

Research Outcomes

Summary of Research Projects 2016

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

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Trade & Investment Liberalization & Facilitation

Second-Term Review of APEC's Progress towards the Bogor Goals: APEC Region

Publication Number: APEC#216-SE-01.14

Published Date: November 2016

Full Report: 96 pages

The second-term review of progress towards the Bogor Goals includes two sections: 1) general assessment of progress of the APEC region as a whole; and 2) review of each economy's recent progress in areas included in the Osaka Action Agenda. The assessment of the APEC region as a whole examined its trade and investment performance; the evolution of trade and investment liberalization and facilitation indicators; and the changes in growth and development statistics.

Findings

Some of the main findings are:

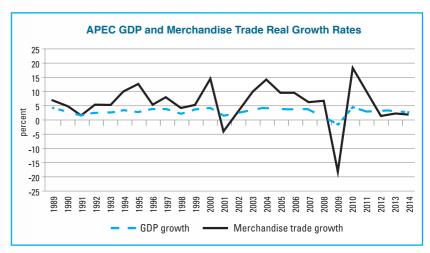
Trade and investment flows by APEC economies have expanded greatly since the 1990s, but trade has slowed down since the global financial crisis

- Between 1994 and 2014, APEC's total trade in goods increased at a yearly average rate of 7.8%, reaching USD 18.4 trillion in 2014. Intra-APEC trade increased four-fold over this period, but its contribution to APEC's total trade went down from 71.9% to 67.2%.
- Trade in APEC however, has slowed down since the 2008 Global Financial Crisis (GFC) and its growth rates have been falling behind GDP growth rates since 2012. The slowdown seems to have structural reasons, such as the consolidation of global value chains.

- APEC's trade in commercial services increased at a slower annual pace (7.6%) than APEC's trade in goods. Commercial services trade by APEC-developing economies increased at a faster average rate than that by APEC-industrialized economies (9.6% vs. 6.0%).
- FDI inward stocks in APEC increased on average by 11.1% per year between 1994 and 2014, reaching USD 12.4 trillion in 2014. APEC-developing economies increased their share as FDI destinations from 33.4% to 44.7% over this period.
- FDI outward stocks by APEC also increased significantly by 10.6% per year during 1994-2014, totaling USD 12.9 trillion in 2014. The share of APEC-developing economies as FDI sources went up from 9.8% to 32.6%.

In general, tariffs have fallen significantly but some sectors still face high tariff rates

 The simple average MFN tariff in the APEC region fell by almost half from 11.0% in 1996 to 5.5% in 2014. The average tariffs for APEC-industrialized economies and APEC-developing economies in 2014 were equal to 3.3% and 6.3%, respectively.



Source: WDI data and APEC Policy Support Unit estimates.

- While many non-agricultural sectors reported low tariff rates, sectors related to agriculture experienced relatively higher tariff rates in the APEC region. The highest average tariffs in 2014 were found in dairy products (22.3%), beverages and tobacco (16.5%), and cereals and preparations (15.6%).
- The number of zero-tariff product lines in APEC went up from 27.3% in 1996 to 45.4% in 2014. In addition, the percentage of zero-tariff imports also increased substantially from 29.2% in 1996 to 60% in 2014. Nevertheless, for both cases, the percentages have remained steady since 2010.
- Extensive trade liberalization has also taken place in a negotiated manner through RTA/FTAs. APEC economies were parties to 152 RTA/FTAs by the end of 2015, 61 of which were intra-APEC RTA/FTAs.

There is an increasing trend in the application of non-tariff measures affecting trade

- Information from the WTO Integrated Trade Intelligence Portal indicates that APEC economies increased the number of trade remedies in place between 2010 and 2015. The number of unresolved specific trade concerns against an APEC economy reported in the WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Committees also increased during this time.
- Transparency in the application of non-tariff measures (NTMs) appears to have weakened. Between 2010 and 2015, the percentage of specific trade concerns duly notified at WTO by the corresponding APEC economies imposing the measure went down from 43.4% to 31.3% at the WTO SPS Committee, and from 65.1% to 48.1% at the WTO TBT Committee.
- According to data from Global Trade Alert and the European Commission, food products were one of the types of products heavily affected by NTMs in APEC. Other sectors identified by Global Trade Alert with high prevalence of NTMs are basic chemicals, basic metals, especially purposed machinery and transport equipment.

Services restrictions have been falling in recent years, even though levels of restrictiveness vary across economies and sectors

- The energy, telecommunications, and transportation sectors appear to be less restrictive in recent years in several APEC economies. Similarly, retail and some professional services sectors are also experiencing a more competition-friendly regulatory stance.
- Some sectors offer a more open regulatory framework.
 For instance, telecommunications appear to enjoy fewer restrictions than energy or transportation. Professional services related to engineering and architecture are less restrictive than those related to accounting and legal services.
- In general, APEC economies have been offering more comprehensive services commitments in their RTA/FTAs in comparison with those offered at WTO/GATS. When the best services commitments by APEC economies in RTA/FTAs are compared with their GATS commitments or public revised offers, the RTA/FTA commitments are 23% deeper than those at WTO/GATS.
- Computing, telecommunications, distribution, tourism, and construction services are among those with the best RTA/FTA commitments in mode 1 (cross-border trade in services) and mode 3 (commercial presence) within APEC. The health and social services sector remains as the most restrictive.

Negative perceptions on restrictions facing foreign investors are more prevalent now. However, governments have been implementing measures to improve the investment climate

- Regulations affecting FDI show that the restrictiveness on FDI in APEC has decreased over the years. APEC economies have been implementing measures to ease entry conditions for foreign investors, promote and facilitate investments and improve the general business atmosphere.
- Nevertheless, restrictions remain in the APEC region. Screening and prior approval mechanisms have been identified as the main constraints in industrialized economies. Foreign equity limitations are the main constraints in developing economies.

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After the GFC, there have been negative perceptions regarding
the investment climate in APEC; for example, growing
perceptions of lower prevalence of foreign ownership over
the years in APEC-developing economies, and an increasing
sentiment that business rules are discouraging FDI in APECindustrialized economies

There have been positive efforts in trade facilitation in the APEC region

- On average, it is getting faster for APEC economies to trade across borders. It took around 13 days to trade in 2013, more than two days faster in relation to 2006. While it took nearly 9 days in APEC-industrialized economies to complete the formalities to trade, it took more than 14 days to do so in APEC-developing economies.
- Between 2006 and 2013, the average cost to export and import in APEC went up by 17% and 12.2%, respectively. However, the increase in the overall cost to trade has been more benign than the average inflation, which reached 30% over the same period.
- For APEC-developing economies, it is cheaper to trade across borders than for APEC-industrialized economies. In 2013, the cost of trading for the former was around 75% of the cost for the latter.
- Logistics in the APEC region seem to have improved between 2007 and 2014. A survey of logistics professionals reveals that perception on the quality of infrastructure has improved.

Important steps to facilitate investments in APEC, but investors are still facing obstacles which increase their costs

- Between 2006 and 2015, the average number of procedures to start a business in the APEC region went down from nearly 9 to 6. The average time to start a business fell by three weeks, from 37 to 15 days.
- Progress was also reported regarding the average time to register property and obtain a construction permit in APEC. In 2015, registering property took on average 35 days (12 days shorter than in 2006), while getting a construction permit took 137 days (44 days shorter than in 2006).

- Among the existing bureaucratic obstacles, the cost of enforcing contracts increased slightly. In addition, firms of all sizes identified restrictions in the access to electricity and corruption as one of the main obstacles to do business.
- While SMEs pointed out tax rates, inadequate access to finance, and informal sector practices as some of the main obstacles, large firms identified unsatisfactory telecommunications infrastructure, customs and labor regulations, and poor workforce skills as obstacles to their operations.

Progress in economic growth and social outcomes, but employment levels have not recovered since the GFC

- APEC's economic growth outperformed that for the rest of the world. Between 1994 and 2014, APEC's real GDP grew at 3% per annum, while the rest of the world grew by 2.5% per annum. GDP per capita in APEC rose at an annual average rate of 2.2%.
- Poverty has fallen significantly. The number of people living under poverty conditions within APEC fell by 802 million between 1993 and 2012. Similarly, the number of people living in extreme poverty fell by 83.5%, from 842 million to 139 million.
- Living standards have improved in APEC. For instance, life expectancy has been increasing throughout the region, reaching 75.6 years in 2013.
- Access to electricity has expanded. Currently, 98.8% of the people in APEC have access to electricity. More people also have access to clean water. An additional 605.6 million people gained access to improved water sources in APECdeveloping economies during the period 1994-2012, reaching 91.9% of the population in APEC- developing economies.
- Enrolment in tertiary education more than doubled in APEC economies, from 21.2% to 42.4%, between 1994 and 2013.
- Unemployment rates in the APEC region increased after the 2008 GFC. The unemployment rate in the region stood at 4.9% in 2013, higher than the rate of 4.4% in 2007.

APEC has mixed outcomes on environmentally sustainable growth

- Within APEC, carbon dioxide emissions increased at an annual rate of 2.7% between 1994 and 2014. The amount of carbon dioxide emissions per capita also increased by 1.8% per year.
- However, the carbon dioxide emissions per dollar of GDP fell by 1.4% per year, which means that the carbon intensity of production is falling in the APEC region.

