SMEs’ own domestic market, it is difficult to list themselves in platforms located in foreign markets. Most economies require that listed sellers on platforms have local business registration, a condition that SMEs would be hard pressed in complying in other markets. Aggregators or intermediaries, including the platform itself, can help solve this problem because they have the financial capacity to do multiple local business registrations. SMEs can, in this case, act as suppliers to these intermediaries without the need to list themselves independently.

In theory, SMEs need not list themselves in foreign market platforms to access those markets because foreign buyers can find them through their domestic platforms. In fact, this happens to Korean sellers who are found by consumers purposely looking for Korean products like cosmetics and search them through Korean marketplace platforms like Gmarket. This requires that buyers anywhere are not blocked from accessing any e-commerce website in any economy. This also requires that the marketplace platform itself is well-known enough and has significant traffic so they are found in engine searches. In practice, however, domestic buyers prefer buying through the domestic marketplace platform, for reasons of language and shipping cost.

Logistics cost is a significant portion of e-commerce cost. SMEs shipping parcels abroad will not be competitive, unless they have a unique product that buyers are
willing to get despite the high shipping cost. To be competitive, SMEs need volume which is obtained by using intermediaries or aggregators who can negotiate better shipping discounts, or by using the logistics arranged by the marketplace platform operator. Payment service providers are another important link in the chain. One case study, Brunei Darussalam, highlights the disadvantage brought to sellers by the lack of available payment gateway like Paypal which many international online shoppers prefer to use for payment.

Good digital infrastructures including ICT, payment services, postal services and others are important for the development of e-commerce and internationalization of SMEs. Affordable broadband connection helps access to the internet and fosters increased awareness of e-commerce. But just as important are the regulatory infrastructures like transparent regulations, expeditious customs clearance through for example electronic single window, and overall facilitative business environment starting from business registration to taxation to application of international standards.

Regular dialogues in APEC between various regulators and market players are useful to understand emerging technology trends. As well, it is important to hear policy developments that may be useful to replicate in other economies. For example, China’s experience of digital free trade zones may provide lessons for others.

Supporting Industry Promotion Policies in APEC

Supporting industry, in its broadest sense, refers to manufacturers and suppliers of raw materials, capital goods and intermediate goods as well as production services to user firms. Supporting industry is an integral part of any manufacturing value chain, because unless user firms internalize all their activities including the production of every raw materials and capital goods, they would need to source them externally at some stage. This is particularly so in the current globalized world, where improvements in technology and logistics have made it more cost-effective for firms to be focusing only on activities that they have comparative advantage in, and outsource the rest. Yet, the frontier is not stationary. Continuous change in production patterns and advancements of technology have posed both opportunities and challenges to supporting industries.

This study examines the policy experiences of promoting supporting industry through case studies conducted on three APEC economies (Australia; Mexico; and Viet Nam). In addition to individual economy reports, these policy experiences are synthesized into a synthesis report which distils the key takeaways and what can be done to improve the quality of policies for promoting supporting industry in APEC.
Findings & Recommendations

Motivations for development of supporting industry. Evidence from the three case studies showed that there are variations in the motivations behind an economy’s interest in developing or enhancing their supporting industry which, to a certain extent, can be associated to the level of development of the analyzed economies.

- For Viet Nam, a lower-middle income economy, progress and changing landscape mean that the economy has to complement its attractiveness as a low-cost labor location with other factors such as the competitiveness of its supporting industry.

- For Mexico, an upper middle income economy, competition from others in terms of cost and their engagement in the same sectors means that the economy has to focus on more complex activities within the same sectors and/or venture into even higher value sectors.

- For Australia, a high income economy, inability to compete on costs means that the economy has to transform its existing supporting industry firms such that they are able to contribute to the value chains by being at the forefront of emerging trends/technological frontier.

Besides development status, there exist other factors intrinsic to each economy which can also explain their motivations for wanting to develop their supporting industries. Insights from the case study should therefore be applied together with economy-specific considerations.

Policies for development of supporting industry. While the three economies have taken different approaches to develop their supporting industries, there are still parallels that can be observed.

Policies for SME development play an integral role in the development of supporting industries as most firms in supporting industries are SMEs, although it should be made clear that not all SMEs are supporting industries (and vice versa). Indeed, among the three case studies, only one made the distinction between policies for SME development and that for supporting industry. Even then, the two sets of policies are fairly similar. In the other two case studies, policies for supporting industry development are generally part of policies for SME development. One way of classifying policies for development of supporting industry is to group them into either supply-side or demand-side policies.

- Supply-side policies are focused on enhancing the capacity of firms to increase their participation in value chains. Examples of such policies from the case studies include those formulated to promote R&D activities, to facilitate human resource development, and to provide financial incentives for various purposes.

- Demand-side policies entail linking supporting industry firms to larger markets, and hence widening their customer base. Examples from the case studies include business matching initiatives, as well as creating demand through regulations and government procurement policies.
Policies for supporting industry development are often accompanied by efforts to improve the general business environment, which have broader implications as they aim to create a conducive macro-environment for all businesses.

**Key takeaways across case studies.** The richness and wide variation of insights make it challenging to generalize policy recommendations which are applicable across all APEC member economies. Nevertheless, some common key takeaways stand out and these include the importance of:

- **Exploring comprehensive range of policies.** Supporting industry firms face many different challenges in integrating into value chains, and a single firm is likely to face multiple challenges simultaneously. The range of challenges make it imperative that policymakers explore various policy options available to firms.

- **Balancing sectoral nuances with flexibility.** Different sectors exhibit distinctive characteristics in terms of their value chains, evolving pace of industrial trends, sophistication of technology, and intensity of capital requirements among others. Thus, the requirements and needs of sectors vary and one-size-fits-all approach may not work.

- **Engaging with multiple stakeholders.** Different stakeholders bring diverse perspectives to the table and can contribute at various stages of the process of supporting industry development. The involvement of multiple stakeholders are therefore more likely to lead to better policies as they have incorporated the collective wisdom of broader group.

- **Timely policy improvements (in terms of content, awareness, implementation and monitoring).** Content that may have been appropriate at the time of formulation may become less useful over time. Awareness among potential beneficiaries is important to achieve the intended objectives of the policies. Implementation is critical as it operationalizes policies and enables access. Monitoring and evaluation lies at the crux as they provide the basis for policy improvement process.

- **Considering SMEs’ inherent challenges.** Despite the notable contributions of SMEs across many measures such as number of total firms operating in APEC region and source of employment, the extent of their participation in value chains remains relatively low. If the targeted beneficiaries of supporting industry policies include SMEs, then it is critical that these policies and their accompanying institutional structure take SMEs’ inherent challenges into account.

