



**Asia-Pacific
Economic Cooperation**

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

Renewed APEC Agenda for Structural Reform (RAASR) - Mid-Term Review Report

APEC Policy Support Unit

August 2018

Prepared by:

Andre Wirjo, Denise Cheok, Divya Sangaraju and Jenny Ayumi Kai
Asia-Pacific Economic Cooperation Policy Support Unit
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 6891-9600 Fax: (65) 6891-9690
Email: psugroup@apec.org Website: www.apec.org

Produced for:

Asia-Pacific Economic Cooperation
Economic Committee

APEC#218-SE-01.12



This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Singapore License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/sg/>.

The views expressed in this paper are those of the authors and do not necessarily represent those of APEC Member Economies.

CONTENTS

CONTENTS	II
INTRODUCTION	3
CONTEXT OF THE MID-TERM REVIEW OF RAASR.....	4
1. HIGHLIGHTS	5
2. REVIEW OF APEC-WIDE PROGRESS USING AGREED EXTERNAL INDICATORS	9
2.1. BACKGROUND	9
2.2. UPDATE ON INDICATORS	11
2.3. GENERAL CAVEATS ON INSIGHTS.....	13
2.4. PROGRESS BY PILLARS.....	14
2.4.1. Pillar #1 – More open, well-functioning, transparent and competitive markets	15
2.4.2. Pillar #2 – Deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers and people with disabilities	29
2.4.3. Pillar #3 – Sustainable social policies that promote the other pillars, enhance economic resiliency, and are well-targeted, effective and non-discriminatory.....	38
3. REVIEW OF PROGRESS MADE BY INDIVIDUAL ECONOMIES	41
3.1. OVERVIEW	41
3.2. SUMMARY OF PROGRESS REVIEW BY ECONOMIES	44
3.2.1. Australia.....	44
3.2.2. Brunei Darussalam.....	47
3.2.3. Canada.....	51
3.2.4. Chile.....	55
3.2.5. China.....	58
3.2.6. Hong Kong, China	60
3.2.7. Indonesia	64
3.2.8. Japan	66
3.2.9. Korea.....	71
3.2.10. Malaysia.....	73
3.2.11. Mexico	75
3.2.12. New Zealand.....	76
3.2.13. Papua New Guinea.....	79
3.2.14. Peru	81
3.2.15. The Philippines	83
3.2.16. Russia.....	86
3.2.17. Singapore	90
3.2.18. Chinese Taipei	92
3.2.19. Thailand	95
3.2.20. United States	96
3.2.21. Viet Nam.....	99
REFERENCES	102

INTRODUCTION

Structural reform is an important and ongoing initiative of APEC. It can aid economies to reach higher growth paths both in times of economic uncertainty and economic prosperity. In the former, structural reform can mitigate against slower growth, while in the latter this reform can help economies leverage on improved efficiency and competitiveness.

APEC's structural reform activities began taking shape with the adoption of the Leaders' Agenda to Implement Structural Reform (LAISR) in 2004. Five priorities for economies to focus on until 2010 were identified, namely: regulatory reform, competition policy, corporate governance, public sector governance and economic and legal infrastructure. A stock-take undertaken in 2010 revealed that economies have made progress across all five areas although regulatory reform appeared to be the area where progress was most significant¹.

Recognizing that structural reform is a continuous process that has to adapt to an ever-changing economic landscape and to overcome new challenges, the APEC New Strategy for Structural Reform (ANSSR) was adopted by APEC Leaders in 2010. ANSSR categorized actions by individual members in terms of broader pillars aimed at promoting: 1) more open, well-functioning, transparent, and competitive markets; 2) labour market opportunities, training, and education; 3) sustained SME development and enhanced opportunities for women and vulnerable populations; 4) effective and fiscally sustainable social safety net programs; and 5) better functioning and effectively regulated financial markets. The final review of ANSSR², which ran to 2015, indicated that member economies remain committed to structural reform efforts. Hundreds of individual projects including capacity-building activities were undertaken and the majority focused on the competitive market and labour market pillars.

To further consolidate and streamline APEC's structural reform work and drawing on progress as well as lessons learnt under LAISR and ANSSR, the Renewed APEC Agenda for Structural Reform (RAASR) was set forth by APEC's Structural Reform Ministers in 2015.³ The agenda was embraced against a backdrop of uneven economic growth and widening income disparity, despite the increasing average per capita income and falling absolute poverty levels in the APEC region. Noting that inequality can impede long-run growth and sustainable economic development, Ministers shared the view that structural reform has the potential to give all segments of society a stake in economic growth and hence improve inclusion. Specifically, RAASR identified three pillars that could act as guideposts for the choice of concrete reform actions by individual economies, namely: 1) more open, well-functioning, transparent and competitive markets; 2) deeper participation in those markets by all segments of society, including micro, small and medium enterprises (MSMEs), women, youth, older workers, and people with disabilities; and 3) sustainable social policies that promote the above-mentioned objectives, enhance economic resilience, and are well-targeted, effective, and non-discriminatory. Similar to previous efforts, RAASR is not prescriptive in terms of its approach to structural reform by allowing each economy to identify its own priorities.

While RAASR is primarily an EC initiative, the importance of structural reform is such that RAASR has been mentioned in other work undertaken by APEC. For example, the APEC Services

¹APEC. (2011). APEC Economic Policy Report. Retrieved from <https://www.apec.org/Publications/2011/05/2011-APEC-Economic-Policy-Report>.

²APEC. (2015). Assessing the APEC New Strategy for Structural Reform (ANSSR) and Advancing the APEC Structural Reform Agenda Beyond 2015. Retrieved from <https://www.apec.org/Publications/2015/10/Assessing-the-APEC-New-Strategy-for-Structural-Reform-ANSSR-and-Advancing-the-APEC-Structural-Reform>.

³APEC. (2015). 2015 Structural Reform Ministerial Meeting Retrieved from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Structural-Reform/2015_structural.aspx

Competitiveness Roadmap (ASCR) indicates implementation of RAASR as one of its APEC-wide actions^{4,5}. Moreover, the ASCR encourages economies to implement unilateral reforms aimed at further improving the services sector as part of their structural reform action plans under RAASR. The Strategy for Implementation of the Cebu Action Plan (CAP) encourages economies to implement other initiatives, particularly those pertaining to structural reforms which can potentially contribute to CAP's 10-year goal. Specifically, it advocates economies to cross-reference their priorities on APEC structural reform agenda including RAASR if appropriate⁶.

Context of the Mid-Term Review of RAASR

As agreed by Structural Reform Ministers in 2015, a mid-term and final review of RAASR will be conducted in 2018 and 2020, respectively. The objective of this mid-term review report is to assess how much progress has been attained by member economies in their structural reform efforts, and at the same time, areas where gaps are observed so economies may focus their attention at moving forward.

The mid-term review of RAASR would comprise of two parts:

- A review of the progress made by APEC region as a whole by using the agreed external quantitative indicators from reputable sources such as international organizations; and
- A review of the achievement made by each APEC economy through analysis of inputs provided directly via economies' submission of the mid-term review template.

The two-part review process would give a more complete picture of the progress achieved by economies under RAASR as it balances two perspectives, that is: 1) the importance of monitoring the progress made by individual economies since the range of concrete actions identified traverse very wide spectrum; and 2) the value of monitoring and analysing APEC-wide progress on structural reform to consider aspects beyond individual actions identified by economies.

With the mid-term review report, the APEC Policy Support Unit (PSU) aims to provide a good snapshot of progress in various areas with linkages to RAASR and encourage deeper policy discussions among APEC members, particularly on measures to enhance their efforts in the following years.

⁴ APEC. (2016). APEC Services Competitiveness Roadmap Implementation Plan (2016 – 2025). Retrieved from http://mddb.apec.org/Documents/2016/MM/AMM/16_amm_012.pdf

⁵ APEC. (2016). Annex B: APEC Services Competitiveness Roadmap (2016-2025). Retrieved from https://www.apec.org/Meeting-Papers/Leaders-Declarations/2016/2016_aelm/2016_Annex-B.

⁶ APEC. (2016). Annex B. Strategy for Implementation of the Cebu Action Plan. Retrieved from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Finance/2016_finance/annexb.

1. HIGHLIGHTS

Review of APEC-wide progress using agreed external indicators

- APEC member economies agreed to a list of 17 external indicators to monitor progress pertaining to RAASR. However, frequency and delay in the release of indicators mean that not all indicators can be used to determine if progress has been made since RAASR's inception in 2016. Compilations by PSU showed that a total of ten indicators have baselines and progress can be compared against them. As for the remaining seven indicators, comparison against baseline values cannot be made since data was not available beyond 2016⁷.
- Of the ten indicators for which comparison against baseline can be made, four indicators - namely: 1) World Bank Ease of Doing Business (EoDB); 2) The Conference Board Labour Productivity per Person Employed; 3) World Economic Forum (WEF) Indicators for Business Sophistication and Innovation; and 4) ILO Labour Force Participation Rate for Age Group 65+ - indicate improvements against baseline.
- Another four indicators – namely: 1) OECD Services Trade Restrictiveness Index (STRI); 2) ILO Share of Youth Unemployment; 3) WEF Global Competitiveness Indicators for Labour Market Efficiency; and 4) for Financial Market Efficiency - indicate mixed performance, while one indicator (i.e. ILO Employment to Population Ratio) indicates slight fall in percentage. The last remaining indicator – World Bank Indicators on Women, Business and the Law – show no improvements.
- Of the seven indicators for which comparison against baseline cannot be made, comparisons of how APEC performed vis-a-vis other groupings in terms of the baseline situations show mixed progress – APEC outperforms OECD in some indicators/sub-indicators, but underperforms in other indicators/sub-indicators. The same can be said when comparing APEC with ASEAN.
- Key findings:
 - **APEC economies need to redouble their efforts towards improving business regulations and facilitating business conduct (Pillars #1 and #2)⁸.** While analysis of World Bank EoDB indicators between 2016 and 2017 showed improvements across all areas covered, data from OECD STRI indicated mixed results - some services sectors such as logistics have become less restrictive, but others have become more restrictive. Furthermore, comparing APEC's performance vis-à-vis OECD in terms of OECD Product Market Regulation indicators revealed that while APEC has done relatively well in certain areas such as addressing complexity of regulatory procedures and administrative burdens on start-ups, more work needs to be done in areas such as tackling explicit barriers to trade and investment. Moreover, data from OECD FDI Regulatory Restrictiveness Index (RRI) identifies that despite outperforming ASEAN in general, the opposite holds true when APEC is compared with the OECD.