Second-Term Review of APEC's Progress towards the Bogor Goals: Progress by Economy

Publication Number: APEC#216-SE-01.25

Published Date: November 2016

Full Report: 88 pages

The analysis by individual APEC economy highlighted the recent progress and identified areas for further improvements of each economy. The reports were prepared with information from the Individual Action Plan of each economy, as well as data from other sources such as international organizations and domestic government institutions.

Findings

Among the important findings are:

- MFN tariffs for non-agricultural and agricultural products have declined, but MFN tariffs for agricultural products are still much higher.
- New NTMs have been imposed in recent years. Prohibitions and restrictions tend to be specific to certain products.

- There are mixed reviews in services sectors across the APEC region. While many economies are using RTA/FTAs and unilateral measures to relax restrictions on foreign companies in some services sectors, other economies have increased those restrictions.
- There are efforts to improve investment conditions by relaxing ownership conditions, raising investment screening thresholds, lowering taxes or signing investment protection or avoidance of double taxation agreements. However, investment restrictions remain in sectors considered as strategic.
- APEC economies are participating actively in international standardization activities, and making efforts to align domestic to international standards.
- APEC economies are implementing the WTO Trade Facilitation Agreement. Single windows continue to be modernized and trusted operator programs, such as the Authorized Economic Operators, are being implemented or expanded.
- There are reforms to enhance the environment to support intellectual property rights, as well as efforts to speed up the examination of applications for patents, registration of trademarks, etc. Border measures are also being strengthened to detect intellectual property rights infringements.
- There are reforms to promote more competition and deter anticompetitive practices.
- Government procurement preferences to benefit local businesses are still used in many APEC economies. Many APEC members have implemented the WTO Government Procurement Agreement or are negotiating their accession.
- The validity of the APEC Business Travel Card has been extended to 5 years. There are also more expedited secure travel or automatic clearance programs for selected travellers.
- The network of RTA/FTAs is expanding.

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APEC's Bogor Goals Dashboard 2016

Publication Number: APEC#216-SE-01.13
Published Date: November 2016

Full Report: 35 pages

The Bogor Goals Dashboard aims to provide easy-to-understand figures to track advances 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. The indicators are gathered from respectable public sources only.

Findings

The Dashboard shows progress in trade liberalization in recent years. The APEC average tariff went down from 5.8% to 5.6% between 2013 and 2014, as well as the percentage of product lines with MFN tariffs above 10% from 14.3% to 13.8%. The improvement in tariff levels was explained by both agricultural and non-agricultural products. 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.

Trends and Developments in Provisions and Outcomes of RTA/ FTAs Implemented in 2015 by APEC Economies

Publication Number: APEC#216-SE-01.9 Published Date: September 2016

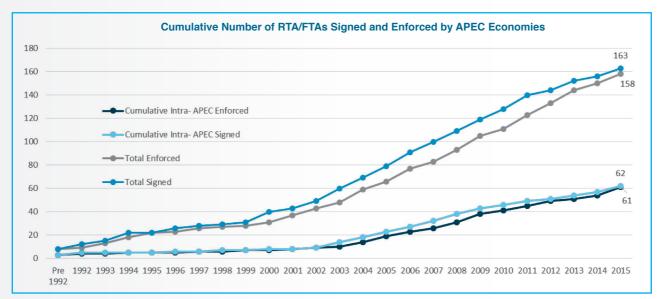
Full Report: 43 pages

This report, the second produced on an annual basis, contributes to the APEC information sharing mechanism on RTA/FTAs, an initiative to enhance transparency among the trade agreements. It analyzes the evolution of the number of RTA/FTAs by APEC economies in the past two decades and examines the general structure of the RTA/FTAs which came into force in 2015. The nine agreements covered are, namely: the Australia-China; Australia-Japan; Canada-Korea; Chile-Thailand; China-Korea; Korea-New Zealand; Korea-Viet Nam; Malaysia-Turkey; and Mexico-Panama FTAs.

This report analyzes specific topics in these RTA/FTAs, and examines provisions in the chapters on rules of origin, services, investment and intellectual property to identify possible common patterns or recent trends. Where relevant, the report examines the WTO-plus commitments included in those agreements.

Findings

- The number of RTA/FTAs in the APEC region has been on a rising trend since the early 2000s. 163 RTA/FTAs were signed by at least one APEC economy as at December 2015, of which 158 had been enforced. In 2015, nine new RTA/FTAs were put in place, three more than in 2014.
- Among APEC members, the number of FTAs is increasing. In 2005, only 45 of the bilateral trade relationships between APEC economies were covered by any RTA/FTA (21% of total relationships). By the end of 2015, this number more than doubled, as 98 of these intra-APEC bilateral trade relationships were covered by any RTA/FTA (47% of total relationships). The share of intra-APEC trade covered by RTA/FTAs also went up



Source: APEC Policy Support Unit

from 37% to 48% during the same period. Likewise, the share of APEC trade with the world (intra- and extra-APEC trade) under RTA/FTAs increased from 29% to 47%.

- Some reasons for the proliferation of RTA/FTAs are: i) slower pace of multilateral trade negotiations in the context of the Doha Round; ii) changing face of trade, with non-traditional trade areas such as services trade, investment, intellectual property, among others, becoming increasingly important and are not necessarily covered in a comprehensive manner at WTO; iii) interest from governments to establish clear rules to gain preferential access and address issues going beyond the traditional areas; iv) minimizing the effect of trade diversion caused by RTA/FTAs signed by other parties; and v) political and economic considerations based on each party's development level and size.
- The structure of RTA/FTAs is evolving. There are more agreements incorporating chapters on Trade in Services and Investment. It is also more common to find RTA/FTAs with specific sectoral services chapters, such as Financial Services and Telecommunications. Chapters on Intellectual Property (IP) are also found more frequently in RTA/FTAs.
- Analysis of the nine RTA/FTAs covered in this report shows areas of similarities and areas with striking differences that would make convergence very difficult to achieve. In general, the RTA/FTAs include many WTO-plus elements, but some WTO-minus elements have been found as well. For example, in some Cross Border Trade in Services chapters, it is possible to find WTO-plus clauses on transparency issues but WTO-minus issues in domestic regulation, as some agreements do not include a clause on nullification or impairment which establishes that parties cannot apply requirements that nullify or impair services commitments in ways that are not based on objective and transparent criteria.
- In terms of the Investment chapters, all agreements provide Most Favored Nation (MFN) treatment to both pre- and postestablishment stages with some exceptions. All RTA/FTAs analyzed provide national treatment for post-establishment, but only four of them offer it for the pre-establishment stage. Except one RTA/FTA, the rest include clauses on investorstate dispute settlement.
- As for the Intellectual Property chapters, their depth differ across the analyzed RTA/FTAs. All include general provisions,

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such as the reaffirmation of the TRIPS Agreement and other international intellectual property agreements, enforcement provisions and national treatment on the application of IP. Most chapters also include clauses on co-operation and some include issues concerning technology transfer as part of the co-operation activities among the parties. IP chapters usually include some specific types of IP, with trademarks and copyrights the most common ones. While some chapters include articles concerning intellectual property and public health, none of them contains specific sub-sections on pharmaceutical products such as the case of the Trans-Pacific Partnership (TPP).

• In the Rules of Origin chapter, all agreements include product-specific rules of origin to qualify for preferential market access. The change of tariff classification and the qualifying value content are the two most utilized criteria in these product-specific rules. All agreements also include de minimis provisions to facilitate meeting the origin criteria, as well as clauses on accumulation/cumulation of origin. Crosscumulation is not present in any of the RTA/FTAs analyzed, but some of them acknowledge that provisions on the matter could be incorporated in the future. On the declaration/certification of origin, divergences remain among RTA/FTAs since some of them only accept certification by entities, while others only do self-certification. Nevertheless, the agreements enforced by Australia with China and Japan could provide a solution as they accept both schemes.

Survey of Regulatory Measures in Environmental Services

Publication Number: APEC#216-SE-01.15

Published Date: November 2016

Full Report: 72 pages

Prepared in support of the APEC Environmental Services Action Plan, this report presents an overview of regulatory measures for environmental services in APEC economies. It includes a summary of the scope and coverage of services and measures; an overview of the institutional frameworks, the incidence of regulatory measures and the extent of liberalisation in trade agreements of environmental services identified across APEC economies; and summary outcomes of measures identified in each APEC economy.

Findings & Recommendations

Despite considerable variations across APEC member economies, some trends are apparent:

- In most APEC economies, environmental services are regulated by multiple agencies at both central and sub central levels, and local government authorities play a major role in administration of most environmental services within their respective jurisdiction.
- Licensing and approval procedures are the predominant type of control across the region. While these measures tend not to restrict trade per se, the multiplicity and complexity of requirements can impede it, particularly where approval procedures are open to administrative discretion or are lacking in transparency.
- The majority of measures affect the operation of firms in foreign markets and about one quarter the establishment of a commercial presence. Almost 10% impact on the ability of business persons or professionals to deliver services.
- While not all economies have committed to market opening of environmental services in the WTO General Agreement on Trade in Services (GATS), all have improved on WTO liberalisation outcomes in subsequent FTAs.