- **Balancing economy-wide and local priorities.** The challenges faced at national and local levels may be different, and such differences may lead to variations in how policies are being operationalized. Policymakers should attempt to balance national and local priorities so as to overcome or minimize issues such as lower than expected awareness and access to policies.

- **Enhancing general business environment.** Policies that lead to a conducive business environment, although not specifically targeting supporting industries, are critical for the development of firms in supporting industries.

**Way forward.** APEC can build on the insights from the study and contribute to the endeavor of improving the quality of policies for promoting supporting industry by:

- **Facilitating information sharing/exchange on relevant policies, particularly in areas such as how such policies have been developed, what the mechanisms to raise awareness are, as well as how policy implementations and their impacts are monitored and evaluated.** Such platforms may serve to encourage deeper discussions on how policies can be bolstered and also be used as avenue to understand how policies for development of supporting industry can assist economies in overcoming middle income trap.

- **Formulating policy guidelines to serve as a reference on aspects that economies may wish to consider when developing policies to promote supporting industries.** These can include the common key takeaways discussed in this synthesis report, as well as inputs from member economies based on their experiences.

- **Organizing capacity building activities to assist member economies in the development of their supporting industry.** These can include workshops to enhance the capability of policymakers, as well as training assistance provided to supporting industry firms in developing economies by experts from international organizations, academia, and developed economies.
This annual report contributes to the APEC information sharing mechanism on RTA/FTAs, an initiative to enhance transparency among the trade agreements.

Findings

- Since the 2000s, there has been an increasing trend in the number of RTA/FTAs that APEC economies have signed or enforced within the APEC region and with the world. As of December 2016, 165 RTA/FTAs had been signed by at least one APEC member economy. 156 RTA/FTAs of them were already in force, out of which 62 were intra-APEC agreements.

- From the trade perspective, intra-APEC integration has been strengthening for the last two decades. Between 1996 and 2016, the number of intra-APEC trade pairings with an RTA/FTA in force went up from 13% to 48%. Similarly, the share of intra-APEC trade flows by RTA/FTA partners increased from 30% to 64% during the same period.

- Trade integration for APEC economies has not only increased within APEC, but also with the rest of the world. From the export side, this share increased from 23.1% to 49.4% of total APEC exports; while for the import side, it increased from 21.2% to 46% of total APEC imports. Overall, the share of trade with RTA/FTA partners has risen for most APEC economies between 1996 and 2016.

- The structure of the RTA/FTAs implemented in 2016 corroborates the trend that recent agreements have covered, not just disciplines on trade in goods but also on services and investments.

- The Investment chapters in the four RTA/FTAs analyzed in this report (Japan-Mongolia; Korea-Colombia; Pacific Alliance; and Viet Nam-Eurasian Economic Union) are WTO-plus as they include a broad range of disciplines beyond those appearing in the WTO Agreement on Trade-Related Investment Matters. All of them make liberalization commitments through the use of a negative list, provide for national treatment and MFN at the post-establishment level, prohibit the use of certain performance requirements, guarantee the free transfer of capital without delay, consider environmental concerns to attract investments and include clauses concerning the application of investor-state dispute settlement (ISDS).

- However, the study found some differences concerning the Investment chapters in areas such as the inclusion of national treatment and MFN treatment at the pre-establishment level; the recognition of fair and equitable treatment and minimum standard of treatment in accordance to international customary law or domestic laws and regulations; the application of performance requirements to technology transfers; exceptions to free transfers of capital in cases of problems with the balance of payments; and diverging procedures regarding ISDS. In general, some of these contrasts may represent a challenge to APEC economies when pursuing new trade agreements, particularly those involving a greater number of parties.

- The Customs chapters include provisions in most disciplines that appear in the APEC Model Measures for RTA/FTAs on Customs Administration and Trade Facilitation. While the scope of the chapters may differ among the four RTA/FTAs, there are similarities in the areas of transparency concerning customs-related laws and regulations and the acknowledgement of the importance of using information technology systems to facilitate trade.

- Differences in the Customs chapters
relate to the requirements in submitting documentation, the time to complete certain procedures, as well as the level of cooperation among RTA/FTA partners. Nonetheless, these differences may not necessarily represent an obstacle in negotiating a regional agreement such as the Free Trade Area of the Asia Pacific (FTAAP), as the existing RTA/FTAs generally share similar objectives in this area.

- Technological advancements have been introducing new ways to deal with trade transactions. RTA/FTAs are also adapting to this new environment, with most RTA/FTAs put in force in recent years including chapters or sections on E-commerce. These E-commerce chapters contain binding commitments which include not charging customs duties on electronic transmissions. However, in some cases, these commitments do not have the same depth as suggested by the APEC Model Measures for RTA/FTAs.

- In general, all agreements acknowledge the growing importance of E-commerce to achieve economic growth and include relatively similar clauses regarding consumer protection and paperless trade. Most agreements also recognize the importance of avoiding the implementation of unnecessary barriers affecting E-commerce transactions.

- However, there are divergences among the E-Commerce chapters which could become a concern if APEC economies were to negotiate a comprehensive regional trade agreement. Some differences are related to the definition of digital products; the scope of application of E-commerce provisions; the use of national treatment and MFN treatment for digital products; the binding nature of provisions on electronic authentication and digital certificates; and the inclusion of clauses concerning localization of computing facilities and source codes.

- As for the Government Procurement chapters, not all agreements include chapters with binding provisions. However, many of the provisions included in the agreements with binding commitments on government procurement are based on those in the WTO Government Procurement Agreement. Looking at any process toward the FTAAP, the main difficulty in negotiating a Government Procurement chapter would be deciding if the agreement is comprehensive with binding provisions.

- One of the differences among Government Procurement chapters with binding provisions concerns market access conditions. Thresholds establishing the minimum value of public purchases open for suppliers from RTA/FTA counterparts differ across agreements. Furthermore, the number of public institutions covered by these chapters at the central, sub-central and other levels vary and reciprocal restrictions in market access are found in some agreements.
An annual flagship report by the Economic Committee, the 2017 APEC Economic Policy Report on Structural Reform and Human Capital Development begins with a discussion on structural unemployment caused by fundamental changes in an economy and new technologies before it reviews the regulatory and policy issues affecting the labor market and some of the human capital challenges facing the APEC region. The report also provides policy recommendations for structural reforms that can be implemented to strengthen human capital at all stages of development.

**Findings**

- Currently many APEC economies are wrestling with structural unemployment, which is caused by structural changes in an economy such as shifting labor demand patterns (e.g., due to affluence, capital accumulation, urbanization, international trade or changes in technology). At the same time, economies often face a mismatch between the skills of workers looking for work and the skills required by emerging job opportunities.