⁷ An indicator is deemed to have a baseline if the latest available year is 2016 or if unavailable, earlier latest available year up to 2014. This criteria applies to all indicators except OECD economy-wide product market regulation due to its release frequency (i.e. every 5 years).

⁸ The 3 pillars of RAASR are: 1) more open, well-functioning, transparent and competitive markets; 2) deeper participation in those markets by all segments of society, including micro, small and medium enterprises (MSMEs), women, youth, older workers, and people with disabilities; and 3) sustainable social policies that promote the above-mentioned objectives, enhance economic resilience, and are well-targeted, effective, and non-discriminatory.

- **APEC has performed well in enhancing innovation and productivity, and should continue to support these areas (Pillars #1 and #2).** Labour productivity per person employed in APEC⁹ increased year-on-year. Additionally, productivity showed an uptick in growth, a reversal of trend since 2012 where growth was declining. Moreover, WEF indicators pertaining to business sophistication and innovation showed improvements across all monitored indicators, albeit only slightly.
- **APEC could increase efforts towards boosting the competitiveness of its labour and financial markets, paying attention to certain gaps in specific areas (Pillars #1 and #2).** Although an analysis of WEF indicators on labour and financial market efficiency indicated improvements by APEC in one (i.e. hiring and firing practices) and three areas (i.e. venture capital availability, soundness of banks, and regulation of securities exchange) respectively between 2016 and 2017, scores in the remaining areas such as cooperation in labour-employer relations, flexibility of wage determination and access to financing through local equity market have either stagnated or worsened.
- **APEC could step up measures aimed at strengthening access to basic services & infrastructure and enhancing fiscal & social policies (Pillars #1, #2 and #3).** Analysis of WEF indicators on basic services & infrastructure at the baseline showed that while APEC on average fared better than ASEAN in terms of both basic and digital infrastructure (e.g. transport, communications), and health services and infrastructure, it underperformed the OECD. Indeed, data from World Bank and OECD indicated that APEC has fewer physicians per 1,000 people than OECD on average. Specifically on access and quality of education, analysis of UNESCO tertiary gross enrolment ratio pointed that while APEC is doing better than ASEAN on average, it lags the OECD. Likewise, UNESCO pupil-teacher ratio showed that although APEC has lower pupil-teacher ratio than ASEAN across all three levels of education (i.e. primary, secondary and tertiary), they are higher relative to that of OECD. On fiscal transfers, APEC performed better than OECD but worse than ASEAN in terms of tax code, but the opposite is observed in terms of social protection.
- **APEC could do more to deepen the participation of wider segments of society in its markets, particularly on youth employment (Pillar #2).** Despite the ILO labour force participation rate for age group 65+ indicating improvements between 2016 and 2017, mixed results have been observed for the share of youth unemployment over the same period. While female youth unemployment fell, male youth unemployment had increased slightly. Furthermore, employment to population ratio has declined slightly over the same period. Moreover, analysis of the World Bank indicators on Women, Business and Law between 2015 and 2017 showed that the number of APEC economies having laws/regulations on various aspects that may protect women against discrimination have remained the same.

⁹ measured by The Conference Board

Review of progress made by individual economy

- All 21 economies provided progress updates on their RAASR priorities and related actions. 19 economies, namely Australia; Brunei Darussalam; Canada; Chile; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; United States; and Viet Nam gave full updates (i.e. all priorities and related actions identified in their 2016 RAASR Individual Action Plan (IAP) submissions and subsequent revisions). Moreover, Brunei Darussalam identified three additional priorities in its Mid-Term Review submission. Two economies – China and Papua New Guinea – provided partial updates on their priorities.
- Key findings:
 - **Collectively, the 21 economies gave updates on 80 priorities and 172 related actions.** Categorizing these priorities into the three pillars of RAASR showed that pillar #1 - more open, well-functioning, transparent and competitive markets had the most priorities associated with it (66 percent). 46 percent of the priorities can be associated to pillar #2 – deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers, and people with disabilities, while 34 percent are associated to pillar #3 – sustainable social policies that promote the above-mentioned objectives, enhance economic resilience, and are well-targeted, effective, and non-discriminatory.
 - **Priorities and related actions identified and undertaken by economies were varied, even within the same pillar.**

Pillar	Examples of objectives of various priorities and actions
Pillar #1	<ul style="list-style-type: none"> • Reducing administrative burden. • Boosting competitiveness and competition in the economy as a whole and in specific sectors including addressing issues related to state-owned enterprises (SOEs). • Improving infrastructure. • Liberalizing the market to a greater extent.
Pillar #2	<ul style="list-style-type: none"> • Enhancing the quality of human resource in the economy. • Increasing the participation of specific segments of the society such as women, youth, people with disabilities and vulnerable groups in the labour force. • Eliminating labour duality in the market. • Providing support to MSMEs in various aspects including access to finance and government procurement.
Pillar #3	<ul style="list-style-type: none"> • Improving the quality of education and health and ensuring they respond to industry demands. • Enhancing social programs in terms of benefits and coverage. • Using data analytics to identify at-risk households.

- **Economies made reasonable progress in their priorities and related actions.** Where economies indicated plans to pass/amend a certain law/regulation in their 2016 RAASR IAP or subsequent revisions, progress ranges from regulations being drafted to full implementation. Where economies noted the presence of certain programs/activities, specific or broad progress updates were provided. Understandably, the fact that certain laws, regulations or programs are either not at the implementation stage yet or having just been implemented indicates that progress in terms of how an economy's target population

have benefited are still unclear at the moment. Furthermore, certain economies reoriented their actions in response to changes in the external or domestic environment.

- **Several economies faced challenges in the course of moving certain actions forward.** Encouragingly, such challenges have led economies to respond by making changes. This is indeed the main motivation for advocating that priorities and related actions be monitored and evaluated - they allow for progress to be tracked and provide the basis for tweaking actions to attain optimum outcome if necessary.
- **There is room for improvement in indicators and baselines used by economies to monitor and evaluate priorities and actions.** Indicators need to evolve along with the progress of an action and it would be a pity if actions with good intentions are not monitored and followed through because the indicators originally identified are no longer applicable. The quality of information captured by the indicators could also be improved. Incomplete information obscure what exactly was implemented by economies, and how some inferences were made. For instance, some economies did not clearly identify the baseline conditions against which latest data and information were compared. In some cases, latest data and information were not as recent as expected (i.e. 2017 or later) although it is understood that data collection and processing may be costly and economies were not able to do so as often as they would like.

2. REVIEW OF APEC-WIDE PROGRESS USING AGREED EXTERNAL INDICATORS

2.1. Background

APEC Senior Officials (SOM) tasked the Economic Committee (EC) to work with PSU to develop a set of quantitative indicators to monitor RAASR, with priority being placed on identifying indicators for evaluating inclusiveness of policies. In response, PSU prepared a report to propose possible external baseline indicators which was subsequently endorsed by EC in 2016¹⁰. The list of 17 agreed indicators and associated RAASR pillars are listed in Table 1 below. Most indicators can be associated with more than one pillar. For example, the World Bank Ease of Doing Business is both an indicator of market competitiveness and the ease of participation of stakeholders such as SMEs in the market. The same can be said for the World Economic Forum (WEF) Global Competitiveness Indicators for Business Sophistication and Innovation. The UNESCO Tertiary Gross Enrolment Ratio can be used to make inference on an economy's education policy as well as the general education level of its people and, therefore, their capacity to participate in the market.

Agreed indicators can either be policy-based, perception-based or outcome indicators. Five indicators (World Bank Ease of Doing Business, OECD Economy-wide Product Market Regulation, OECD FDI Regulatory Restrictiveness Index, OECD Services Trade Restrictiveness Index, and World Bank Indicators on Women, Business and the Law) are based partly or mostly on the assessment of economies' policy framework. Another five indicators (World Economic Forum (WEF) Indicators for Business Sophistication and Innovation, for Labour Market Efficiency, for Financial Market Efficiency, for Basic Services and Infrastructure and for Fiscal Transfers) are mainly based on perceptions and hence provide insights into how policies are perceived by relevant stakeholders. The remaining seven (e.g. The Conference Board Labour Productivity per Person Employed, ILO Share of Youth Unemployment and UNESCO Tertiary Gross Enrolment Ratio) are outcome indicators and provides important insights on the progress of economies in achieving their objectives when implementing certain policies. Examples include those aimed at increasing productivity and boosting the level of tertiary education.