The environmental services examined for this survey (CPC94) could be expanded to include a wider range of environmental services or complementary services which impact on business delivering environmental services in foreign markets. In addition to measures which directly regulate environmental services, foreign providers face measures arising from the various 'incidental' services (such as planning, construction, engineering and technical personnel) which are involved in establishing a commercial presence, that impact on operation in the market or that control the ability of persons to work or deliver these services. Broadening the scope of services

covered would contribute to a more complete picture of the regulatory measures in place.

In many economies, applicable measures at the sub central level were not fully investigated, mainly due to time and resource constraints. APEC economies may benefit from further work to examine their extent and breadth. This would complement the results of the survey, and provide economies with a more informed picture upon which to explore further action. A further issue for consideration is how APEC governments are best placed to address the substantial reach of regulatory control at this (state and local) level.

Study of APEC Best Practices in Authorized Economic Operator (AEO) Programs

Publication Number: APEC#216-SE-01.3

Published Date: May 2016 Full Report: 85 pages

This study updates the APEC Authorized Economic Operator (AEO) Compendium, assembled in 2010, with results of a new survey with APEC customs authorities. Based on the survey, a matrix was created to determine where APEC AEO programs converge with or diverge from each other. The study also suggests ways to improve AEO convergence in APEC.

Findings & Recommendations

- There is overall high convergence among the AEO programs in APEC, particularly in the following aspects or components:

 (1) self-assessment mechanism;
 (2) physical security requirements;
 (3) compliance requirements;
 (4) suspensions and revocation;
 (5) application, verification and authorization procedures. The lowest convergence is found in SMEs and types of operators.
- While convergence analysis is a good tool to use, the results laid out are not meant as a gap analysis. The recommendations in the report are meant to encourage further AEO programs

- convergence in APEC. After all, every AEO program is unique to the economy's specific environment and experiences. No single template should be used for every AEO program in the region.
- The survey also reveals various concerns and associated best practices among certain APEC AEO programs, such as stakeholder involvement and communication/understanding of benefits; participation by SMEs in the AEO programs; training and capacity building; mutual recognition agreements among economies; and other government agency inclusion. Other concerns raised include the lack of analytical data regarding the impact of mutual recognition agreements and arrangements, and the time it takes for an AEO program to be approved.

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APEC Economic Policy Report (AEPR) 2016: Structural Reform and Services

Number: APEC#216-EC-01.1 Published Date: November 2016

Full Report: 471 pages

This report aims to contribute to greater understanding of service sector reforms, the benefits they bring and the implementation and execution challenges they give rise to. It does so by drawing on the extant research literature and on five case studies on services reforms experiences prepared for the Economic Committee (EC) as well as three case studies prepared for two sub-groups of the Committee on Trade and Investment (CTI), the Market Access Group (MAG) and the Group on Services (GOS). The case studies are, namely: (1) Chile: Transport Services; (2) China: Retail Services; (3) Indonesia: Air Transport Service; (4) Japan: Financial Services; (5) Malaysia: Health and Medical Services; (6) New Zealand: Electricity Retail Services; (7) Papua New Guinea: Telecommunications Services; and (8) Chinese Taipei: Testing and Certification Services.

These case studies provide in-depth analysis of the economic impact of specific services reforms in APEC economies. They illustrate the importance of a focus on services to enhance inclusion while at the same time generating growth in real incomes and improving welfare of citizens. Most of the studies cite positive impacts, but more importantly, provide useful lessons from the various reform experiences. Not the least of these lessons is that structural reforms are a 'continuous process' that require regular adjustment of efforts to meet policy goals. Structural reform is not a once-and-for-all process but rather continued learning-bydoing.

Findings & Recommendations

The policy recommendations are:

 Pay more attention to services. The performance of services sectors matters for the simple reason that services already account for over half of all economic activity in APEC economies and in most instances significantly more than that. The share of services in GDP and employment will only increase looking forward especially as developing economies expand into digital and internet businesses and demand for services grows with rising incomes. Services impact the competitiveness of all firms in an economy because many services are inputs into production. Services performance is also critical for inclusion, as access to services and the quality of services available to citizens directly impact on their welfare. Most SMEs are in the services sector and so is the majority of employment. Thus, services must be a central focus of economic policy and structural reform efforts aimed at bolstering inclusive growth.

- Pursue reforms on a unilateral basis. Structural reforms in services sectors should be pursued autonomously. This does not imply that international agreements such as through the WTO, Trade in Services Agreement, or regional trade agreements cannot be helpful in providing a supportive framework for reforms. But the burden of structural reform initiatives rest on individual governments. They can be and should be informed by international experience and efforts to determine what constitute good practices – an area in which APEC has a long-standing track record.
- Focus on productivity. There are many possible rationales and reasons for undertaking structural reform in services sectors. The economic literature and international experience with such reforms suggests that the aim should be to improve the economic performance of services sectors. The evidence discussed in this report suggests there is a good case for focusing on total factor productivity. This may be reflected in lower prices/costs but may also be associated with better access and improved quality, variety and choice.
- Rely on market mechanisms and competition. A focal point (premise) for structural reforms is to enhance competition on domestic markets through removal of policy-driven barriers to entry by new firms and reduction of restrictions on the ability for firms to pursue mergers or acquisitions. Identifying and removing entry restrictions should be a basic element of reforms measures that inhibit new entry, including by startups and foreign-owned companies as entry is a major driver for better performance.

- Recognize and measure the positive spillover effects of structural reform. Services reforms can have many positive effects, and experience reveals that many of these take the form of ancillary, unanticipated benefits. Reforms should be defined as going beyond the realization of narrowly defined targets but being motivated by such positive spillovers. A corollary is that systems be put in place to identify and measure spillover effects so as to be able to monitor and document the effects of a reform process. The case studies show that a variety of positive spillovers may be generated by services policy reforms and that this may result in 'underselling' of the benefits of undertaking structural reforms.
- Apply value chain perspectives to leverage services reforms.
 At the economy level the effects of structural reforms in services will be determined in part by the linkages that connect sectors. The design of reforms should be sensitive to and consider such linkages, and allow for adjustments over time to ensure that related policy areas are not (do not become) a binding constraint. Explicit consideration of forward and backward linkages can be achieved by adopting value-chain informed approaches to identifying the set of policy areas that impact on service sector performance.
- Adopt a whole of government outlook to anticipate potential silo problems. A corollary of the 'value chain' dimensions that should be considered in the design and implementation of structural reforms for services is to engage the different regulatory agencies and government entities that impact on the various sectors that are implicated. A high-level of commitment to reforms is needed for sustaining a whole of government approach, and is likely to bolster the perceived credibility of a reform program.
- Consider need to address adjustment costs. Structural reform may give rise to adjustment costs. Incumbent firms that have benefitted from the rents created by entry restrictions will see that source of profit eroded by reforms and workers in inefficient firms may be forced to search for new employment opportunities and require re-training. Such possibilities need to be addressed in the design and implementation of reforms.
- Design reform programs to be flexible to reflect learning by doing. Reforms are a dynamic process. Circumstances can

- evolve over time. The specifics of the design of reforms may prove to be inappropriate in some dimensions or unexpected spillover effects may emerge. Adjustments may be needed as a result of unintended consequences. This calls for mechanisms to be put in place to generate the information and feedback needed to identify when and where adjustments are needed. Building knowledge partnerships at the economy level that include industry, consumer groups and specific stakeholders to interact with the relevant regulators and government representatives can ensure that such information is generated on a timely basis. Such partnerships can become platforms for monitoring progress and provision of inputs needed for evaluation of structural reforms.
- · At the APEC level, pursue cross-fora collaboration and joint work programs. The regulatory issues that are the focus of deliberations in the Economic Committee (EC) as part of the broader structural reform agenda must be informed by and involve the relevant sectoral regulators and related working groups, and vice versa. Regulators will not have an economywide focus, while economic policy efforts aiming at inclusive growth are in large part conditional on regulatory reforms at sector level. Likewise, deliberations on services trade and investment policy reforms, a subset of the broader structural reform agenda and economic policy, must include sectoral regulators as well as line ministries that are responsible for policies that directly impact on the ability of firms to engage in international trade. Multi-stakeholder for a such as the regular policy dialogues that occur in the margins of APEC meetings can be mobilized as well to act as a venue for learning and exchange of experience in implementing structural reforms.
- Implement measures to measure progress and impacts of structural reforms. Data on services policies and services performance productivity, employment, trade, investment lags far behind that compiled for goods. Addressing these gaps should be a priority. Better data will support the structural reform agenda. It is needed to identify priority areas to focus on, to establish baseline performance measures/metrics for the services concerned, and to measure progress (trends) over time in indicators of performance. Monitoring and evaluation to assess impacts of reforms is needed to allow for adjustments in reform initiatives over time and to build on them with complementary actions. It is also important in assessing

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the extent of potential spillover effects of reforms. Such efforts should involve the private sector, including users of the services concerned. Of particular importance is firm- and household-level data that permits monitoring and evaluation of the impacts of policy reforms.