- In their Individual Economy Reports, APEC economies identify skills mismatch as a key challenge in their labor markets. Young workers are not always getting the right skills to prepare them for employment in a fast-changing market, leading to high levels of youth unemployment in several economies. Meanwhile, aging populations mean older workers need to continue working while learning new skills as there are insufficient newly trained young workers to replace them. Economies face challenges in improving skills development and providing lifelong learning opportunities to increase productivity and enhance employability. Increasing labor force participation of youth, women, minorities, and other disadvantaged groups is a continuing effort among APEC economies.

- Empirical data show some gaps in human capital development in the APEC region. About a third of APEC economies have net enrolment rates in secondary school below 60%. Unemployment rates among youth aged 15-25 were greater than 10% in 13 of APEC’s 21 economies in 2015. Moreover, up to 30% of employed workers in the region are own-account workers or unpaid family workers. Meanwhile, surveys of formal sector employers report difficulties in finding skilled workers to fill job openings, pointing to a lack of workers with adequate technical skills.

- Addressing structural unemployment and skills mismatches will depend on each economy’s context and situation. Economies at different levels of income and development will need to focus on different aspects of skills training, labor market regulation, and social protection.

- Basic skills—i.e., literacy and numeracy as well as comprehension and problem solving—are necessary for the development of a skilled workforce. Economies need to improve access to and quality of education and training, including for disadvantaged groups. However, as enrollment and completion rates for primary and secondary education approach 100%, greater focus can be given to skills development and upgrading.

- Unilateral structural reforms that promote human capital development can be instrumental in overcoming these challenges. In many cases it will be optimal to reform labor market regulations and legislation to ensure greater alignment with the need of employers and the capabilities of workers. Careful analysis
and policymaking are needed to ensure that workers are compensated fairly and work in humane and safe environments while employers are not discouraged from hiring workers due to excessive costs and regulations.

- Crucial in the long run to addressing structural unemployment is the holistic development of active labor market policies (ALMPs). ALMPs are the coordination mechanism that link various aspects of skills training and development, on one hand, and job search and skills matching, on the other. The development of ALMPs would involve enhancing labor market information systems, reforming labor market regulations, and developing skills definitions and certifications, among others. For this approach, direct engagement with the private sector—which is best informed on the skills required by the market—will be critical.

- Key to having effective ALMPs is delivering timely and accurate labor market information to the sectors that need it and having a mechanism to efficiently match workers with employers. Data on skills needed by the market can inform education and training systems on areas of skills development that need more focus. Meanwhile, employment centers can serve as a mechanism that will not only deliver social protection (e.g., unemployment benefits) but also provide information on job opportunities, incentives for job search and training, and matching with prospective employers.

- In addition to unilateral structural reforms and policy development, there are also many important avenues for regional cooperation on human capital development. Knowledge sharing and capacity building provide opportunities for economies to learn from each other and find solutions to common problems. People-to-people connectivity could be enhanced through increased efforts at labor mobility and cross-border regulatory coherence—these efforts are all the more important in light of the cross-border impacts of globalization and digital technology. APEC economies could also consider greater cooperation on cross-border education and training exchange to enhance skills development in the region.
**Structural Reform**

**Recommendations**

- **Improve access to and quality of education and training.** This is especially important for excluded groups and regions. Improving the quality of education should be a continuing process and intensify once 100% enrollment in primary school has been achieved. Expansion of capacity in secondary schools and lifelong training programs should be accelerated as primary enrollment gets to 100%. Categories of expansion should be coordinated with apparent and forecast skill requirements and geared toward inclusion (in coordination with an ALMP plan as discussed below).

- **Develop labor and educational reforms with a view to reaching appropriate ALMPs.** ALMPs coordinate all aspects of skills and employment and the policies suggested below could each be a part of a fully functional ALMP. Coordination of various policies and actions on skills development and employment—e.g., training and education, unemployment compensation, job vacancies, job search and matching, retraining for redundant workers, and training to upgrade skills—can improve labor productivity, allocation, and utilization while contributing to inclusive growth.

- **Involves private sector in training and skills development.** The private sector has an important role to play in skills development of the workforce and is the best informed on their labor market needs. Advisory committees could advise officials on skills abundance and shortages, needed additional training facilities, expectations on growth areas, course content, etc. Where appropriate, apprenticeships could be encouraged with financial support for workers, and perhaps even for businesses that hire and retain those they train.

- **Reform labor market regulations and protection as needed.** APEC economies have committed to ensuring worker protections and rights; thus, in line with these commitments, reforms need to be pursued in accordance with internationally agreed and recognized fundamental principles of rights at work. Nevertheless, economies should be mindful not to over-regulate their labor market. For example, policy reforms may be established to ensure that minimum wages, employees’ rights to leave, hours of work, and other labor regulations guarantee fair compensation and safe working conditions. Yet, economies would want to structure these reforms so as not to induce shifts to the informal sector or discourage job creation.

- **Develop and improve data on all aspects of the labor market.** Developing timely and accurate data on the labor market is an important step toward effective ALMPs. In addition to data from labor force surveys, data on job vacancies and redundancies from employers, data on qualification and standards that can be shared and disseminated, and other data will need to be regularly collected to inform policymakers, educators, and labor markets.

- **Develop definitions of skills and appropriate certification mechanisms.** Having common definitions of skills is crucial so that employers and employees can be better informed as to job matching needs and as an input to ALMPs. These definitions are also an important input for education and training systems so they can develop appropriate curricula and pedagogies and issue certifications that are relevant to labor market needs.

- **Enhance social protection and safety nets for all, with an emphasis on inclusion.** Social protection and safety net programs play a crucial role in helping workers and households adapt to cyclical and structural unemployment. They also provide opportunities for unemployed workers to search for appropriate jobs and invest in human capital. Social protection and safety nets need to be enhanced while taking into account both the benefits and the costs. Linking unemployment benefits to job search and training or retraining as needed, in economies where these benefits exist, can improve outcomes for workers, employers, and the economy. To remain sustainable and responsive, programs need to be adaptable to changing technologies, employment relationships, and demographic trends.
• Establish employment centers, especially in areas where information is poor and where exclusion is a significant issue, and provide support for displaced workers and those at risk of displacement due to structural unemployment. This should be coordinated as a significant step toward a full ALMP, with unemployment benefits conditional on job search or retraining as agreed with a counselor. Information from employers can be disseminated through employment centers. With better information flows, periods of unemployment post-training or after redundancy can be significantly reduced, with simultaneous benefits to inclusion and economic growth.