Table 1. Agreed indicators and associated RAASR pillars

No.	Indicator	More open, well-functioning, transparent and competitive markets	Deeper participation by all segments of society, including MSMEs, women, youth, older workers, and people with disabilities	Sustainable social policies that promote the other pillars, enhance economic resilience, and are well-targeted, effective and non-discriminatory
1	World Bank Ease of Doing Business Distance to Frontier	○	○	
2	OECD Economy-wide Product Market Regulation	○	○	

¹⁰ Wirjo, A. (2016). Exploring Quantitative Indicators for Effective Monitoring of APEC-wide Progress on Structural Reform under RAASR 2016-2020. Retrieved from <https://www.apec.org/Publications/2016/10/Exploring-Quantitative-Indicators-for-Effective-Monitoring-of-APECwide-Progress-on-Structural-Reform>.

3	OECD FDI Regulatory Restrictiveness Index	○	○	
4	OECD Services Trade Restrictiveness Index	○	○	
5	The Conference Board Labour Productivity per Person Employed	○	○	
6	WEF Global Competitiveness Indicators for Business Sophistication and Innovation	○	○	
7	ILO Employment to Population Ratio		○	
8	ILO Share of Youth Unemployment		○	
9	ILO Labour Force Participation Rate for Age Group 65+		○	
10	World Bank Indicators on Women, Business and the Law		○	
11	WEF Global Competitiveness Indicators for Labour Market Efficiency	○	○	
12	WEF Global Competitiveness Indicators for Financial Market Efficiency	○	○	
13	UNESCO Tertiary Gross Enrolment Ratio		○	○
14	WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure	○	○	○
15	WEF Inclusive Growth and Development Indicators for Fiscal Transfers	○	○	○
16	UNESCO Pupil-Teacher Ratio		○	○
17	World Bank and OECD Physicians Per 1,000 People		○	○

Source: Compilations by APEC Policy Support Unit (PSU).

2.2. **Update on indicators**

Infrequent updates and delays in the release of indicators mean that not all indicators would be available for the mid-term review of RAASR¹¹. To overcome these challenges and to enable as many indicators as possible to be analysed for the purpose of this mid-term review, PSU has adhered to the following rules:

- 1) An indicator is deemed to have a baseline if the latest available year is 2016 or if unavailable, earlier year up to 2014 (i.e. 2014 and 2015).
- 2) An indicator is deemed to have a baseline, and progress can be compared against baseline if the latest available year is after 2016.
- 3) An indicator is deemed to have no baseline if the latest available year is before 2014 for reasons other than release frequency.

Latest compilations by PSU showed that a total of ten indicators have baselines and have progress to be compared against this baseline. The remaining seven indicators also have baselines but have no progress to be compared against baseline values, as the latest available year is 2016 or earlier. These indicators are colour-coded in green and orange respectively under the 'current status' column of Table 2.

¹¹ There is usually a delay of a year in the release of indicators after raw data has been collected for reasons such as data cleaning and processing. Essentially, this signifies that indicators showing an economy's performance in 2017 would not be released until sometime in 2018 or even later. For social indicators such as tertiary gross enrolment ratio and pupil-teacher ratio, the time lag between data collection and release can extend to more than three years.

Table 2. Status of agreed indicators

No.	Indicator	Latest available year	Latest update	Current status
1	World Bank Ease of Doing Business Distance to Frontier	2017 (DB2018)	Oct 2017	Green
2	OECD Economy-wide Product Market Regulation	2013 (incl. INA and USA)	Mar 2017	Orange
3	OECD FDI Regulatory Restrictiveness Index	2016	Mar 2017	Orange
4	OECD Services Trade Restrictiveness Index	2017	Jan 2018	Green
5	The Conference Board Labour Productivity Per Person Employed	2017	Nov 2017	Green
6	WEF Global Competitiveness Indicators for Business Sophistication and Innovation	Mostly 2016-17 (GCR2017-18)	Sep 2017	Green
7	ILO Employment to Population Ratio	2016 (estimates) & 2017 (projections)	Dec 2017	Green
8	ILO Share of Youth Unemployment	2016 (estimates) & 2017 (projections)	Dec 2017	Green
9	ILO Labour Force Participation Rate for Age Group 65+	2015 (estimates) & 2017 (projections)	Jul 2017	Green
10	World Bank Indicators on Women, Business and the Law	2017 (WBL2018)	Mar 2018	Green
11	WEF Global Competitiveness Indicators for Labour Market Efficiency	Mostly 2016-17 (GCR2017-18)	Sep 2017	Green
12	WEF Global Competitiveness Indicators for Financial Market Efficiency	Mostly 2016-17 (GCR2017-18))	Sep 2017	Green
13	UNESCO Tertiary Gross Enrolment Ratio	Patchy (mostly 2015, handful 2014, CT 2016-17)	May 2017	Orange
14	WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure	2015-2016 (IGDR2017)	Jan 2017	Orange
15	WEF Inclusive Growth and Development Indicators for Fiscal Transfers	2015-2016 (IGDR2017)	Jan 2017	Orange
16	UNESCO Pupil-Teacher Ratio	Patchy (several 2016, handful 2015 or before, CT 2016-17)	May 2017	Orange
17	World Bank and OECD Physicians Per 1,000 People	Patchy (ROK and CT 2016, rest 2015 or before)	Nov-Dec 2017	Orange

Note: Red: No baseline (i.e. latest available year is before 2014); Orange: There is baseline (i.e. latest available year is 2016 or if unavailable, earlier latest available year up to 2014) except indicator #2 because of release frequency; Green: Possible to compare progress against baseline (i.e. latest available year is after 2016).

Source: Compilations by APEC Policy Support Unit (PSU)

Since PSU’s 2016 report on these quantitative indicators, changes have been made to some of the indicators. For example, The Conference Board now provides two different GDP values which can be used to calculate the labour productivity per person employed. While one of the values is consistent with the earlier versions of its database, the other value has been adjusted to account for rapidly falling ICT prices. Another example is the WEF Inclusive Growth and Development indicators for fiscal transfers (Table 3). Previously, the two survey indicators monitored under the ‘social protection’ umbrella are: 1) government effectiveness in reducing poverty and inequality; and 2) wastefulness of government spending. In the latest report released by WEF, the two survey indicators have been replaced by: 1) efficiency in public goods and services provision; and 2) social safety net protection.

Table 3. Comparison of survey indicators under the ‘social protection’ component of fiscal transfers

	Indicator	Definition
Inclusive Growth and Development Report 2015	Government effectiveness in reducing poverty and inequality	Survey respondents rate the effectiveness of their government’s efforts to address income inequality on a scale of 1-7 (1= not effective at all; 7= extremely effective)
	Wastefulness of government spending	Survey respondents rate the efficiency by which their government spends public revenue on a scale of 1-7 (1= extremely inefficient; 7= extremely efficient)
Inclusive Growth and Development Report 2017	Efficiency in public goods and services provision	Survey respondents rate the government’s efficiency in providing public goods and services on a scale of 1-7 (1= extremely inefficient; 7=extremely efficient)
	Social safety net protection	Survey respondents rate the extent to which a formal social safety net provides protection to the general population from economic insecurity in the event of job loss or disability on a scale of 1-7 (1= not at all; 7= full protection)

Source: Compilations by PSU.

PSU perceives these changes positively as it reflects the organization’s efforts in improving the indicators over time. So long as these indicators are comparable over the assessed period and the changes noted, PSU is of the view that they should still be analysed.

2.3. General caveats on insights

Readers should be aware of the general caveats associated with these insights. First is attribution, that is, indicators may be affected by factors other than concrete actions identified by economies. Even in instances where actions have direct impact on an indicator, it may take time for the outcome of these actions to be captured by the indicators.

Second is inference. Improvements in indicators may not be directly linked to observable outcomes for various reasons. For example, improvement in business regulatory environment would facilitate MSMEs’ participation, but is not a given if MSMEs decide otherwise.

Analysis of these indicators generally provide a regional perspective, which may be different from those of an individual economy. Indeed, there are instances when an indicator shows improvements in its regional score, but showed the opposite for some economies individually and this will be indicated

where relevant. Related is the issue of coverage. It is important to note that changes in score may not be reflective of APEC as a whole as some indicators have data only for certain member economies.

Last but not least, agreed indicators are not exhaustive and therefore, do not cover all aspects of structural reform efforts. However, they provide a good snapshot of progress in certain areas with linkages to RAASR and can encourage deeper policy discussions.

2.4. Progress by pillars¹²

As previously mentioned, progress against baseline can currently be compared for ten indicators, while only baseline values are available for the remaining seven indicators. For the former, progress would be analysed and assigned the following colour-code:

- 1) Green if the indicator shows improvements across all its sub-indicators.
- 2) Orange if the indicator shows improvements for some sub-indicators and decline for other sub-indicators, or if there is no change.
- 3) Red if the indicator shows decline across all its sub-indicators.

For indicators with only baseline indicators, there are merits in comparing how APEC performed vis-à-vis other groupings such as OECD and ASEAN. If APEC has outperformed other groups, it may inspire members to continue their structural reform efforts so as to remain ahead. On the other hand, if APEC performs relatively poorer, then it encourages members to further enhance their structural reform efforts in the coming years.

APEC's progress in terms of the 17 agreed indicators are summarized in Table 4 below. Of the ten indicators where progress against baseline can be compared, four indicators – namely, World Bank Ease of Doing Business, The Conference Board Labour Productivity per Person Employed, World Economic Forum Indicators for Business Sophistication and Innovation, and ILO Labour Force Participation Rate for Age Group 65+ - indicate improvements against baseline. Another four indicators – namely, OECD Services Trade Restrictiveness Index, ILO Share of Youth Unemployment, WEF Global Competitiveness Indicators for Labour Market Efficiency, and for Financial Market Efficiency – indicate mixed performance. One indicator (i.e. ILO Employment to Population Ratio) indicates slight fall in percentage, while the last remaining indicator – World Bank Indicators on Women, Business and the Law – show no improvement. Discussions of indicators by individual pillars follow.