The APEC report on baseline indicators has identified a wide range of services data gaps and weaknesses across APEC economies, indicators and time periods. A concerted effort is needed to improve the statistics on services and for APEC economies to commit to an initiative to do so. A first step would be for GOS or the other existing working group to identify the issues that constrain better collection and reporting of statistics and areas where technical assistance and capacity building efforts should be pursued. This work should be tasked to GOS or the other existing working group with a mandate that is focused on data that will allow assessment of regulatory policies and outcomes, through for example services trade restrictiveness indices (STRIs), the extent to which APEC economies have established or participate in sectoral international regulatory cooperation (IRC) initiatives, and the degree to which they have made commitments in trade agreements - through indicators such as sectoral coverage ratios.

While collecting such information is costly, it has high potential payoffs in helping to understand structural reform efforts and the benefits they create. Costs can be reduced by avoiding duplication and building on progress that has already been achieved. In the case of policies that impact on trade and investment use can be made of the OECD STRIs as a focal point for measurement of progress in reform. The STRIs will be regularly updated by the OECD so that APEC economies can simply rely on that initiative as one source of valuable data that can be used to track the direction of change in STRIs at the aggregate and the sector- and sub-sectoral level. The same is true for World Bank governance and investment climate indicators, and the World Bank's STRI—which is more narrowly focused on discriminatory laws and regulations. This is supposed to be updated in a partnership with the WTO, an initiative that deserves the support of APEC economies.

APEC's Ease of Doing Business: Final Assessment 2009-2015

Publication Number: APEC#216-SE-01.10 Published Date: September 2016

Full Report: 48 pages

The final assessment of APEC's Ease of Doing Business (EoDB) initiative, which takes into account the period 2009-2015, looks at the performance of the APEC region using the indicators of the World Bank's Doing Business in five priority areas, namely:

1) Starting a Business; 2) Dealing with Construction Permits;
3) Getting Credit; 4) Trading Across Borders; and 5) Enforcing Contracts. The APEC Policy Support Unit (PSU) prepared this assessment in collaboration with the Economic Committee (EC).

Findings & Recommendations

The assessment shows that APEC has fallen short of the overall target of a 25% improvement by 2015, by posting a combined progress in the five priority areas equivalent to 14.6%. However, despite the fact that the target was not met, significant progress was achieved by APEC in some areas.

For example, when examining APEC's average values in the indicators of all priority areas, the progress achieved in Starting a Business was a remarkable 47.4% improvement, far ahead of the 25% improvement target. The average time to start a business went down by almost two weeks from 28.5 to 14.8 days. The progress in Dealing with Construction Permits, equivalent to 13.9%, did not meet the required target, but the average time to get a construction permit went down by more than one month, from 149 to 112 days, which is a significant improvement between 2009 and 2015. Similarly, Getting Credit indicators reached a combined progress of 10.1%. In particular, there was a noticeable expansion of the average coverage of the adult population with credit information available in private credit bureaus, going up from 48.8% to 61.4%.

The other two areas, Trading Across Borders and Enforcing Contracts, did not make significant progress. In the case of Trading Across Borders, the combined improvement of 1.4% was

APEC: Accumulated Overall Progress of Ease of Doing Busin	ness Initiative (Average Values)
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Improvement	Starting a Business	Dealing with Construction Permits	Getting Credit	Trading Across Borders	Enforcing Contracts	Overall Progress	Benchmark
2009 - 2010*	6.3	3.3	1.8	1.4	0.0	2.6	2.5
2009 – 2011*	17.1	6.9	3.3	2.7	0.4	6.1	5.0
2009 – 2012*	22.8	15.7	4.0	2.5	0.1	9.0	10.0
2009 - 2013*	27.3	19.8	6.6	2.6	0.2	11.3	15.0
2009 – 2014**	38.7	14.9	8.0	1.5	0.5	12.7	20.0
2009 - 2015***	47.4	13.9	10.1	1.4	0.4	14.6	25.0

Source: APEC Policy Support Unit calculations using data from:

- * World Bank, Doing Business 2014 database
- ** World Bank, Doing Business 2015 database
- *** World Bank, Doing Business 2016 database

Note: Figures in percentage values. Improvements are shown with positive values.

due to increases in the average cost to trade which offset the effect of the reduced average time to trade in the APEC region. For Enforcing Contracts, the change was only marginal during the period 2009-2015.

For these two priority areas, it is possible that the low improvement rates are due to the complexity involved in implementing regulatory reforms in issues concerning connectivity and trade, and judiciary matters. Many of these reforms in most APEC economies need to go through several layers of approval, for example, legislative branches. For Enforcing Contracts, an additional difficulty is found in some economies concerning the separation of powers between the judiciary and the executive and/or legislative branches, in which an initiative from the central government to reform the judiciary may be seen as an undue interference in matters that exclusively are the responsibility of the judiciary branch. In contrast, some reforms in areas related to

Starting a Business, Dealing with Construction Permits or Getting Credit, are easier to conduct as they are usually implemented at the municipal level or only require approval from one branch (e.g. executive branch).

APEC's median values concerning the indicators in the five EoDB priority areas evolved in a similar way to its average values. Starting a Business reported the greatest progress, followed by Dealing with Construction Permits and Getting Credit. The progress in Trading Across Borders and Enforcing Contracts were far behind the 25% improvement target as well.

Whilst APEC could not keep pace to meet the 25% improvement target in 2015, the progress achieved so far across the region cannot be discounted. Now, it is cheaper, easier and faster to deal with different aspects related to doing business in the region. This facilitates more efficient use of resources and represents

APEC: Accumulated Overall Progress of Ease of Doing Business Initiative (Median Values)

Improvement	Starting a Business	Dealing with Construction Permits	Getting Credit	Trading Across Borders	Enforcing Contracts	Overall Progress	Benchmark
2009 - 2010*	6.8	-2.6	5.1	2.7	0.0	2.4	2.5
2009 – 2011*	22.0	-5.7	3.4	5.0	0.0	4.9	5.0
2009 - 2012*	23.0	4.6	4.5	5.0	-0.3	7.4	10.0
2009 - 2013*	23.0	9.5	5.0	6.5	0.5	8.9	15.0
2009 – 2014**	27.2	22.0	9.6	4.3	-1.1	12.4	20.0
2009 – 2015***	37.9	17.3	11.3	6.4	1.1	14.8	25.0

Source: APEC Policy Support Unit calculations using data from:

- * World Bank, Doing Business 2014 database
- ** World Bank, Doing Business 2015 database
- *** World Bank, Doing Business 2016 database

Note: Figures in percentage values. Improvements are shown with positive values.

Structural Reform

significant savings for firms and individuals. Furthermore, APEC's performance has been greater than that of the rest of the world.

The results in this assessment indicate that APEC has made progress, but there is still room for improvement in several areas, especially Trading Across Borders and Enforcing Contracts. In relation to this, the decision by EC to continue with this EoDB initiative and launch a new action plan for the period 2016-2018, covering the same five priority areas and setting a collective target of 10% improvement across all these areas, are very important decisions.

Capacity building remains a pillar of APEC's EoDB Second Action Plan. Based on experiences from the First Action Plan 2010-2015, the exchange of experiences and best practices and preparation of diagnostic studies had been very useful for APEC economies. They were able to understand more about the bottlenecks that affect them in doing business and to learn about the actions that could be taken to address existing problems. Such capacity building efforts will need to include a mix of APEC-wide and economy-specific activities. The Second Action Plan 2016-2018 will continue to build on the capacity building efforts from the First Action Plan and emphasize on the implementation of reforms associated with the five priority areas.

Exploring Quantitative Indicators for Effective Monitoring of APEC-wide Progress on Structural Reform under the Renewed APEC Agenda for Structural Reform (RAASR) 2016-2020

Number: APEC#216-SE-01.20 Published Date: October 2016

Full Report: 53 pages

This report proposes possible external baseline indicators to be used to monitor APEC-wide progress on structural reform under RAASR. It was prepared in response to the task by APEC Senior Officials to the Economic Committee (EC) to work with the APEC Policy Support Unit to develop a set of quantitative indicators to monitor RAASR.

The report first provides a general overview of how the review process of RAASR can possibly be conducted as well as the thought process behind the identification of the proposed external indicators. It then lists these indicators and provide additional details for each, including the relevant RAASR pillars addressed by the indicator, possible actions at economy level that may impact the indicator, its strengths and limitations.