• Improve people-to-people connectivity through cross-border training exchange, labor mobility, and regulatory coherence. Economies can consider upgrading cooperation on people-to-people connectivity in line with current commitments. As globalization and digital technologies are increasingly making labor markets international, cooperation on labor mobility and employment regulatory coherence becomes vital. APEC economies could also consider cooperation on cross-border education exchange—including for technical and vocational education and training, apprenticeships, and teacher training—to enhance skills development capacity building in the region.

Using the World Bank’s Doing Business indicators in the five areas and their corresponding values in 2015 as baseline, this assessment examines whether APEC’s combined performance in 2016 is on track to meet the overall target of 10% improvement across the priority areas for the period 2016-2018.

Findings & Recommendations

An examination of APEC’s average values in the indicators of the five priority areas shows that APEC’s combined progress in 2016 was equal to 3.6%, exceeding the pro-rata target of 3.3%. The greatest progress was recorded in Getting Credit (10.5%), which can be explained by an improvement in the strength of legal rights and depth of credit information in the APEC region. The average coverage of adult population with credit information available in public or private credit registries/bureaus increased from 74.3% to 75.3% in 2016.

APEC vs. Rest of the World: Overall Progress in EoDB Initiative (Average Values, Year 2016)

<table>
<thead>
<tr>
<th>Priority Area</th>
<th>APEC</th>
<th>Rest of the World</th>
<th>Pro-Rata Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a Business</td>
<td>4.4</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Dealing with Construction Permits</td>
<td>1.2</td>
<td>0.9</td>
<td>3.3</td>
</tr>
<tr>
<td>Getting Credit</td>
<td>10.5</td>
<td>2.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Trading Across Borders</td>
<td>1.6</td>
<td>0.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Enforcing Contracts</td>
<td>0.5</td>
<td>0.2</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Overall Progress</strong></td>
<td><strong>3.6</strong></td>
<td><strong>1.3</strong></td>
<td><strong>3.3</strong></td>
</tr>
</tbody>
</table>

Note: Figures in percentages. Improvements are shown in positive values
Another area which made remarkable progress was Starting a Business (4.4%). Only one APEC economy still required a paid-in minimum capital as a condition to start a business. Average time to start a business in APEC also went down from 15.3 to 14 days.

Not much progress was seen in the average values of other areas. In the case of Dealing with Construction Permits, this was due to a lack of significant progress in reducing procedures, time and cost to obtain a permit. Regarding Trading Across Borders and Enforcing Contracts, the challenges found during the first EoDB initiative (2010-2015) remained, such as limited progress in reducing the cost to trade and difficulties in simplifying paperwork to enforce contracts. Low improvement rates in these two areas may be explained by the complexity in implementing structural reforms, as changes in the judiciary and trading system usually require the approval of executive and legislative branches.

In terms of median values, APEC’s collective improvement in 2016 was 1.4%. The area of Getting Credit reported most of the progress (10.6%) while the rest reported negligible progress (Trading Across Borders), no change (Starting a Business and Enforcing Contracts) or a deterioration in their median values (Dealing with Construction Permits). In many of these cases, the average progress in these priority areas’ indicators was explained by few APEC economies, thus the scant progress in the APEC region from the median perspective.

So far, APEC is on pace to meet the 10% improvement target by 2018. Nevertheless, it will be important to intensify efforts in continuing reforms in order to make doing business in the APEC region easier, faster and cheaper. The current progress is mostly explained by efforts made in one priority area. There is still room for improvement and APEC could emphasize capacity building activities, particularly in those areas with little or no progress. In this regard, the exchange of information as well as sharing of best practices and experience could provide APEC economies with a better understanding of the challenges and possible options to resolve existing problems. Likewise, the preparation of diagnostic studies are important tools to identify bottlenecks and provide policy recommendations to improve conditions for doing business.

### APEC vs. Rest of the World: Overall Progress in EoDB Initiative (Median Values, Year 2016)

<table>
<thead>
<tr>
<th>Priority Area</th>
<th>APEC</th>
<th>Rest of the World</th>
<th>Pro-Rata Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a Business</td>
<td>0.0</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Dealing with Construction Permits</td>
<td>-4.5</td>
<td>2.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Getting Credit</td>
<td>10.6</td>
<td>0.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Trading Across Borders</td>
<td>0.9</td>
<td>1.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Enforcing Contracts</td>
<td>0.0</td>
<td>0.0</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Overall Progress</strong></td>
<td><strong>1.4</strong></td>
<td><strong>1.4</strong></td>
<td><strong>3.3</strong></td>
</tr>
</tbody>
</table>

Note: Figures in percentages. Improvements are shown in positive values
Connectivity Including Supply Chain Connectivity & Global Supply Chains

Study on the Application of Global Data Standards for APEC Supply Chain Connectivity

The adoption of global data standards (GDS) in supply chains enables relevant stakeholders to send and receive messages to and from each other in a globally consistent language, hence assist them in monitoring freight, transport assets such as containers and trucks, storage and delivery locations and reporting events throughout the shipment. By adopting common identifiers for goods, transport equipment, places and events, activities in the supply chain can be viewed from supplier to customer. To find out the costs and benefits of implementing GDS in supply chains, this project studies five pilots conducted in two phases.

Phase 1 of the project studies two pilots involving the cross-border shipments of wine and boxed beef between APEC members including Australia; the US; and Hong Kong, China.

Findings & Recommendations

Benefits & costs. At the conclusion of the pilot assessment, it was not possible to accurately determine a cost-benefit ratio for the pilots given their nascent state. Each pilot was able to demonstrate benefits and identify costs. However, the precise value of both remains subject to further realization beyond the timeframe of the current study. For example, having data available which is harvested from supply chain events can lead to improved business reporting and decision-making and to the development of innovative applications. However, such developments have yet to emerge from these pilots due to the small number of shipments conducted within the timeframe of this study.

Impact. As a result of adopting GDS and using that to share event messaging, visibility was found to have increased from 35 to 73% of supply chain events for the wine pilot and from 43 to 93% for the boxed beef pilot. Improved data tracking also reduced the Delivery In Full On Time (DIFOT) failures in both pilots.

Survey. A survey of APEC economies on the adoption of GDS revealed the following: 1) sensitive products such as pharmaceuticals and food products traded cross-border were identified as a priority for traceability and supply chain visibility; 2) levels of adoption within the traded goods sectors varied considerably across APEC economies, with 50% of respondents having none or limited adoption of GDS in their jurisdiction; and 3) in economies where standards are being utilized, systems for track and trace are implemented in pharmaceuticals, food and beverage, healthcare, retail, communications, building products and construction industries. In these economies, the private sector has voluntarily adopted GDS to enable improved communication with domestic and international trade partners.