Table 4. How does APEC fare in terms of the 17 agreed indicators?

No.	Indicator	Improvement
1	World Bank Ease of Doing Business Distance to Frontier	Green
2	OECD Economy-wide Product Market Regulation	Black
3	OECD FDI Regulatory Restrictiveness Index	Black
4	OECD Services Trade Restrictiveness Index	Orange
5	The Conference Board Labour Productivity Per Person Employed	Green
6	WEF Global Competitiveness Indicators for Business Sophistication and Innovation	Green
7	ILO Employment to Population Ratio	Red
8	ILO Share of Youth Unemployment	Orange

¹² Economy nomenclature for APEC members are based on the APEC Publications Guidelines (https://www.apec.org/~media/Files/AboutUs/PoliciesandProcedures/Publications/APECPubs_guide_Oct16.pdf), while that for other economies are based on ISO Alpha-3 codes.

9	ILO Labour Force Participation Rate for Age Group 65+	Green
10	World Bank Indicators on Women, Business and the Law	Orange
11	WEF Global Competitiveness Indicators for Labour Market Efficiency	Orange
12	WEF Global Competitiveness Indicators for Financial Market Efficiency	Orange
13	UNESCO Tertiary Gross Enrolment Ratio	Black
14	WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure	Black
15	WEF Inclusive Growth and Development Indicators for Fiscal Transfers	Black
16	UNESCO Pupil-Teacher Ratio	Black
17	World Bank and OECD Physicians Per 1,000 People	Black

Note: Green - indicator shows improvements across all its sub-indicators; Orange - indicator shows improvements for some sub-indicators and decline for other sub-indicators, or if there is no change; Red - indicator shows decline across all its sub-indicators; Black - no progress against baseline can be assessed.

Source: *Compilations by APEC Policy Support Unit (PSU)*

2.4.1. Pillar #1 – More open, well-functioning, transparent and competitive markets

Pillar #1 aims to galvanize member economies to continue efforts towards making their markets more open, well-functioning, transparent and competitive. Various areas can be considered including improving business regulations and facilitating their conduct; enhancing innovation and productivity; boosting the competitiveness of labour and financial markets; strengthening access to basic services & infrastructure; and having well-targeted fiscal & social policies.

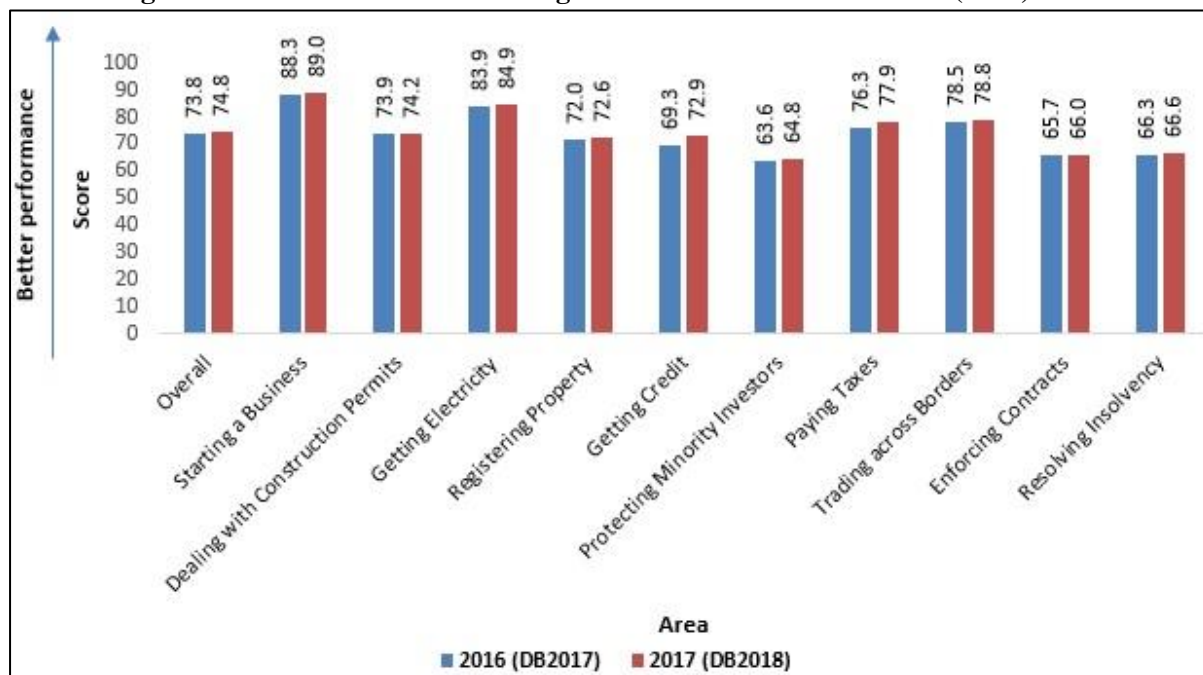
Improving business regulations and facilitating their conduct

Improving business regulations makes it easier for firms to do business and encourages foreign investment among others. Andrews and Cingano (2012)¹³ and Valkonen (2006)¹⁴ among other papers noted that interactions with foreign firms can in turn expose domestic firms to alternative practices and may urge them to develop their own competitive strategies, hence creating a more well-functioning and competitive market as a whole.

The World Bank's Ease of Doing Business (EoDB) indicators measure various aspects of business regulations with implications on a firm's ability to establish and operate their businesses. Djankov et al (2006) estimated that enhancing an economy's overall Ease of Doing Business (EoDB) indicator from worst (first quartile) to best (fourth quartile) could potentially lead to a 2.3 percentage point increase in its economic growth. Analysis of APEC's average scores between 2016 and 2017 showed a region that is becoming more open, well-functioning, transparent and competitive (Figure 1). Indeed, positive improvements can be seen across all areas covered by the indicators over the assessed period.

¹³ Andrews, D. and F. Cingano (2012), "Public policy and resource allocation: Evidence from firms in OECD countries", OECD Economics Department Working Papers No. 996, OECD Publishing, Paris.

¹⁴ Valkonen, L. (2006). *Deregulation as a means to increase competition and productivity: Some Finnish experiences* (No. 1014). ETLA Discussion Papers, The Research Institute of the Finnish Economy (ETLA).

Figure 1. World Bank Ease of Doing Business Distance to Frontier (DTF) score

Note: An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier. A higher score indicates better performance. For economies with multi-city data, data from the city with the largest population is used.

Source: APEC PSU calculations using data from the World Bank, Doing Business 2018 database. APEC score is the average of all 21 economies.

APEC performed well in the three areas of 'Starting a Business', 'Getting Electricity' and 'Trading Across Borders', with distance to frontier (DTF) scores of 89.0, 84.9 and 78.8, respectively in 2017. In the case of 'Starting a Business', APEC members scored well in this area because of the relatively shorter time and lower costs required to start a business. Specifically, economies such as Brunei Darussalam; China; Indonesia; Russia; and Thailand announced various initiatives to streamline business application procedures.

On 'Getting Electricity', APEC improved the most in the system average interruption frequency index (SAIFI), reliability of supply and transparency of tariff index, and system average interruption duration index (SAIDI) between 2016 and 2017. Economies that performed well in this area include Korea; Chinese Taipei; and Hong Kong, China with DTF scores close to 100. Malaysia; Russia; Singapore; and Thailand have DTF scores between 90 and 95.

'Trading Across Borders' saw improvements particularly in terms of import and export time. This was led by strong improvements by Singapore and Chinese Taipei. In general, advances in technology have streamlined cross-border trade, leading to a reduction in both time and cost to trade.

Three areas in which APEC may wish to strengthen its efforts are 'Protecting Minority Investors', 'Enforcing Contracts' and 'Resolving Insolvency'. The relatively lower DTF scores in these areas indicate that more can be done to lower the risks of investing in the region and legal protection can also be further enhanced. The World Bank notes that stronger legal protections for minority investors allows firms to grow and eventually innovate and diversify¹⁵.

Specifically on 'Protecting Minority Investors', only three APEC economies (New Zealand; Malaysia and Singapore) had DTF scores of 80 and above, with the highest score being 81.7. Nonetheless, four

¹⁵ World Bank (2017). Protecting Minority Investors. <http://www.doingbusiness.org/data/exploretopics/protecting-minority-investors/why-matters>