Findings

The reports proposes a list of 17 external indicators, as follows:

- World Bank Ease of Doing Business Distance to Frontier
- OECD Economy-wide Product Market Regulation
- OECD FDI Regulatory Restrictiveness Index
- OECD Services Trade Restrictiveness Index
- The Conference Board Labour Productivity per Person Employed
- WEF Global Competitiveness Indicators for Business Sophistication and Innovation
- ILO Employment to Population Ratio
- ILO Share of Youth Unemployment
- ILO Labour Force Participation Rate for Age Group 65+
- World Bank Indicators on Women, Business and the Law
- WEF Global Competitiveness Indicators for Labour Market Efficiency
- WEF Global Competitiveness Indicators for Financial Market Efficiency
- UNESCO Tertiary Gross Enrolment Ratio
- WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure
- WEF Inclusive Growth and Development Indicators for Fiscal Transfers
- UNESCO Pupil-Teacher Ratio
- World Bank and OECD Physicians Per 1,000 People

These indicators will allow for comparative analysis across economies and consequently, progress at the APEC-wide level under RAASR. Although these proposed indicators are not exhaustive and hence will not be able to cover all possible impacts that may arise from structural reform efforts, they provide a good snapshot of progress in certain areas or topics with linkages to the RAASR pillars and, hopefully, encourage deeper policy discussions. They will also serve to complement the monitoring of progress made by individual economies in their Individual Action Plans

Connectivity Including Supply Chain Connectivity & Global Supply Chains

APEC Supply Chain Connectivity Framework Action Plan (SCFAP) 2010-2015: Final Assessment

Publication Number: APEC#216-SE-01.8 Published Date: November 2016

Full Report: 46 pages

This report presents the final assessment results of the APEC Supply Chain Connectivity Framework Action Plan (SCFAP), covering eight chokepoints that need to be addressed to improve the performance of supply chains in the APEC region, with a target of 10% reduction in time, cost and uncertainty by 2015. The eight chokepoints are: (1) transparency; (2) infrastructure; (3) logistics capacity; (4) clearance; (5) documentation; (6) connectivity; (7) regulations and standards; and (8) transit.

Findings

The final assessment of the SCFAP uses a three-pronged approach, evaluating progress using: (i) external indicators; (ii) internal indicators; and (iii) a self-assessment survey. The findings are presented below.

 External Indicators: The performance assessment using external indicators makes use of relevant benchmarks from the 2016 Logistics Performance Index (LPI), the 2015 Doing Business (DB) report and the 2014 Global Enabling Trade Report (GETR).

The overall LPI score shows a small improvement, still far from the 10% target. DB scores show very strong progress in terms of time, exceeding the pro-rata target for both imports and exports: trade transactions were completed 10% faster for imports and 12% for exports. DB cost figures (adjusted for inflation) for imports and exports also show good progress, achieving the pro-rata target in 2014. It should be noted that nominal costs still show an increase of 7% for imports and 2% for exports.

The 2016 LPI shows that traders had a significantly longer lead time to import and export in port/airport supply chains. While this finding should be interpreted carefully, there could be a need for stronger policy direction to resolve this issue.

- Internal Indicators: An analysis of internal indicators shows that around 93.6% of the SCFAP activities to address the eight chokepoints were completed during the period 2010–2015.
 The activities focused on determining key obstacles and highlighting policy recommendations and proposed actions to resolve the chokepoints.
- Self-assessment Survey: The self-assessment survey indicates that, out of a total of 70 projects reported by APEC member economies, 50 projects have been completed with the remainder still ongoing. Over a quarter of these projects addressed chokepoint 4 on cross-border clearance procedures, while chokepoints 2, 7 and 8 were the least tackled. It is worthwhile to note that 22 of these SCFAP projects were deemed highly successful, earning a best practices label.

The overall assessment suggests that the common challenges in implementing SCFAP activities, and achieving the 10% target, are related to insufficient infrastructure, lack of information and consistency, and institutional problems. Nevertheless, there also exist opportunities for collaboration and information sharing, and for harmonizing and standardizing regulatory practices to help overcome the obstacles.

Respondents are of the view that the next phase of SCFAP activities should focus on: simplifying customs and border procedures; addressing commodity-specific bottlenecks; knowledge sharing and performance benchmarking; minimizing transportation issues; conducting capacity building and cooperation initiatives; and strengthening supply-chain security.

Recommendations

The review of the diagnostic reports, the self-assessment survey and analysis of external indicators in this SCFAP assessment

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suggests that APEC could consider the following areas moving forward:

- Simplifying and improving customs and border procedures and processes: This includes issues such as: (1) digital customs; (2) interoperability of National Single Windows; and (3) expansion of the Mutual Recognition Arrangement of Authorized Economic Operators between APEC economies.
- Improving quality and access to transportation infrastructure and services: This captures issues such as: (1) improving connectivity efficiency using technology; (2) addressing congestion; (3) funding future regional infrastructure; and (4) enhancing multimodal transportation.
- Reliable, secure and efficient logistics services: This captures
 issues such as: (1) high logistics costs; (2) strengthening
 the ports network; (3) green supply chain; (4) improving the
 capacity of SME logistics providers; and (5) strengthening
 supply-chain security.
- Stronger regulatory cooperation and harmonization: This could include issues such as: (1) better stakeholders' consultation; and (2) effective integration of trade, competition, and marketopenness considerations into the regulatory development processes.
- Improved policy and regulatory infrastructure for e-commerce: This could include issues such as: (1) cybersecurity initiatives to establish a secure, sustainable online environment; and (2) adoption of an electronic information exchange framework.

Supply-chain connectivity has been one of the core areas for APEC in strengthening and supporting regional integration. The SCFAP shows some progress in reducing time and cost for traders. Nevertheless, gaps remain and these should be addressed in the next phase of the SCFAP. The second phase should also address emerging issues in the global supply chain such as e-commerce, digital customs and cybersecurity.

Case Study on the Role of Services Trade in Global Value Chains

This project consists of case studies examining the role of services in global value chains (GVCs), particularly the effects market-opening services development have had on the economy and GVCs. The case studies undertaken are: (1) Chile: Transport Services; (2) Malaysia: Health and Medical Services; and (3) Papua New Guinea: Telecommunications Services.

Transport Services in Chile

Publication Number: APEC#216-SE-01.22 Published Date: September 2016

Full Report: 46 pages

This case study examines the pattern of liberalization in Chile's transport services sectors, specifically from the point of view of the ways in which it has supported increasing engagement with the GVCs.

Findings & Recommendations

The case study finds that Chile has undertaken substantial transport sector liberalization over recent years. Chile's regulatory stance is generally quite liberal, and this is reflected in a substantial embodiment of foreign transport value added in exported GVC goods in sectors like agribusiness, and paper products, as well as resource sectors.

On the basis of an econometric model, it is concluded that the combination of transport sector reform efforts in Chile perhaps contributed to increase GVC performance by around 7%. Transport services are an important input into many GVCs, including those where Chile has been successful, so it should come as no surprise that liberalization can make a non-negligible contribution to promoting the expansion and deepening of GVCs.

A particular aspect of the Chilean experience highlighted in the case study is the link between transport in combination with logistics as a value, as opposed to cost, service in some sectors. Promoting development of transport as a real source of value added, for instance through cold chain storage, high speed movement of time-sensitive goods, and use of controlled environments to preserve sensitive products, can make it possible for economies like Chile to participate in non-traditional GVCs. As highlighted in the report, Chile has been successful in developing some agribusiness sectors into competitive GVCs, and having open and competitive transport markets has been a significant factor in that evolution.

More broadly, the work presented here supports APEC's focus on the role of services in manufacturing value chains. Moreover, it suggests that sectors like agribusiness, where GVCs are becoming more relevant for a number of APEC economies, also rely on services like transport, as well as wholesale and retail distribution. As a result, regulatory reform in key backbone services sectors, including transport, has the potential to help develop GVC activity across APEC, with the national income and development gains that brings with it.

While Chile is quite liberal from a strictly trade policy point of view, there are remaining issues of domestic regulation that perhaps deserve attention, such as slot allocation in air transport, and price setting in other modes. Chilean policies in the transport sector contain relatively little de jure discrimination against foreign service providers, which is admirable. However, it will be important to maintain the momentum towards efficient and effective sectoral regulation by conducting rigorous cost benefit assessments of some of the measures that have been identified in the case study.

Health & Medical Services in Malaysia

Publication Number: APEC#216-SE-01.24

Published Date: February 2017

Full Report: 54 pages

This case study examines the healthcare sector reforms in Malaysia, particularly in medical and health services. It identifies good regulatory approaches and best practices for development of the healthcare sector to effectively participate in GVCs.

Findings & Recommendations

The healthcare sector in Malaysia shows great potential for growth in the region and also globally. The study highlighted strong support from the government to promote healthcare services in the private sector to become more globally competitive. The integration of healthcare and tourism into medical-tourism and healthcare-tourism also creates strong externalities between the healthcare and tourism sectors.

The Malaysia government has been able to create a positive impact through these policies in the healthcare sector:

- Taking an active role in planning and managing the development gap and bottlenecks in the healthcare sector.
- Creating synergy between public and private healthcare service providers to create positive externalities for quality and safety of healthcare services.
- Identifying key skills gaps in the healthcare sector, thereby increasing the flow of semi-skilled and skilled foreign workers to enable them to effectively participate in the public and private healthcare sectors (mode 4).
- Encouraging and incentivizing investments by foreign hospitals in terms of joint ventures and mergers to internationalize domestic hospitals (mode 3) by removing foreign ownership in the Malaysian healthcare sector.

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- Strong policies to encourage international accreditation of healthcare services and incentivizing local hospitals to be accredited by international healthcare agencies.
- Incentivizing and increasing private sector investment in infrastructure, connectivity and technologies in healthcare services by tax exemptions and tax holidays.
- Deliberate policies allowing the integration of medical practices in private and public hospitals to create economies of scale and scope in the provision of healthcare services in Malaysia.
- Government ministries and agencies becoming facilitators and enablers for quality healthcare services in the economy and region.