Study on GDS – Phase 1

Publication Number: APEC#216-SE-01.7
Published Date: February 2017
Link: https://www.apec.org/Publications/2017/02/Study-on-the-Application-of-Global-Data-Standards-for-APEC-Supply-Chain-Connectivity-Phase-1
Among the benefits anticipated from adopting GDS were efficiency, visibility, and traceability. Challenges envisaged included changes required to achieve harmonized legal and regulatory frameworks if the standards are mandated; need for broad private and public sector awareness of the benefits of GDS; and whether MSMEs would have the capacity to invest in the capability.

Next steps. The pilots in this study have demonstrated the time, resources and commitment required by businesses to progress the adoption of GDS. Firms will want to ensure that the expected benefits of adopting standards and building connectivity outweigh the costs, and this requires accurate data and information to support the required cost-effectiveness assessments. However, this study has shown that there are several challenges to collecting relevant and accurate information to undertake such assessments, particularly within a brief time period. It is important to recognize these challenges while helping firms understand the potential benefits and opportunities of adopting GDS. Facilitating more pilot studies with adequate implementation time and publicizing the cost-benefit information APEC-wide will be a useful approach.

The two pilots have demonstrated that firm-level benefits vary significantly and, depending on the existing capability and scale of trade, the business case will vary. While recognizing the business case is specific to the particular supply chain, a more general benefit in relation to regulatory reporting of cargo and enabling of dashboard reporting using GDS-compliant visibility platforms is worthy of consideration by APEC. As firms progress in the digital economy, new interactions between traders and regulatory agencies which take advantage of the automated event data should be considered in the armoury of tools at each government’s disposal to fight counterfeiting and guaranteed economy-of-origin, authenticity and pedigree of products.

APEC governments might consider two streams of activity in relation to the adoption of GDS to facilitate trade: 1) supporting industry understanding and uptake by working with trade and logistics peak bodies and the standards providers; and 2) conducting analysis on how GDS might be utilized in gathering data related to trade regulation activities.

Phase 2 of the project covers three pilots: 1) asparagus from Peru to the US; 2) durian from Malaysia to China and Hong Kong, China; and 3) tequila from Mexico to the US.

Findings & Recommendations

Benefits and costs. An evaluation of the pilot projects revealed a number of benefits. Significant savings are reported due to the reduction of efforts and time spent on information search and consolidation efforts. GDS enables better tracking and sharing of information with all stakeholders, facilitating greater visibility along the supply chain through the use of Electronic Product Code Information Services (EPCIS) digital platform. GDS also allows accurate and timely capture of data, thus reducing regulatory compliance errors. Additionally, clearer and more accessible information because of GDS helps companies save detention related costs. On the other hand, there are costs entailed with the adoption of GDS which arise from subscribing to GS1 service, obtaining equipment and software, carrying out data cleaning and adjustment, and training of staff.
The project has two objectives: (1) to conduct peer review on policies and practices relating to the planning, selection and implementation process of infrastructure projects; and (2) to identify capacity building needs of the reviewed economy and suggest capacity building activities. This report captures outcomes from the peer review undertaken on road infrastructure in the Philippines (the reviewed economy), specifically with the Department of Public Works and Highways (DPWH) and the Public-Private Partnership (PPP) Center.

Findings & Recommendations

The peer review concludes with three issues, namely: 1) technical assistance to DPWH in analyzing the three key elements of Quality Infrastructure - Life Cycle Cost (LCC), Environmental and Other Impacts, and Safety Assurance; 2) capacity building and development of key skills identified by DPWH and PPP Center; and 3) defining major issues for review and develop solutions within the roads infrastructure context.

Quality infrastructure. DPWH undertakes LCC analysis as part of project preparation. While understanding the concept and the need for it, it is not practised for every project and largely limited to ODA and PPP roads due to detailed project preparation guidelines required for those projects. A Value for Money (VfM) analysis is undertaken for PPP projects in accordance with the project guidelines and requirements of the National Economic and Development Authority. However, the analysis is based on a range of government cost assumptions and not on actual data since the latter is not available. LCC is not practised for most budget funded roads because there...
is only one person in DPWH who has the skill to undertake such analysis. DPWH also recognizes that Value Engineering has a substantial impact on initial construction parameters and costs for roads and lifecycle costs. A manual for Value Engineering is in place but has not been adopted universally for projects, again because of a lack of suitably qualified staff to undertake such analysis.

DPWH could further advance the adoption of LCC, VfM and Value Engineering for all three categories of budget: government, ODA and PPP. As the leading organization within the government on procurement practices, the way forward will be to develop a specific program with DPWH on these three issues and to commit to its development jointly over a program timeframe. Such approach, if adopted, could be linked to the capacity building needs DPWH has identified.

**Capacity building.** DPWH and PPP Center have demonstrated substantial capacity and enthusiasm to measure their core practices based on experiences of other economies. The PPP Center has, for example, undertaken consistent ‘lessons learned’ reviews of PPP projects within the Philippines and continuously informed itself of PPP practices in other economies. DPWH is cognizant of its own shortcomings and needs. Given this context and the workshop that was conducted with each organization, capacity building needs will encompass the following:

- Capacity building for DPWH and PPP Center to be scoped and developed as a program covering a two- to three-year period, with a focus on LCC, VfM and Value Engineering.
- Combine a review of PPP risk management approach of the government with a capacity building program.
- Develop skills in ex-post evaluation, as identified by DPWH and PPP Center.
- Capacity building to review the PPP Law for PPP Center.
- Technical resources and capacity building program for DPWH to develop interoperation arrangements for toll roads.
- Cooperative approach between government agencies for promoting PPP projects.

As earlier mentioned, the review and assistance will need to be on a sustained program basis and not on individual projects. Capacity building can be delivered through the use of technology to provide training and education such as webinar based training. More certified training and a change in structure from classroom lecture to problem-solution based training and education can also be provided.

**Major issues for review.** Discussions with DPWH and PPP Center gave rise to a number of major issues for review, which the respective agencies considered to be central to their operations and capacity to deliver quality infrastructure. The issues included:

- Need for technical support to DPWH to assist in establishing policy and practices for interoperation and interconnection of toll roads.
- Need for local government to take a holistic approach at the regional level when developing infrastructure; where the projects and their planning, budget and delivery cycles are connected and there is cooperation between the national and local governments.
- Need for assistance in reviewing the Draft PPP Law within the next six to eight months given PPP Center’s plan to present a PPP Bill to the Congress in 2017.
Covering the period 2017-2020, the goal of SCFAP II is ‘to reduce trade costs across supply chains and to improve supply chain reliability in supporting the competitiveness of business in the Asia Pacific region’. In order to monitor progress toward this goal, the APEC Committee on Trade and Investment has developed a monitoring framework for SCFAP II, outlining the key challenges, stakeholders involved and external indicators. This report reviews and proposes potential aspirational targets based on those external indicators for consideration by APEC economies.