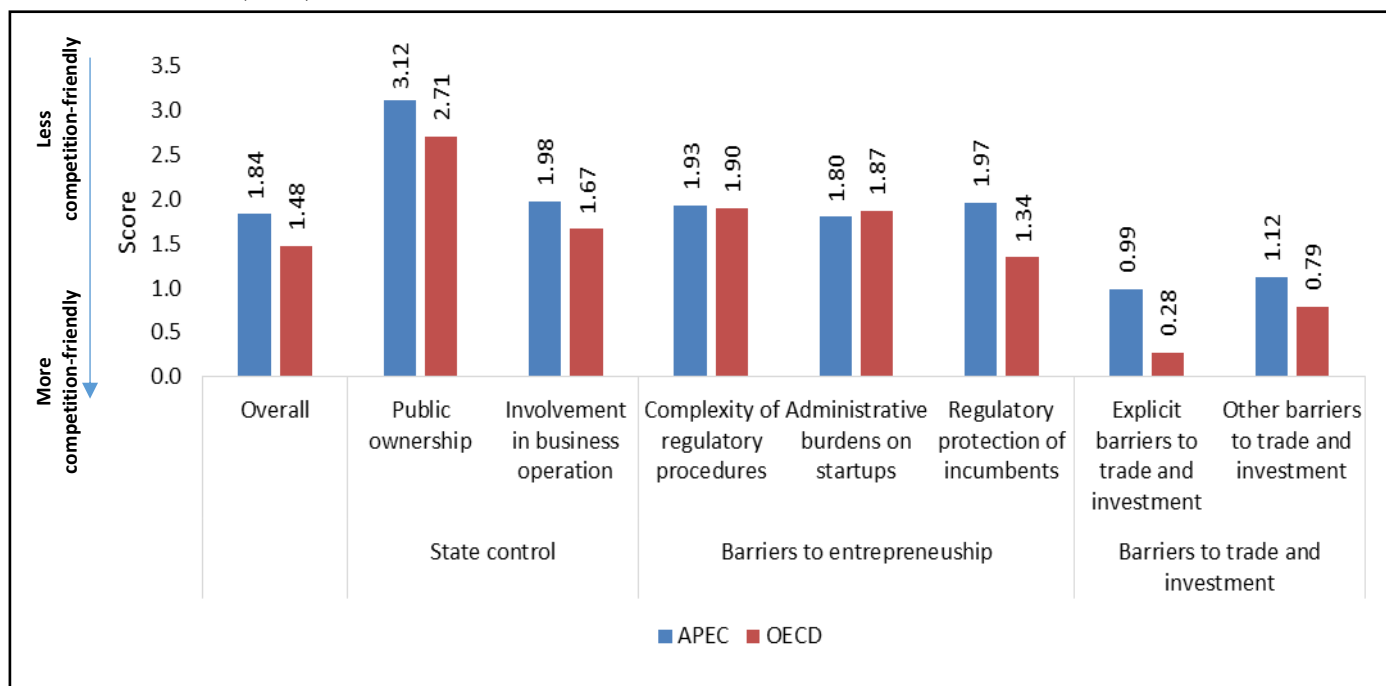
APEC members reported improvements in their scores between 2016 and 2017 through measures such as increasing shareholder rights, and making it easier to sue directors of companies¹⁶.

In terms of ‘Enforcing Contracts’, DTF scores showed only two APEC economies (Korea and Singapore) scoring above 80. One economy made enforcing contracts more difficult by mandating pre-trial resolution before filing a claim, thereby lengthening the initial phase of judicial proceedings.

‘Resolving Insolvency’ fared slightly better with four APEC economies (Japan; the United States; Korea; and Canada) scoring above 80. However, four APEC economies saw lower DTF scores in 2017 compared to 2016.

OECD’s Product Market Regulation (PMR) indicators provide the extent through which policies encourage competition in both goods and services sectors. Due to the release frequency of five years and the latest available data being 2013, APEC’s progress against baseline cannot be assessed. However, analysis of APEC’s average scores vis-à-vis OECD indicated that the former has performed relatively well in addressing complexity of regulatory procedures and administrative burdens on startups, but needs to improve on other areas such as tackling explicit barriers to trade and investment, public ownership, involvement by government in business operation, and regulatory protection of incumbents (Figure 2).

Figure 2. OECD Economy-wide Product Market Regulation scores, comparison between APEC and OECD (2013)



Note: A lower value indicates regulatory stance that is more competition-friendly. Overall scores are the average of the seven subsections.

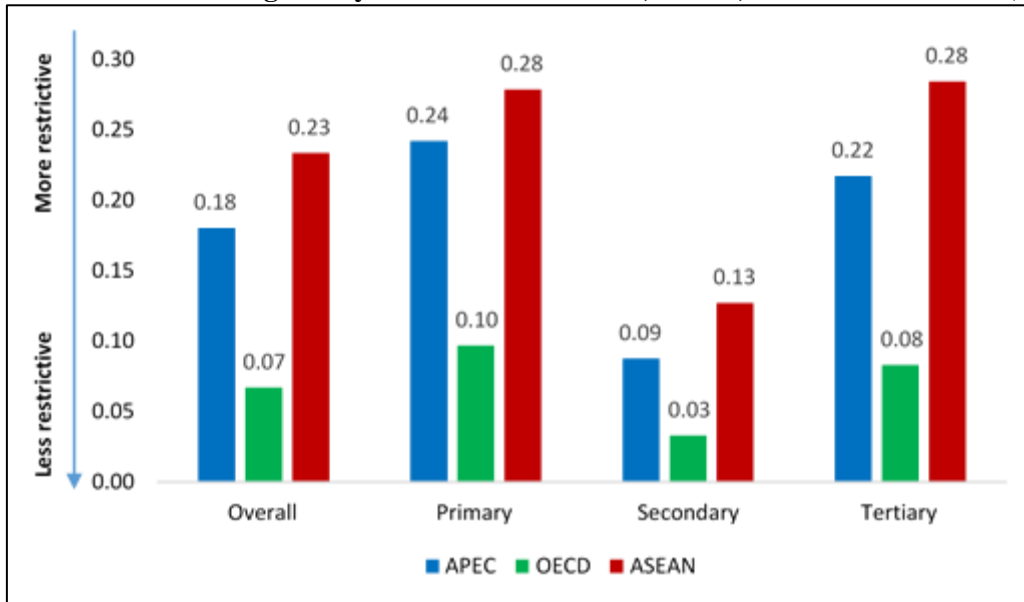
Source: APEC PSU computations based on data from OECD. The APEC score is the average of 11 economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MEX; NZ; RUS; and USA). The OECD score is an average of all 35 member economies.

OECD FDI Regulatory Restrictiveness Index (FDI RRI) analyses statutory restrictions on foreign direct investment (FDI) in various economies. This is useful in highlighting to policymakers the relative restrictiveness of various sectors in the economy in terms of FDI, hence enabling them to undertake actions which hopefully would lead to a more open and competitive market. Similar to PMR indicators,

¹⁶ World Bank (2017). Doing Business 2018 – Reforming to Create Jobs, regional profile of Asia-Pacific Economic Cooperation (APEC). Washington: The World Bank and the International Finance Corporation.

however, the latest year for which data is available (i.e. 2016) limit assessment of APEC’s progress against baseline. Nonetheless, comparison of APEC’s average scores with those of OECD and ASEAN indicates that FDI regulations in APEC are more restrictive in all sectors compared to OECD, but less restrictive compared to ASEAN (Figure 3). Within all three groupings, secondary industries are the least restrictive compared to primary and tertiary industries.

Figure 3. OECD FDI Regulatory Restrictiveness Index, APEC, OECD and ASEAN (2016)



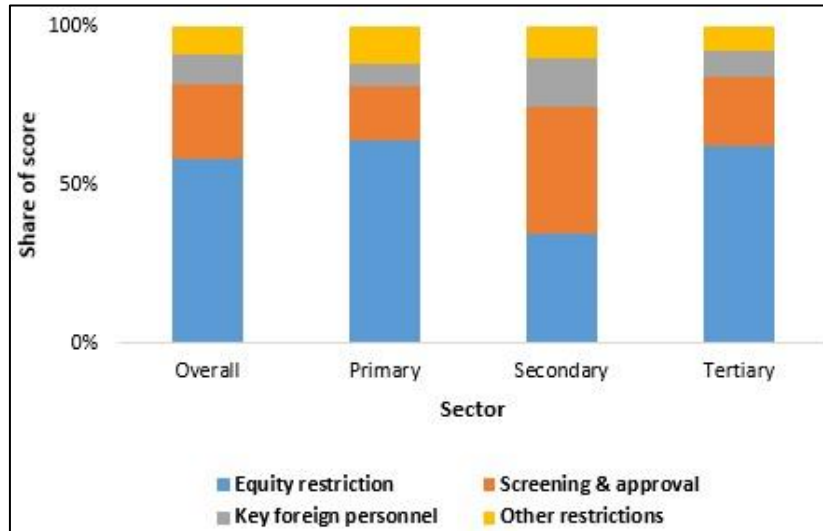
Note: A higher score indicates higher levels of restriction. Primary sectors include agriculture (forestry and fisheries) and mining & quarrying. Secondary sectors include manufacturing (food and other, oil & chemicals, transport equipment), electricity (electricity generation, and electricity distribution), and construction. Tertiary sectors include distribution (wholesale, retail)¹⁷, transport (surface, maritime, air), hotels and restaurants, media (radio and TV broadcasting, other media), communications (fixed telecoms, mobile telecoms), financial services (banking, insurance, other finance), business services, legal, accounting and audit, architectural, engineering, and real estate investment.

Source: APEC PSU computations based on data from OECD. Calculations comprise of data from 15 APEC economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; USA and VN).

Evaluating the restrictions across sectors showed that the primary and tertiary sectors were mainly affected by equity restrictions (Figure 4). Secondary sectors, however, were equally affected by both screening & approval and equity restrictions.

¹⁷ Thomsen, S. (n.d.). OECD FDI Regulatory Restrictiveness Index. A tool for benchmarking countries, measuring reform and assessing its impact [PowerPoint slides]. Retrieved from <https://www.oecd.org/daf/inv/investment-policy/FDIRRIndexPPT.pdf>. PPT.pdf

Figure 4. OECD FDI Regulatory Restrictiveness Index, breakdown by sector, APEC (2016)



Note: A higher score indicates higher levels of restriction.