However, the private healthcare sector still faces several key challenges and where further efforts are necessary.

- Retention and quality of professionals in the economy for private healthcare services to be competitive.
- Need for greater mutual recognition of medical and healthcare diplomas and degrees.
- Encouraging more linkages between domestic and foreign hospitals.
- Creating value-chain activities in services such as promoting healthcare travel services in terms of insurance brokers and agents and international travel intermediaries to be located in Malaysia.
- Improving value-chain activities in the healthcare sector by establishing foreign medical and healthcare educational institutes.
- Keeping both tourism and healthcare cost competitive and also affordable for the Malaysians.
- Developing stronger domestic capacity and linkages to support foreign investments in the healthcare sector.
- Encouraging the promotion of Halal Hub in online portals
 18

and at healthcare exhibitions in other economies to promote healthcare services in Malaysia.

 Maintaining the quality of public healthcare in terms of affordability and cost effectiveness.

One of the most difficult tasks is to ensure first-class health outcomes at reasonably low cost. The population in Malaysia is getting older and less healthy due to demographics and lifestyle shifts, contributing thus to an increase in non-communicable diseases. Such changing health patterns require expensive, long-term treatment and higher public spending. However, this is not reflected in the current trend of public health expenditure in Malaysia. The government would have to increase its healthcare expenditure, closer to the average of 5% or more of GDP in the East Asian economies.

Telecommunications in Papua New Guinea

Publication Number: APEC#216-SE-01.21

Published Date: September 2016

Full Report: 38 pages

This case study examines the effects of the deregulation of Papua New Guinea's (PNG) mobile telecommunications sector, a process which began in 2007. Specifically, it examines the social and economic impact of mobile telecommunications deregulation in PNG, considers the effects that reforms have had on PNG's ability to benefit from GVCs, identifies barriers and challenges and provides recommendations.

Findings & Recommendations

Among the key findings are:

 Falling mobile telecommunications costs have driven down total costs for PNG contributors to GVCs by between 2% and 5%, resulting in an increased ability to supply key inputs such as energy, metals and agricultural goods to competitive global markets.

- In 2016, it is estimated that this reduction in costs will boost GDP by between 0.9% and 2.3%.
- Companies and other organisations have developed safety and transparency systems accessible by mobile subscribers.
- Improved functioning of fresh produce value chains could contribute to PNG's participation in GVCs for processed food products.
- Internet access in remote areas has enabled agricultural cooperatives to open new markets for their produce, facilitating sales of time-sensitive fresh goods.
- Safety, health and transparency initiatives have all been enabled by access to mobile phones, leading to positive social and economic outcomes.
- Concerns remain regarding the rapid changes that have been wrought by mobile telecommunications in PNG. Infidelity and crime are all legitimate concerns, as is the fear that the costs of mobile phone ownership may be too high for some subscribers.

In order to maximise the positive aspects of the spread of mobile telecommunications, mobile telecommunications operators should continue to address network black spots, and progressively upgrade rural networks to provide internet access. The role for the government includes to ensure healthy competition in the mobile telecommunications sector, and to prioritise electrification projects in remote parts of PNG and make continued investment in transport infrastructure. A peripheral recommendation is to increase the publication of official economic data since better data coverage will enable useful comparisons with other economies at a similar stage of development, and allow the identification of initiatives that have the best chance of contributing to positive change.

Economic & Financial Analysis

APEC Regional Trends Analysis

APEC Regional Trends Analysis is a merger of former reports "APEC Economic Trends Analysis" and "Key Trends and Developments Relating to Trade and Investment Measures". The new biannual report aims to provide an overview of the APEC region's economic prospects through in-depth analysis on recent macroeconomic and financial developments and also trade and investment trends in the region and measures recently implemented by APEC member economies.

Series: May 2016 – Reducing Trade Costs in the Asia-Pacific

Publication Number: APEC#216-SE-01.6

Published Date: May 2016 Full Report: 30 pages

Findings & Recommendations

Reducing Trade Costs in the Asia-Pacific

- APEC has been at the forefront of trade facilitation efforts with many initiatives aiming to reduce trade costs. For example, the APEC Supply Chain Connectivity Framework Action Plan (SCFAP), initiated in 2010, identifies eight chokepoints to be untangled to improve supply-chain connectivity in the region and calls for an improvement of supply chain performance in time, costs, and uncertainty.
- Figures from the World Bank's Doing Business database show progress in terms of reducing time and costs to trade in APEC.
 While progress is promising based on these indicators, they only measure two aspects of trade costs.
- An alternative is to compute ad-valorem equivalent bilateral trade costs, which cover all costs involved in conducting transactions across borders, including direct and indirect costs of fulfilling regulatory import and export requirements;

differences in currencies, languages, and culture; geographical distance; and shipping and logistics costs. Based on this measure, it is estimated that APEC economies have achieved a reduction in bilateral trade costs with their 10 largest trading partners by 6% to 12% between 2010 and 2014. If a simple average is used, ad-valorem trade costs have fallen from 96.4% of the value of goods traded in 2010 to 90.7% in 2014. If a trade-weighted average is used, trade costs have fallen from 74.4% in 2010 to 65.8% in 2014.



Note: Data for 17 APEC economies. Source: World Integrated Trade Solution database and APEC Policy Support Unit calculations

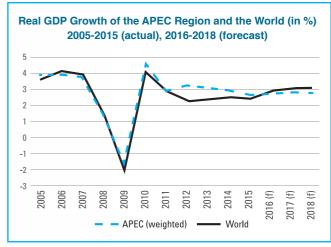
- Trade costs for agricultural products are almost double that for manufacturing products, pointing to the many barriers (e.g., tariffs and non-tariff barriers) that still constrain trade in agricultural products. These differences in trade costs could be distorting firms' decisions on product specialisation and investment.
- Flourishing global value chains have been made possible by lower trade costs. Hence, lower trade costs is an enabling factor for a more efficient global production network, increasing productivity as well as influencing firms' investment location decisions.
- Key efforts to reduce trade costs have been consistently implemented within APEC, including initiatives for customs

reform, harmonizing standards, and business mobility. APEC economies need to further strengthen regional cooperation on new areas such as upgrading transport and network infrastructure, improving the regulatory environment for services, strengthening connectivity, and enhancing value chain resilience. An end-to-end supply chain framework to view trade facilitation is necessary to enhance these efforts.

Boosting Growth amid External Weaknesses

- The APEC region continued along the growth trajectory amid persistent challenges in the external and domestic fronts as GDP grew by 2.7% in 2015, higher than world GDP of 2.5%, but lower than the 2014 APEC growth of 2.9%.
- Resilient private consumption and strong government spending together with generally positive contribution from gross fixed capital formation, underpinned by low commodity prices and fiscal expansionary measures, boosted economic activity in the APEC region throughout 2015.
- The APEC region has been affected by the downward trend in commodity prices since some APEC economies are major exporters of oil and energy products, metals and minerals, as well as agriculture products. The all-commodity price index declined by 35.3% year-on-year in 2015, with crude oil prices significantly down by 47.2% due to a combination of a glut in supply and a slowdown in demand.
- A downturn in trade was seen in the APEC region in 2015, reflecting the impact of a confluence of cyclical and structural factors. The value of exports of merchandise trade contracted by 8.7% in 2015 across APEC economies, a reversal from the 1.9% modest expansion in 2014. Imports also contracted by 11.5% from 0.3% growth during the same comparative period.
- Preliminary estimates show that APEC economies were the top three largest recipients of foreign direct investment (FDI) inflows in 2015: the United States at around USD 384 billion; Hong Kong, China with a new record of USD 163 billion; and China at USD 136 billion. Cross-border mergers and acquisitions accounted for the bulk in FDI inflows, supported in turn, by an environment of low interest rates and strong cash positions.

- APEC implemented 68 trade-related measures in mid-May to mid-October 2015, of which 28 measures were tradefacilitating and 40 measures had the effect of discouraging trade. During the period May 2015 to February 2016, APEC implemented more measures to ease the entry of FDI rather than restrict it.
- Calculations by the APEC Policy Support Unit based on the IMF growth projections indicated that the APEC region will maintain a 2.7% growth in 2016, inching up to 2.8% in 2017-2018. Growth prospects will continue to be affected by the direction of commodity prices, the economic rebalancing in China, the strength of the Japanese economy, together with the level of trade competitiveness in the region as determined by such factors as trade policies, exchange rates and product quality, among others.



Source: IMF, World Bank, economy sources and APEC Policy Support Unit calculations.