Findings

The aspirational targets proposed for the five chokepoints in SCFAP II are defined both in terms of ‘APEC rate of improvement by 2020’ (percentage rate of improvement or change) and ‘APEC average level by 2020’ whenever appropriate. These targets range from 4% to 25% rate of improvement or change by 2020, with corresponding APEC averages also provided. These two kinds of targets will allow for easier benchmark and comparison for APEC economies.

The common principles for target setting are that the target should be realistic, yet ambitious enough to initiate significant change. Setting the target too low may create the impression of a lack of urgency while having an overly ambitious target may ignore different domestic realities. For SCFAP II, the targets proposed are based on the rate of change from the previous years and considering the respective OECD average levels. A few targets are defined qualitatively since there is not enough data available.

These targets however, should be viewed as aspirational for individual economies considering the diverse domestic environment and different stages of development across APEC. The level of progress to achieve the targets will also very much depend on the initial starting point of each individual economy.
Findings

Globalization: The Good, the Bad, and the Role of Policy

- Globalization and international trade have contributed to unprecedented growth in human prosperity and welfare, especially in the last 50 years. The material, technological and information exchanges enabled by globalization have vastly improved living standards and reduced poverty around the world.

- One of the more tangible ways globalization has helped improve human well-being is in the trade in vaccines. Between 1988 and 2015, tariffs on vaccines were reduced and trade in vaccines grew an average of 24% per year. Trade has helped make life-saving vaccines widely available, enabling public health systems to reduce infant and child mortality and practically eliminate debilitating diseases such as polio.

- However, globalization has not brought benefits to everyone. While trade liberalization improves overall welfare in the long-run, the process entails difficult adjustments for firms and workers in the short- and medium-run. Trade has indeed increased overall prosperity and employment in economies that open up, but it also brings with it structural unemployment as internationally uncompetitive firms or industries fold up and lay off workers.

- Unfortunately, low- and medium-skilled workers – who are among the least able to cope with structural unemployment – are more likely to be adversely affected by globalization. In an analysis of trade and employment data from 125 economies over 2000-2014, we find that every 10% increase in exports correlates with a reduction in employment among low- and medium-skilled workers of 1.1 to 2.1%.

- However, the same data also show that protectionism is not the answer to structural unemployment. There is no evidence that import growth is directly correlated with reduction in employment. Rather, the data seem to point to a positive association between imports and employment.

- Unlike capital, which can seamlessly shift from sector to sector, it takes time and resources for workers to shift from an uncompetitive sector to one offering opportunities. Thus, trade-related adjustments are needed to ameliorate the plight of workers disadvantaged by globalization. At the economy level, these adjustments include lifelong access to skills training (and retraining), temporary support for households affected by structural unemployment, as well as access to credit to enable entrepreneurial activity.

- At the international level, trade-related adjustment could be facilitated through rules-based trade-related policies that promote greater openness in international markets, as secure access to open global markets will aid in local adjustment due to fewer trade distortions. Trade could also be made more inclusive through soft laws (i.e., non-legally binding guidelines or
policy declarations) in areas such as labor or environmental standards to ensure fair competition.

- Although the concept of inclusiveness in globalization has been mentioned in APEC declarations as early as the 1994 Bogor Goals, in recent years APEC Leaders have placed ever greater emphasis on ensuring inclusive and sustainable growth in the region. Continuing efforts on quality growth, structural reform, the internationalization of MSMEs, and human capital development are aimed at widely sharing the opportunities and benefits from globalization among all sectors of society.

- Globalization is no panacea for society’s inequities; but the prosperity, information, and people exchange associated with globalization could be harnessed to achieve a more equitable distribution of opportunities and benefits. Globalization alone will not lead to a fairer or more equal society. Maximizing the benefits from globalization requires complementary policies that will ensure inclusiveness and sustainability. It will require the hard work of policymakers and the strength of will of politicians to turn opportunities into reality.

**Global Economic Momentum and Optimism Fueling Near-term Growth**

- The APEC region expanded by 3.5% in 2016, just slightly lower than the year-ago GDP growth of 3.6%.

- The sustained strength in domestic private and government consumption remained the main fuel of APEC’s growth, which, in turn, was boosted by below-peak interest rates and commodity prices as well as government action to pump-prime the economy via fiscal stimulus measures and infrastructure-related expenditures.

- Trade performance in the APEC region started to improve in the second half of 2016. For the whole year of 2016, the aggregate value of APEC’s merchandise exports contracted by 4.1%, which compares favorably to the 8.7% contraction in 2015. The same trend could be observed in imports. This improvement follows world trade which also performed better in 2016 compared to a year ago.

- The improvement in trade growth toward the latter half of 2016 could be traced to stronger global demand, a recovery in commodity prices, and idiosyncratic factors relating to individual economies’ pursuit of diversified markets, products and trade partners.

- APEC member economies constituted half of the top 10 FDI recipient economies in 2016. Taken together, FDI inflows to those five APEC economies reached USD 710 billion, equivalent to 46.7% of global FDI flows in 2016.

- The entry of FDI into the APEC region was facilitated by investment-friendly measures, which continued to outweigh investment-restrictive measures in the period mid-May to mid-October 2016. Trade-facilitating measures also outnumbered trade-restrictive measures during the period.

- Near-term GDP projections point to a higher APEC growth of 3.8% for 2017-2018, above expected world GDP growth. The APEC region is anticipated to converge with the world economy at 3.7% in 2019.

- Forecasts of a higher growth trajectory for both the APEC region and the world in the near term are supported by expectations of more buoyant trade and investment activity; the implementation of fiscal stimulus measures, particularly from the US and China; and the gradual recovery of commodity prices. However, there is also significant uncertainty about trade, monetary and fiscal policies which could give pause to trade and investment activity, adversely affecting economic growth.

- The clarity, transparency and consistency of economic policies could determine the magnitude and direction of economic growth in the near term. In the medium term, macroeconomic management needs to be supported by structural reforms that promote innovation, lead to more competitive markets, facilitate the participation of all segments of society and enhance economic resilience, to contribute to APEC’s aim of achieving sustainable, equitable and inclusive growth.
Findings

Declining Labor Share and the Challenge of Inclusion

- Share of labor compensation in GDP is an indicator of income distribution and inclusiveness. A falling labor share indicates that wages are not rising in step with rising productivity. It also indicates that workers are proportionally benefiting less from economic growth.

- Several studies have noted a downward trend in the labor share of GDP since the 1990s. Data analysis show that a similar pattern is happening in APEC: overall, the labor share in APEC exhibited a downward trend between 1995 and 2015, chiefly among industrialized APEC economies. Studies show that a falling labor share, along with rising inequality and a perception that the gains of economic growth have not been shared broadly, are contributing to a backlash against globalization.