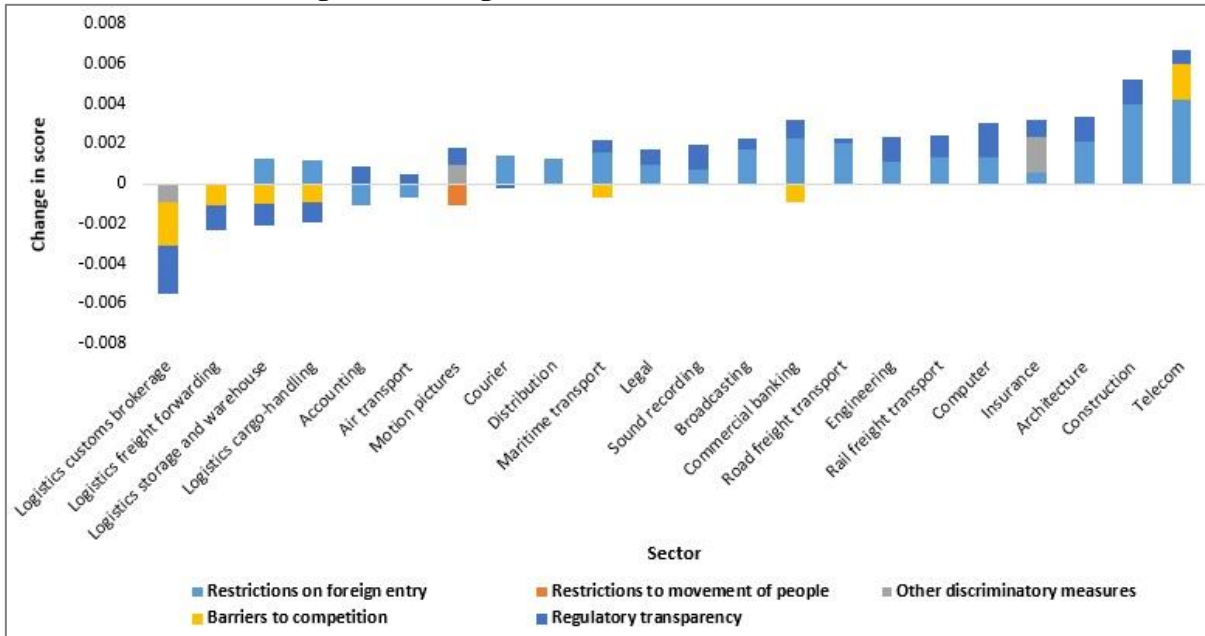
Source: APEC PSU computations based on data from OECD. Calculations comprise of data from 15 APEC economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; USA and VN).

OECD Services Trade Restrictiveness Index (STRI) analyses and identifies regulatory policies affecting trade in services. In essence, it provides greater transparency to services regulations and therefore, allows policymakers to identify areas where efforts should be directed at, especially since services tend to straddle different government agencies, each with their own policy objectives. Unlike the FDI RRI which focuses mainly on mode 3 of services trade, the STRI covers other modes including mode 1 (cross border) and 4 (movement of natural persons). The FDI RRI, however, does include primary and secondary sectors such as agriculture, mining and electricity, which are not captured in the STRI.

Comparing data for year 2016 and 2017 showed that improvements in STRI scores were mostly seen in the logistics sector (Figure 5). This improvement is encouraging as reducing restrictiveness in these sectors is essential for well-functioning supply chains in APEC. Improvements in the logistics sectors were due mainly to improvements in regulatory transparency as well as reductions in barriers to competition.

On the other hand, sectors that became more restrictive include telecommunications, construction, architecture and insurance. This was due mainly to an increase in restrictions on foreign entry, and reductions in regulatory transparency. The telecommunications sector also reported a significant increase in barriers to competition, despite other sectors experiencing a reduction in such barriers.

Figure 5. Change in STRI Scores in APEC (2016-2017)



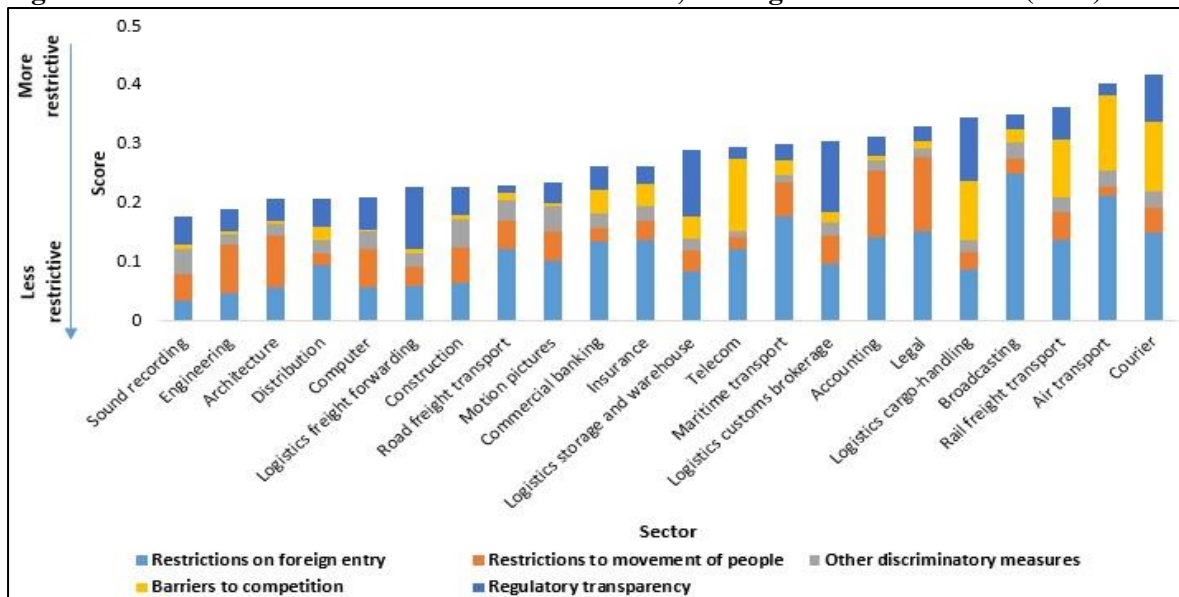
Note: A higher score indicates higher levels of restriction.

Source: APEC PSU computations based on data from OECD. Calculations comprise of data from 11 APEC economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MEX; NZ; RUS; and USA).

Data in 2017 indicated that restrictions on services trade vary amongst the sectors. The primary restrictions for some sectors (e.g. air and marine transport) were foreign equity while in others (e.g. engineering and architecture), they were due to the movement of people (Figure 6).

Legal, logistics cargo-handling, broadcasting, rail freight transport, air transport and courier services continue to be the most restrictive sectors in 2017. As many of these sectors facilitate trade in other sectors, improving competition and openness in these markets would benefit other sectors as well. Following a similar trend, sound recording, engineering, architecture, computer and distribution services remained the least restrictive sectors in comparison to 2016.

Figure 6. OECD Services Trade Restrictiveness Index, Average Scores for APEC (2017)



Note: A higher score indicates higher levels of restriction.

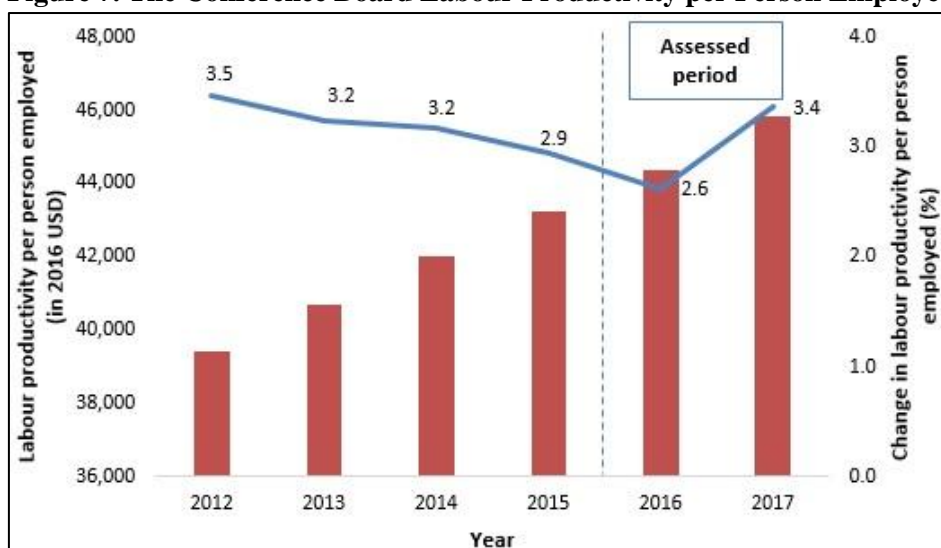
Source: APEC PSU computations based on data from OECD. Calculations comprise of data from 11 APEC economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MEX; NZ; RUS; and USA).

Enhancing innovation and productivity

Enhancing innovation and productivity can promote well-functioning, transparent and competitive markets. OECD (2015)¹⁸ noted that innovation is a key driver of productivity growth, and provides a foundation for new businesses and jobs. Using a production function framework, the contribution of innovation to growth is threefold: 1) technological progress of physical capital in terms of more advanced machinery; 2) investments in intangible capital such as R&D, software or skills; and 3) increased efficiency in the use of labour and capital.

One way to determine an economy's productivity is to calculate the average productivity of its labour. Data obtained from The Conference Board labour productivity per person employed showed that on average, both APEC's labour productivity per person employed, as well as the percentage growth of productivity had increased between 2016 and 2017 (Figure 7 and Figure 8)¹⁹. This uptick in growth is a reversal of trends from 2012 to 2016, where growth was declining. At an individual economy level, however, observations were mixed. While some economies registered consistently high positive growth rates, others had negative, or no growth.