Economic & Financial Analysis

Series: November 2016 – Rethinking Skills Development in the Digital Age

Publication Number: APEC#216-SE-01.19

Published Date: November 2016

Full Report: 34 pages

Findings & Recommendations

Rethinking Skills Development in the Digital Age

- Digital technology has had profound impacts on nearly all aspects of living. It affects not only how we communicate or consume information but what we eat, where we live, how we work, and how we entertain ourselves.
- Digital technology has brought benefits to households and firms that utilise them. Data also show that it could contribute to economic growth. Preliminary data analysis shows that there is a statistically significant and positive correlation between digital technology use and GDP growth.
- However, the analyses with regard to employment show no clear relationship: preliminary estimates show that there is no statistically significant correlation between digital use and employment generation. While deeper analysis is needed, this may be pointing to the opposing impacts of digital technology on employment.
- On one hand, digital technology can result in computers doing the jobs that humans currently do. A study by Frey and Osborne (2013) finds that up to 47% of jobs in the United States are at risk of computerisation. Mid-skill jobs that are routine and follow clear rules—such as factory assembly, transcription, or simple accounting—can be codified into an algorithm and, hence, computerised.
- A related impact of digital technology is job polarisation: as most routine mid-skill jobs are computerised only nonroutine and discretionary jobs at the low- and high-end of the skill spectrum will remain. To use a factory analogy, a

- robot might replace the chip assembler, but the hall janitor and the nanophysicist will likely keep their jobs. This will have implications not only on skills development and employment, but also on wage disparities and income inequality.
- On the other hand, humanity's previous experiences with disruptive technologies have not resulted in doom and instead opened up new opportunities. Indeed, digital technology has opened up new industries (e.g., business process outsourcing) and jobs (e.g., app developer) that were unheard of previously.
- The advent of the digital age requires a rethinking of education and training, labour policy, and even social security. The changing economics of information—from information scarcity to information overload today—will change what we know and how we teach students. This will require revisiting curricula and orienting teachers with revised pedagogies. The rapid pace of technological change will require access to lifelong learning and continuing retooling: a particular challenge for an ageing workforce.
- Labour market and social insurance policies will also need to take into account the new realities of digital jobs. Workers' wages will no longer necessarily come from corporations or factories located in cities, but from work with multiple clients located across international borders. With the popularity of freelance work, precarity and casualisation will be the important labour issues in a digital age. Likewise, social security and insurance will need to be modified in the absence of firms from which to collect premiums.
- Digital technology and its disruptions make regional cooperation especially essential. The disruptions of digital technology have cross-border implications: decisions made in one economy may have impacts, and unintended consequences, in another economy. Regional cooperation thus has an important role to play in coordinating policies and regulations as well as information sharing and capacity building. The working relationships among APEC economies will prove valuable in helping economies navigate through a fast-changing digital environment.

Continued Growth amid Persistent Global Weakness

- The APEC region continued to grow during Q2 2016 at 2.4%, slightly higher than the previous quarter's level of 2.3%, but lower than the 2.8% GDP growth posted in Q2 2015.
- The continued GDP growth in APEC was attributed largely to steady private and public consumption amid low trade growth owing to the persistent weakness in global economic activity, aggravated by uncertainties from the Brexit vote and rising trade protectionism.
- The APEC region's values of merchandise exports and imports contracted by 6.4% and 6.6%, respectively, during the period January-August 2016 compared to the year-ago level. This contraction is in line with the drop in the value of world exports and imports by 4.4% and 4.9%, respectively, during the same period.
- Investor optimism in the APEC region as a whole is relatively strong as shown by the continued inflow of FDI. In 2015, FDI inflows to APEC increased by 42.3% to USD 953 billion compared to the previous year. The region attracted around 54.1% of the world's FDI, higher than the APEC share in 2014 of 52.4% and the 15-year average share (covering the period 2000-2015) of 46.1%.
- FDI entry into the APEC region continued to be boosted by an increasing number of investment-friendly measures, based on UNCTAD's 15th Report on G-20 Trade and Investment Measures and November 2016 Investment Policy Monitor. In contrast, trade-restrictive measures have increased while trade-facilitating measures have declined.

- Economic activity in the near-term is expected to be uneven among APEC economies, hinging on a mix of global weakness and domestic conditions. Downside risks are anticipated to dominate upside opportunities for near-term growth. Heightened uncertainty as to the economic impact of China's rebalancing, another round of US interest rates hike, Brexit and other developments, as well as trade protectionism could overwhelm such upbeat factors as the improvements seen in industrial production, recovery in commodity prices, and sustained inflow of FDI into the APEC region.
- As global headwinds persist, APEC economies need to fortify their resilience in order to continue to grow amid adverse external developments. An appropriate policy mix that addresses short-term growth requirements and mediumterm prospects remains the key toward a higher and more sustainable growth trajectory.

Sustainable Economic Development

Tourist Arrivals and Inclusive Growth

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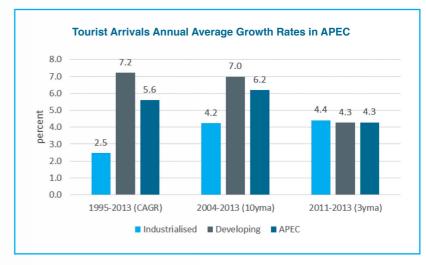
This study contributes to tourism policy discussions in the APEC region in two ways. First, it examines the likely impacts of policies that can contribute to achieving the target of 800 million international tourist arrivals by 2025, a goal APEC tourism ministers announced in 2014. Second, it looks at the linkages between tourism development and the overall economy, in particular the linkages between tourism and macroeconomic indicators, inclusive growth, and micro, small, and medium enterprises (MSME) development.

- Achievement of the 800 million arrivals target by 2025 can lead
 to significant gains for the region. If this target is achieved,
 the APEC region could produce an additional USD 3.8 trillion
 dollars in output, generate an additional 21.1 million jobs, and
 lift an additional 15.2 million people out of extreme poverty.
 Data also show that tourism development has positive
 synergies with bilateral trade and investment, so attaining
 the goal can contribute to trade and investment growth in the
 region.
- Attaining the 800 million target requires the calibration of policies that affect tourist flows. Based on the empirical analysis, two policy areas that have the strongest impact on tourist arrivals are visa requirements and air connectivity.

Findings & Recommendations

Tourism Performance in the APEC Region

- The APEC region received 426 million tourists in 2013, an increase of 168% from the 159 million tourist arrivals in 1995. Between 1995 and 2013, tourist arrivals in the region grew at an average rate of 5.6% per year. However, in more recent years tourist arrivals growth has slowed down, growing an average of 4.3% per year in 2011-2013.
- The region is on track to reach its goal of 800 million tourist arrivals by 2025, but this is not guaranteed.
 If long-term growth rates are assumed, then the region will reach 819 million tourists by 2025.
 However, if more recent growth rates are applied, the region will fall 100 million tourists short of its target.



Note: CAGR = compound annual growth rate; 10yma = 10-year moving average; 3yma = 3-year moving average. APEC industrialised economies are Australia; Canada; Japan; New Zealand; and the United States. APEC developing economies are other APEC members not classified as industrialised. Source: UNWTO data and APEC Policy Support Unit estimates

- Imposing visa requirements, by itself, reduces bilateral tourist
 arrival growth by half a percentage point. Visa requirements
 serve important security and information gathering purposes,
 but are costly for the economy imposing them in terms of lost
 tourism flows. However, the data also show that economies
 can significantly reduce the impacts of visa requirements by
 implementing visas-on-arrival or e-visas, or reducing the cost
 of visa applications.
- Having a direct flight, by itself, increases bilateral tourist arrival growth by a third of a percentage point; only land transport through a shared border has a stronger influence on tourist arrivals. Improving air connectivity through open skies, airline competition, improved airport services, and regional cooperation on connectivity can help raise tourist arrivals growth in the APEC region.
- Other policy areas that can contribute to tourism performance are improving tourist safety, tourism promotion and image management, and cultural exchange programs. Moreover, trade and investment promotion have positive synergies with tourism development by attracting more people to visit a destination, while tourism promotion can help trade and investment growth by opening visitors' eyes to possible business opportunities.

Tourism and Inclusive Growth

- Empirical evidence show that tourism development has a
 positive impact on poverty reduction and inclusive growth
 (i.e., growth in household incomes coupled with improvements
 in distribution). Tourism contributes to poverty reduction as
 every 1% increase in tourist arrivals is associated with a 0.12%
 reduction in the number of poor people in the region. Data also
 show indicatively that tourism contributes to inclusive growth
 by providing the poor with more opportunities for employment
 and entrepreneurial activity.
- The role played by MSMEs is crucial for the inclusiveness of the tourism sector. Employment opportunities for the poor in the tourism sector are usually coursed through MSMEs. This is because MSMEs are more likely to hire locally, generate jobs that are less skill-intensive, and provide more flexible work arrangements that are suitable for poor households.

- Studies have shown the contributions of MSMEs in fostering
 inclusive growth in the tourism sector, as well as the
 challenges they face. MSMEs are often less able to respond to
 macroeconomic instability, corruption, and poor infrastructure,
 while having insufficient access to credit and skills. MSMEs
 are also vulnerable to being crowded out by larger firms and
 multinational chains while competing with poorly regulated
 informal sector firms.
- Enhancing the inclusiveness of tourism requires active policymaking at three levels: destination, economy, and international. Destination-level interventions involve partnerships between residents, operators, NGOs and local authorities at the tourist site itself. At the economy-level, policies on business licensing and permits, skills training, land-use planning, competition policy, and financial sector reform can benefit MSMEs in tourism. Finally, interventions at the international level include regional cooperation on responsible codes of conduct for travel providers, as well as tourism policy coordination, best practice dissemination, and capacity building.