- Apart from domestic circumstances that can lead to falling labor shares (e.g., regressive fiscal policies and weak labor market regulations), studies point to two distinct but intertwined causes for the decline in labor share: 1) technological change, and 2) globalization.

- Technological change lowers the relative cost of accessing and utilizing capital goods such as computers and machinery. This makes it easier for firms to automate certain tasks and lessen the demand for labor, particularly for routine jobs. This effect is generally more prominent in industrialized economies compared to developing economies. In addition, improved communication technologies make it easier to monitor and manage global value chains.

- While globalization has brought many benefits and opened new opportunities, the development of global value chains has led to offshoring of some production activities to more competitive locations with lower cost. Globalization also helps to facilitate access to capital and, hence, newer technologies.

- The intertwined impacts of technological change and globalization can lead to skills mismatches and structural unemployment. The 2017 APEC Economic Policy Report on Structural Reform and Human Capital Development discussed this issue in the context of improving labor participation and adaptability. It found that in order to mitigate these impacts and make growth more inclusive, policies that promote skills development and help affected workers gain access to new opportunities need to be implemented.

- Policy options to promote inclusiveness and reverse the trend of falling labor shares in GDP begin with improving access to and the quality of education and training, especially among disadvantaged groups and workers. This is the bedrock of any skills development and contributes to equalizing opportunities for all workers, allowing them to access the new jobs created by technological change and globalization.

- Economies can also implement active labor market policies (ALMPs) that ensure a timely, coordinated, and holistic approach to responding to skills gaps and mismatches while providing support and protection to workers. ALMPs cover various aspects of skills development, social protection, and employment, from training and
apprenticeships and labor market information systems to unemployment benefits and job counseling. Coordinating these policies and activities is key to equitably distributing opportunities and ensuring inclusive growth while also promoting efficiency in the labor market.

- Regional cooperation plays a role in addressing the cross-border impacts of technological change and globalization. Promoting people-to-people connectivity through cross-border training exchange, labor mobility, and regulatory coherence can help economies address skills mismatches and structural unemployment at a regional level. Sharing timely, accurate, and comparable labor market information, such as through the APEC Labour Market Portal, can provide policymakers with a better picture of labor market challenges and opportunities in the region.

**APEC Grows Faster amid Global Policy Uncertainty**

- Economic growth and trade performance in the APEC region and the world have generally moved in tandem since APEC comprises almost 60% of global GDP and trade. However, since the 2008 Global Financial Crisis (GFC), the APEC region has grown at a relatively faster pace than the rest of the world (ROW). In 2016, the APEC region expanded by 3.4%, while the ROW grew by 2.9%.

- In H1 2017, the APEC region expanded at an average of 3.9%, higher than the 3.3% GDP growth reached in H1 2016. This expansion can be attributed to both favorable external developments, driven by a firmer global economic recovery, and domestic factors, particularly steady private consumption, relatively strong industrial production, and continued improvement in exports.

- The APEC region recorded a significant improvement in trade growth in terms of both the value and volume of merchandise exports and imports. During the period January-August 2017, the value of merchandise exports expanded at an average of 10.4% compared to a contraction of 6.6% in January-August 2016, while merchandise imports recorded a similar reversal. In H1 2017, growth in the volume of merchandise exports and imports grew by 10.6% and 8.4%, respectively, from their levels in the same period a year ago.

- In terms of investment, the APEC region attracted 53% of the world’s FDI in 2016, equivalent to USD 926.3 billion. The continued high level of FDI inflows into the region indicates investor optimism about the economic fundamentals and investment opportunities in the APEC region. However, the growth in FDI inflows slowed to 1.4% in 2016 from 21.9% in 2015, while FDI outflows at 4.1% outpaced FDI inflows in 2016.

- The APEC region accumulated around USD 342.8 billion worth of greenfield investments in 2016, equivalent to a 41.4% share of the world. Over the period 2003-2016, this is the second lowest APEC share of the world’s greenfield investments aside from the 38.8% share recorded in 2008 amid the GFC.

- Between mid-October 2016 and mid-May 2017, the number of restrictive measures on trade and investment implemented by G20 APEC members outweighed the number of facilitating measures. Trade-restrictive measures comprised 59% of total trade and trade-related measures implemented during the reporting period, while investment-restrictive measures comprised 64%.

- The economic outlook for the short-term indicates a surge in APEC GDP growth to 3.9% in 2017 from 3.4% growth in 2016, outpacing the world economy at 3.6% and the ROW at 3.2%. In 2018, the APEC region is projected to continue to outpace the global economy and the ROW at 3.8%, before aligning with the world economy in 2019 and 2020.

- Short-term risks are broadly balanced. Downside risks relate mostly to policy uncertainty which could take a toll on consumer and business confidence, pulling domestic spending and demand downwards, effectively halting the current momentum in global economic activity. The upside potential for growth could come from continued strength in global economic activity, which is expected to further boost consumer and business spending as well as provide much needed support to trade and investment activities.
Economic & Financial Analysis

- In the medium-term, risks remain tilted to the downside as uncertainty over the future direction of monetary, fiscal, and trade policies continues to be a crucial determinant of growth going forward. For example, an unexpected magnitude in monetary policy tightening in some developed economies could result in tightened global financial conditions and unmanageable debt levels which could leave some economies vulnerable, while fiscal policy measures that do not support growth could also hold back global economic expansion. Moreover, inward shifts toward protectionist policies could discourage trade and investment, giving pause to the ongoing economic momentum.

- The current period of relatively high growth, which is expected to be sustained into 2020, leaves adequate room for APEC economies to continue along the path of reform. Thus, the APEC region could focus on improving the ease of doing business, implementing structural reforms as embodied in their Renewed APEC Agenda for Structural Reform (RAASR) individual action plans, and exerting all efforts to achieve the 1994 Bogor Goals of free and open trade and investment by 2020.

- APEC could also exert efforts to ensure that the benefits of free trade and investment are not only measurable, but that those benefits also reach all sectors of society throughout the region, particularly among women, youth, the disabled, and the poor.
The APEC Women and the Economy Dashboard provides a snapshot on the status of women in APEC through a set of indicators measuring the progress of women’s participation in economic-related activities and women’s inclusion in several aspects of life. The Dashboard comprises almost 80 indicators that are classified into the five priority areas of the APEC Policy Partnership of Women and the Economy, namely: 1) access to capital and assets; 2) access to markets; 3) skills, capacity building and health; 4) leadership, voice and agency; and 5) innovation and technology. The report contains 22 dashboards, one for each of the 21 APEC member economies and another for the whole APEC region.