Figure 7. The Conference Board Labour Productivity per Person Employed

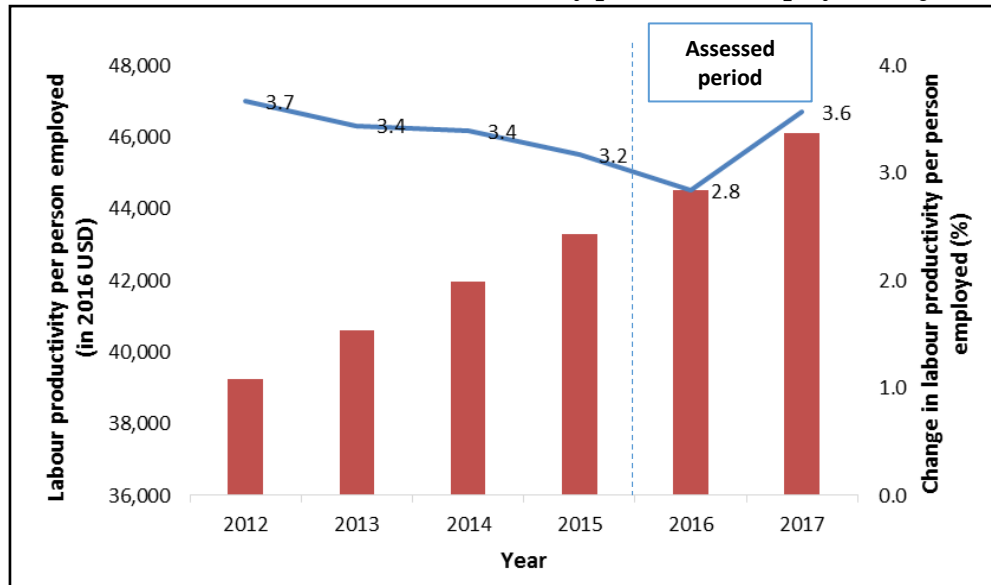


Note: Calculations comprise of data from 19 APEC economies (AUS; CDA; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; SGP; CT; THA; USA and VN).

Source: APEC PSU computations based on data from The Conference Board Total Economy database (accessed 9 February 2018).

¹⁸ OECD (2015), *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being*, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264239814-en>

¹⁹ Labour Productivity per person employed is defined by TCB as output in the form of GDP divided by persons employed https://www.conference-board.org/retrievefile.cfm?filename=TED_SMDetailed_nov2017.pdf&type=subtitle

Figure 8. The Conference Board Labour Productivity per Person Employed (Adjusted Data)

Note: Calculations comprise of data from 19 APEC economies (AUS; CDA; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; SGP; CT; THA; USA and VN).

Source: APEC PSU computations based on data from The Conference Board Total Economy database (accessed 9 February 2018).

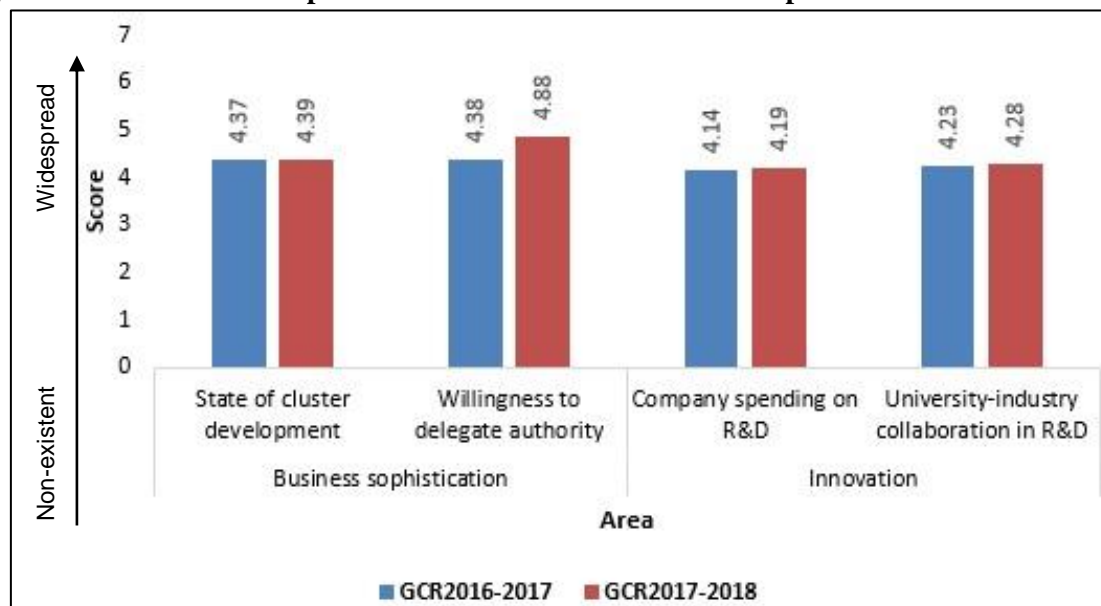
As indicated earlier, economies can undertake various actions to enhance its innovation capability and productivity. These include encouraging skills upgrading by employees, providing grants to automate certain processes across different sectors, promoting the use of data analytics to monitor and improve existing processes, facilitating joint research activities between institutions and industries, and providing incentives to encourage firms to undertake R&D activities.

Specifically for APEC, indicators related to business sophistication and innovation from WEF²⁰ indicated that the region showed improvements across all four indicators, albeit only slightly (Figure 9). Two sub-indicators under business sophistication, namely state of cluster development and willingness to delegate authority increased from 4.37 and 4.38 in 2016 to 4.39 and 4.88 in 2017, respectively. In this context, state of cluster development measures the extent by which well-developed and deep clusters can be found in the economy, while willingness to delegate authority assesses the willingness of senior management to delegate authority to subordinates which would have implications on decision-making process and hence productivity.

With regards to innovation, the two sub-indicators of company spending on R&D and university-industry collaboration in R&D showed improvements in score from 4.14 and 4.23 in 2016 to 4.19 and 4.28 in 2017, respectively. Company spending on R&D measures the extent that companies in the economy spend on R&D, while university-industry collaborations measure the extent of such collaborations. Taken together, these two indicators provide a measure of the level of innovation in an economy.

However, similar to trends in other indicators, progress at individual economy level appears to be mixed. For example, in terms of state of cluster development as well as company spending on R&D, 11 economies reported improvements, while the other 9 had worsening scores. Similarly, university-industry collaboration in R&D identified 14 economies with higher scores, while 6 economies noted a decline in scores between 2016 and 2017.

²⁰ based on an executive opinion survey

Figure 9. WEF Global Competitiveness Indicators for Business Sophistication and Innovation

Note: A higher score indicates higher levels of business sophistication and innovation.

Source: APEC PSU computations based on data from World Economic Forum. APEC score for state of cluster development, company spending on R&D, and university-industry collaboration in R&D is a simple average of the scores of 20 economies (AUS; BD; CDA; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; SGP; CT; THA; USA; and VN). Willingness to delegate authority does not include data for BD.

Boosting the competitiveness of labour and financial markets

Improving labour market efficiency has become increasingly crucial in light of the changing economic landscape brought about by the fourth industrial revolution. A paper by IMF (2015)²¹ noted that increasing labour market flexibility through improving hiring and firing regulations for instance may have significant effects in reducing unemployment. Similarly, more efficient financial markets tend to enable allocation of resources to projects with relatively higher expected rates of return, hence leading to markets that are more well-functioning and competitive.

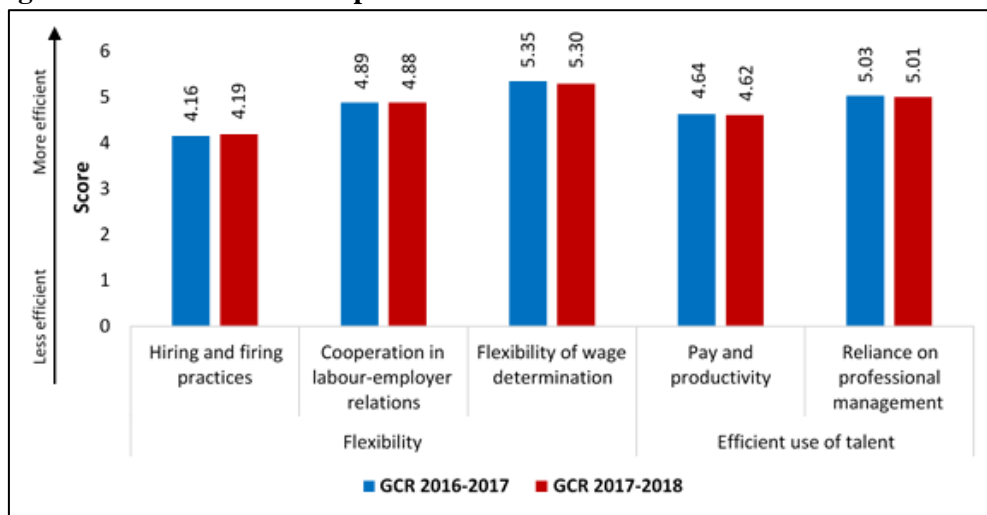
Economies can undertake a number of actions to enhance the competitiveness of their labour markets, including revisiting existing mechanisms on wage setting, enhancing the partnerships between government, employers and employees, as well as promoting meritocracy. For the APEC region, it appears that more can be done to improve the labour market situation – WEF indicators pertaining to labour market efficiency showed deterioration in scores in four out of five areas (Figure 10). With respect to the extent that pay is related to productivity, business executives gave APEC an average score of 4.62 on a scale of 1 (not at all) to 7 (to a great extent) in 2017, lower than 4.64 in 2016. Related to reliance on professional management, executives gave APEC an average score of 5.01 in 2017, which is also lower than that in 2016 (5.03).