The APEC Tourism Working Group (TWG) is well placed to be a forum for information exchange and data sharing for further tourism policy analysis in the region. An APEC-wide dataset for tourism policy inputs (e.g., site promotion efforts, tourist service development) can be collected by TWG, which can then be associated with external data and tourism outcomes to provide a more comprehensive analysis of the sector. Likewise, micro-level case studies on tourism, inclusive growth, and MSMEs can be considered to provide deeper analysis of how tourism development affects firms, households, and individuals; determine gaps and challenges; and glean evidence-based policies that can strengthen the inclusiveness impacts of tourism development in the region.

Sustainable Economic Development

Gender-related Constraints Faced by Women-owned SMEs

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Publication Number: APEC#216-SE-01.5

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This policy brief examines the gender-related constraints faced by women-owned SMEs and provides some policy recommendations to address this issue.

Findings

Overview of Women-owned SMEs in the APEC region

- While SMEs account for a large fraction of all enterprises across APEC economies, on average, only 37% of these SMEs were owned by women as of 2011.
- The size of women-owned SMEs tends to be smaller relative to male-owned ones, which results from the fact that women are disproportionately affected by certain constraints. For example, gender-disaggregated data show that women are more likely than men to operate in the informal sector with 85.1% of women-owned SMEs being informal vis-à-vis 76.7% of men-owned SMEs being informal in the APEC region. Women-owned SMEs also tend to concentrate in industries that are smaller in scale, face further competition and generate lower returns on average. An OECD study noted that women-owned SMEs have a relatively stronger presence in trade, transport, accommodation, and support services industries while men-owned SMEs are more likely to operate in manufacturing, mining and utilities industries.
- Likewise, an IFC (2014) study showed that the gender gap in SME ownership is more pronounced in the retail and wholesale category with nearly 41% of women-owned SMEs belonging to this sector compared to 30% for men-owned SMEs. Besides, women entrepreneurs tend to underperform in terms of sales, profitability and growth compared to their male counterparts. The IFC study also indicated that the median annual sales for

men-owned SMEs was 42% greater than for women-owned SMEs. A similar pattern of gender disparity was also observed for firm's total assets – the median number of assets for menowned SMEs was 44% greater than those SMEs owned by women.

Main Constraints Affecting Women-owned SMEs

Within APEC, four main categories of constraints that female SME owners face in gaining access to markets have been identified.

- Harder for female entrepreneurs to identify opportunities to expand and internationalize, in part due to lack of relevant skills and networking opportunities.
- Unequal access to financial resources from state-owned financial institutions and government agencies has been affecting negatively female entrepreneurs.
- Unfavorable institutional and regulatory framework has made it more difficult for female SME owners to effectively collateralize their assets or to deal with regulations and procedures.
- Cultural and social norms on various issues, ranging from gender division of housework to women's business leadership skills, have been posing additional challenges on female entrepreneurs.

Recommendations

For women-owned SMEs to realize their potential, a holistic and consistent approach is required when crafting policies focusing on inclusiveness, fair institutional frameworks, equal access to finance, and affordability and accessibility of social services.

Creating a mechanism for domestic support, such as family-friendly working conditions and increasing accessibility to childcare services, will enable women to devote more time in economic or entrepreneurial activities. Governments can design tax policies that incentivise mothers to work; introduce labour policies to encourage working fathers to take childcare leave; and divide the parental leave entitlement equally between mothers and fathers. Regulatory reforms simplifying administrative procedures could also encourage business ventures opening childcare services.

To address discriminatory attitudes affecting women's entrepreneurship, more campaigns should be conducted to raise awareness of the problems brought about by gender stereotyping. In addition, it is important that the governments monitor the impact of policies and collect gender-disaggregated data to fine-tune policies and introduce measures to encourage a more equal stance between women and men.

Access to finance plays an important role in helping SMEs to expand to foreign markets. This policy brief highlights the importance to shore up the financial resources for both female and male entrepreneurs through appropriate interventions and targeted programs. Action plans ensuring equal access to government-backed finance programs and credit support schemes targeting SMEs would be useful. For example, in the Philippines, a mandatory credit allocation of 8% and 2% of the banks' total portfolio was put in place in favour of micro, small and medium enterprises, respectively (Republic Act 9501). In parallel, it is also vital to increase awareness of available financial sources and tools among female SME owners and provide them financial advice.

The availability of skilled labour has been identified as one of the factors that determine the success for SMEs to integrate into the global value chains, especially since it is crucial for achieving high productivity and efficiency. For instance, targeted training for women on business, management and IT skills would enable them to tap into e-commerce opportunities and expand their businesses. Governments should consider developing capacity building programs to help women to address their training needs. Public-private partnership can also facilitate business associations to reach out to female SME owners and encourage networking and experience-sharing.

APEC and the Human Development Agenda

Series: Policy Brief No. 14

Publication Number: APEC#216-SE-01.4

Published Date: March 2016

Full Report: 6 pages

This policy brief examines how human development fits into the APEC agenda. It looks into the state of human development in the APEC region as measured by the UNDP and analyzes some linkages with economic growth and trade. It also shows some examples of APEC's work that contribute to human development through human capital investment, before concluding with some thoughts on the process for taking the human development agenda forward.

Findings

Measuring Human Development

The average Human Development Index (HDI) for the 21 APEC member economies has increased steadily during the period 1990-2014. In 1990, the APEC region's HDI stood at 0.69, rising to 0.74 in 2000, 0.79 in 2010, and 0.80 in the latest Human Development Report 2015. Moreover, all APEC economies have experienced an improvement in their respective HDI scores during the period, indicating upgrades in average living standards in the region.

The high correlation between GNI per capita and HDI scores is expected since GNI per capita is a component of the HDI. However, GNI per capita alone explains 89% of the variation in HDI even though it comprises only a third of the weight, implying that life expectancy and education are also positively correlated with per capita income. However, the relationship between trade and human development is not clear-cut. On the whole, empirical data show that trade is positively associated with human development (even after controlling for GDP): a 1% increase in total trade is correlated with a 0.04% increase in HDI. The trade linkage seems stronger for APEC economies, where a 1% increase in trade is correlated with a 0.5% increase in HDI.

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scores. Establishing the reasons behind it will require looking into linkages behind borders.

The linkages between trade and human development are not straightforward, but they can be strengthened by policy. For example, trade that enhances opportunities and capabilities for all members of society—e.g., by expanding the choices for educational materials or by making food and medicines more affordable—can generate positive contributions to human development. Likewise, social safety nets and continuing skills development for workers in industries that compete with foreign companies will help ensure that trade does not harm human development. In this regard, institutions that foster regional cooperation and integration have a role in enhancing human development side by side with the promotion of free and open trade and investment.

APEC's Contribution to Human Development

Although human development is a relatively new topic for APEC, some of APEC's work has contributed to human development, particularly those in the area of human capital investment. While there are significant differences between the human development approach and the human capital approach, mainly due to disparities in objective, both are very similar in terms of policy recommendations, with particular focus on improving access to social services and expanding opportunities for all individuals.

Parallel with its traditional work on economic and trade issues, APEC has touched upon human development through its work on skills development and education. As early as 1990, APEC established the Human Resources Development Working Group (HRDWG) to strengthen human capacity in the APEC region. The goal of HRD in APEC is two-pronged but related: to promote the well-being of all people, and to achieve sustainable and economic growth in the region.

Since human resources development is a cross-cutting concern, the HRDWG has been coordinating with APEC working groups such as the Committee on Trade and Investment (CTI), the Economic Committee (EC), the Small and Medium Enterprises Working Group (SMEWG), the Emergency Preparedness Working Group (EPWG), and the APEC Business Advisory Council (ABAC). The HRDWG and the said APEC working groups

have established crucial points of collaboration: building human capital for the business sector; implementing APEC's structural reform agenda; conducting disaster reduction education; and conducting skills mapping research exercises in the region.

The HRDWG is also collaborating with the Policy Partnership on Women and the Economy (PPWE) to implement training programs and establish capacity building centers to develop women's skills and competencies in order to help them meet job requirements. Together with skills development, the HRDWG and PPWE are working together to enhance the education of girls and women. To ensure that women's ability to access opportunities is not hindered by health concerns, the HRDWG, PPWE, and the Health Working Group (HWG) worked together to develop a Health Toolkit under the APEC Healthy Women, Healthy Economy initiative. The HRDWG together with the APEC Life Sciences Innovation Forum (LSIF) also formulated the Healthy Asia Pacific 2020 Initiative, establishing a new set of health management responses to mitigate threats to the region's people, trade and economic security.

Recommendations

APEC needs to undertake a mapping of its ongoing work that contributes to human development. This mapping exercise will help the organization avoid duplication of efforts while allowing it to recognize opportunities for further action. Given the crosscutting nature of human development, strategic policies and initiatives promoting this agenda need to be discussed at the highest levels, with Senior Officials' Meeting (SOM) as the venue for discussion, leading to implementation and monitoring.

StatsAPEC

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.





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