**Findings & Recommendations**

There are mixed results from the efforts undertaken to allow wider participation of women in the economy. Among the positive findings are:

- Property and inheritance rights for women remain high and are on par with those for men in most APEC economies.
- Some improvements in allowing women to do the same jobs as men and working the same night hours under the law.
- Inclusiveness for women continues to improve in terms of their access to potable water sources and sanitation, health services, technology and access to international markets.
- Women are still far behind men in terms of their participation at the highest levels of political decision-making. However, their participation has been higher than in the last three years.

Notwithstanding, there are gaps where APEC needs to pay closer attention to and intensify their policy efforts in order to allow women to participate in the economy with equal opportunities. These include:

- Efforts to improve credit information systems could especially benefit SMEs and women since more than 1/3 of SMEs are owned by women in the APEC region, of which 73% are considered “very small”.
- Some improvements in credit information systems could especially benefit SMEs and women since more than 1/3 of SMEs are owned by women in the APEC region, of which 73% are considered “very small”.
- Conditions for career advancement have worsened in some areas, such as having equal remuneration for men and women for work of equal value and the existence of paid or unpaid parental leave.
- Participation of women in science, technology, engineering and mathematics remains low in many APEC economies.

While the report provides an update with the most recent annual information available for each indicator, some of the indicators endorsed in 2014 have been discontinued and some may no longer be relevant. It is therefore recommended that APEC economies review the list of indicators for both relevance and data integrity for future updates of the Dashboard.
This study explores the ways cities in the region are supporting partnerships for sustainable development. It builds on previous APEC work on sustainable urbanization, using 14 case studies to assess economies, infrastructure, social and environmental systems and urban governance. The case studies evaluate cities at the secondary city, metropolitan region, and regional economic trade-corridor levels.

**Findings**

**Primary action agendas.** The study identifies five primary action agendas focused on the economic, physical, social, natural (environmental) and governance spheres. These five agendas are all equally important for improving the sustainability of development in the cities of APEC member economies.

While cities in the region have their own priorities when it comes to implementing the agendas, they will have many agenda items in common. Given the wide range of experience available—with some cities displaying very good practice—there is scope for learning from each other. Partnerships constitute an effective way of disseminating that learning and supporting the adoption of best practice across a range of agendas.

**Priority partnerships.** A wide range of partnership arrangements exist—from city-specific ones to those at the multilateral level. These could be significantly enhanced through support by APEC member economies, to the benefit of their economies and that of the region. APEC and its Secretariat could support priority partnerships as part of an initiative focused on Building Better Partnerships for Inclusive and Sustainable Urban Growth of Cities in the Region. This report identifies key areas meriting such priority support:

- **Partnerships to lift economic performance and trade.** While urban areas and systems could help lift economic outcomes at the regional or member-economy level, the city case studies in this report and the literature have found limited evidence of them doing so. The case studies present good examples of sustainable development practices; but very few have been expanded to a city, or system of cities, scale. The development of economic industry clusters, corridors and city-to-city economic linkages across urban systems will be central to scaling up such partnerships. The Jing-Jin-Ji, Pearl River Delta, Vancouver–Seattle, Ho Chi Minh City and Mercosur trade development corridors provide relevant lessons in the management, financing, and development of such corridors and systems.

- **Partnerships to foster sustainable urban forms.** Many cities have evolved toward lower density, high carbon and dispersed forms of urban development which are environmentally unsustainable and economically inefficient. Shortfalls in metropolitan planning, in particular, the lack of integration of land-use and transport/logistics solutions, and in governance are the primary cause of such problems. The case studies on Mexico, Lima, Auckland and Manila show that urban sprawl is responsible for issues associated with congestion and adding to the costs for business, government and communities. Increasing urban density and consolidation of development is vital to improving the sustainability of development across the region.

- **Partnerships to support development of strategic infrastructure.** The governance agenda should promote partnerships for strengthening program development and implementation mechanisms for strategic infrastructure, and for addressing systemic faults related to preparing, financing and implementing investments needed for sustainable development. Infrastructure investment tends to be opportunistic and ad-hoc and lacks the context of a ‘nested’ set of plans at the member economy, regional and local levels together with integrated metropolitan asset
recommendations. Private sector and community inputs are not systematically and equitably canvassed in respect of such investments.

• **Partnerships for financing investment for sustainable development.** Urban governments do not have revenue-raising mandates in line with city infrastructure needs. Local governments have no incentive to maximize tax yields or leverage private and community resources. Funding requirements, in many cases, are unknown. Strategic and asset management plans seldom exist; where they do exist, the investment required has not been adequately estimated. Enterprises in secondary cities often have less access to funding; MSMEs suffer restricted access to funding no matter where they are located.

• **Supporting these initiatives will be partnerships to enhance city information, trade data, and asset management systems.** For trade and investment to grow, information, trade, services and infrastructure need to be more closely integrated, and the nature, volume, capacity and spatial identity of assets and value-adding inputs to production and waste streams better known.

**Recommendations**

The economic planning ministries of APEC members could develop dedicated units capable of analyzing urban economic systems and of fostering best practices in sustainable urban development. The focus should be on providing appropriate enabling frameworks for acquiring, adapting and implementing best practices through supporting effective partnerships with cities, communities and the private sector. The implementation of best practices should extend across the various systems—planning; project development and assessment; project procurement; and finance. Improving only one area is unlikely to improve outcomes. APEC should support the development of such capacity. Responsible ministries should tap the substantial body of expertise in academic and policy institutions.

The APEC Secretariat could form a sustainable urban development group to coordinate activities to implement an urban agenda. The representatives of this group would be drawn from the economic planning ministries of member economies, or their nearest equivalent having a strategic overview of city infrastructure needs. The group could report directly to the Senior Officials owing to its cross-cutting nature and the potential involvement of several committees of APEC. The activities of the group could fall into two areas; the first on the formation of advisory groups for the five agenda areas, and the second on the priority actions for partnership initiatives. These activities could be coordinated by a small ‘initiative secretariat’, which would also act as the repository of data on APEC urban systems.

In conclusion, because of the economic importance of cities to member economies, the issue of sustainable urban development is one to be addressed at the highest level of government, in partnership with all levels of government. Only such a coordinated and collaborative approach will enable the expansion and development of trade, and the proactive adaptation to new models of economic development and to new technologies.
StatsAPEC is APEC’s statistics portal with data dating back to APEC’s inception in 1989. It consists of the Key Indicators Database and the Bilateral Linkages Database. The Key Indicators Database includes over 120 GDP, trade, financial and socio-economic indicators, allowing for an analysis of trends across a number of topics. The Bilateral Linkages Database facilitates detailed analysis of trade and investment 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 and is optimized for use on mobile devices.