Pertaining to cooperation in labour-employer relations, average score in APEC was 4.88 in 2017, which is lower compared to 4.89 in 2016. Similarly regarding flexibility of wage determination, average score in APEC was 5.30 in 2017, lower than 5.35 in 2016. It is only in terms of hiring and firing practices that executives gave APEC a higher average score in 2017 compared to 2016 (4.19 vs. 4.16).

²¹Bernal-Verdugo, L. E., Furceri, D., & Guillaume, D. (2012). Labor market flexibility and unemployment: new empirical evidence of static and dynamic effects. *Comparative Economic Studies*, 54(2), 251-273.

Despite the observed setback by APEC as a region, it is worthwhile to note that some member economies such as New Zealand; Singapore; and the United States had consistently high scores across multiple areas. Sharing of best practices among members may potentially contribute to the increase of competitiveness of labour markets in the APEC region.

Figure 10. WEF Global Competitiveness Indicators for Labour Market Efficiency



Note: A higher score indicates more efficient labour market practices. Data from GCR2016-17 and GCR2017-18 are used for year 2016 and 2017 respectively. APEC score is a simple average of the scores of 20 economies (AUS; BD; CDA; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; SGP; CT; THA; USA; and VN).

Source: APEC PSU computations based on data from World Economic Forum (accessed 15 Jan 2018).

Likewise, there are a range of activities that member economies can undertake to improve the efficiency of their financial markets such as facilitating crowd-funding as a mechanism to access finance, organizing seminars and workshops to share ways to improve firms' chances of accessing finance, and using prudential tools to limit systemic risk in the financial system.

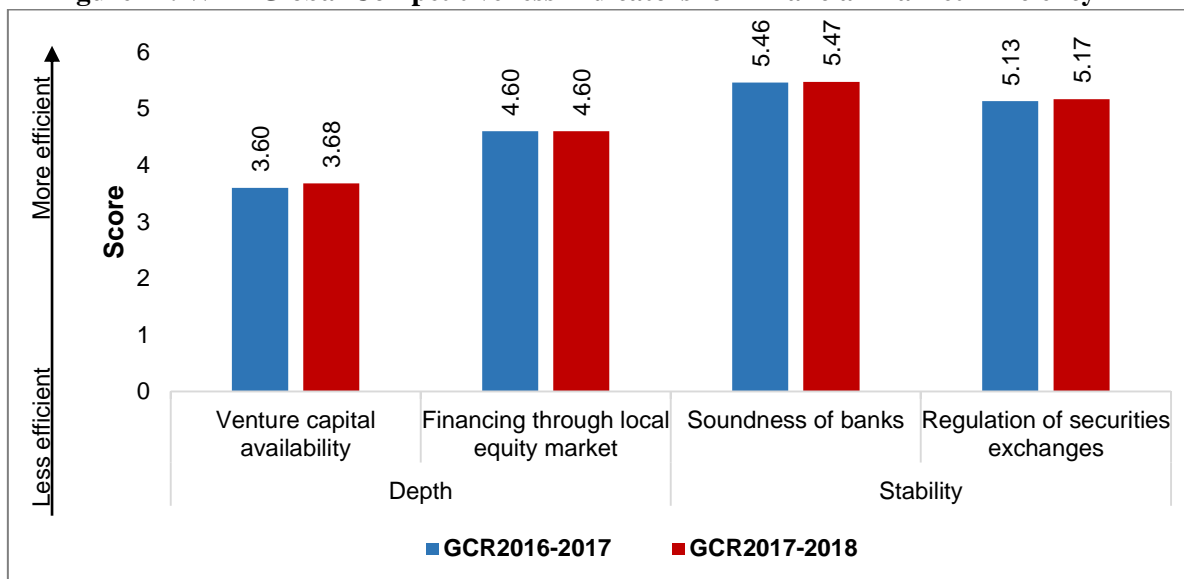
Compared to 2016, analysis of WEF indicators pertaining to financial market efficiency showed that the APEC region has done relatively well in 2017 – business executives gave higher scores to three out of four areas covered: venture capital availability, soundness of banks, and regulation of securities exchanges (Figure 11).

Venture capital availability showed the strongest improvement, despite its score being relatively lower as compared to other areas. Progress in this area was led by the United States; Canada and China. Soundness of banks also reported an increase in score, which was led by strong improvements in economies such as Brunei Darussalam; Indonesia; Viet Nam; and Korea.

Concerning regulation of securities exchanges, 13 APEC economies reported improvements, leading to an increase in scores by 0.04. With regards to the availability of financing through the local equity market, improvements in the region were hampered by a significant reduction in scores by one APEC economy.

Similar to the indicators on labour market efficiency, the progress made by individual economies in improving their financial market efficiency were mixed. In many cases, about half of the economies reported improvements, while the other half had a drop in scores. Thus, there are ample opportunities for the sharing of experiences and best practices between economies.

Figure 11. WEF Global Competitiveness Indicators for Financial Market Efficiency



Note: A higher score indicates more efficient financial market practices. Data from GCR2016-17 and GCR2017-18 are used for year 2016 and 2017 respectively. APEC score is a simple average of the scores of 20 economies (AUS; BD; CDA; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PE; PHL; RUS; SGP; CT; THA; USA; and VN).

Source: APEC PSU computations based on data from World Economic Forum (accessed 15 Jan 2018).

Strengthening access to basic services & infrastructure and having well-targeted fiscal & social policies

Basic services and infrastructure increase the productivity of scarce resources and raise the competitiveness of the economy as a whole. Fournier (2016)²² noted that public investment can indeed have large positive effects on growth. For instance, more efficient transport networks can lower installation costs of new capital, and also connect lower income groups to markets (Calderon and Servén, 2014)²³. Similarly, sound taxation and social protection policies can encourage growth in an economy by ensuring resources are channelled towards areas such as infrastructure, public health and schooling (Scully 2003)²⁴. An effective taxation system that is transparent, predictable and not unnecessarily complex can also promote efficient employment and investment decisions (Clark, 2005)²⁵. In essence, a high tax burden relative to the benefits received from investing or working in a particular economy may deter investment and employment (Clark, 2005)²⁶.

To improve basic services and infrastructure in the region, APEC economies can improve their general infrastructure including transport, communications and energy as well as domestic transport network such as buses, trains and taxis. Health services and infrastructure are also crucial components, and economies can work on improving both accessibility as well as quality.

²² Fournier, J-M. (2016), "The positive effect of public investment on potential growth", OECD Economics Department Working Papers No. 1347, OECD Publishing, Paris.

²³ Calderón, C., & Servén, L. (2014). Infrastructure, Growth, and Inequality. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/20365/WPS7034.pdf>

²⁴ Scully, G. W. (2003). Optimal Taxation, Economic Growth and Income Inequality. Retrieved from <https://link.springer.com/article/10.1023/A:1024223916710>

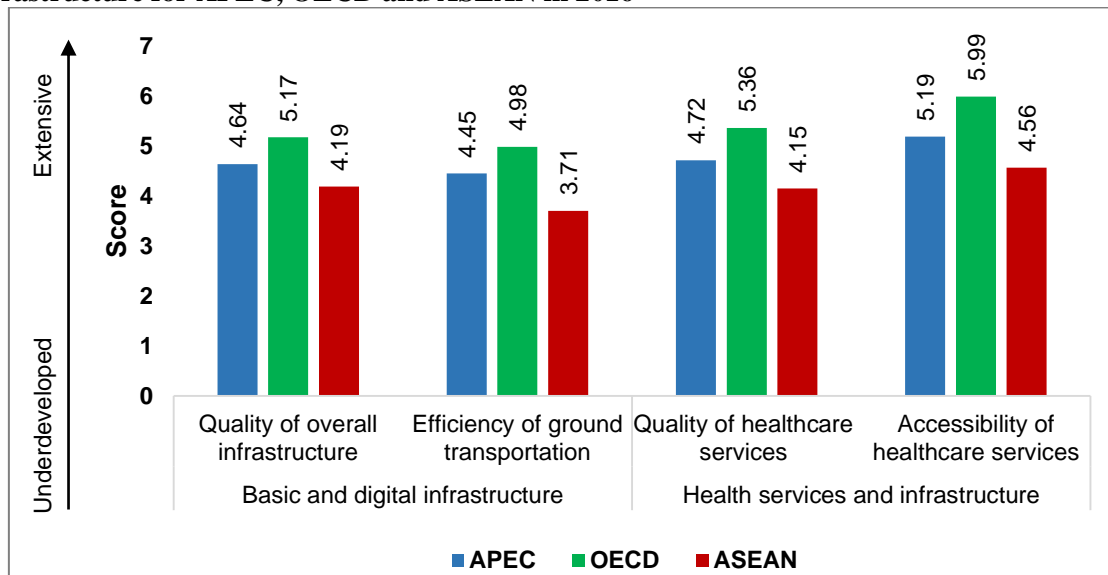
²⁵ OECD. (2005). OECD Conference Investment for Development: Making it Happen. Retrieved from <https://www.oecd.org/investment/investmentfordevelopment/35488855.pdf>

²⁶ *ibid*

The WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure measure the perspectives of business executives on the availability of two types of basic services and infrastructure, namely: 1) basic and digital infrastructure; and 2) health services and infrastructure.

Compared to other groups such as OECD and ASEAN, APEC on average fared better than their ASEAN counterparts, but worse than those in OECD in terms of both basic and digital infrastructure, as well as health services and infrastructure (Figure 12).

Figure 12. WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure for APEC, OECD and ASEAN in 2016

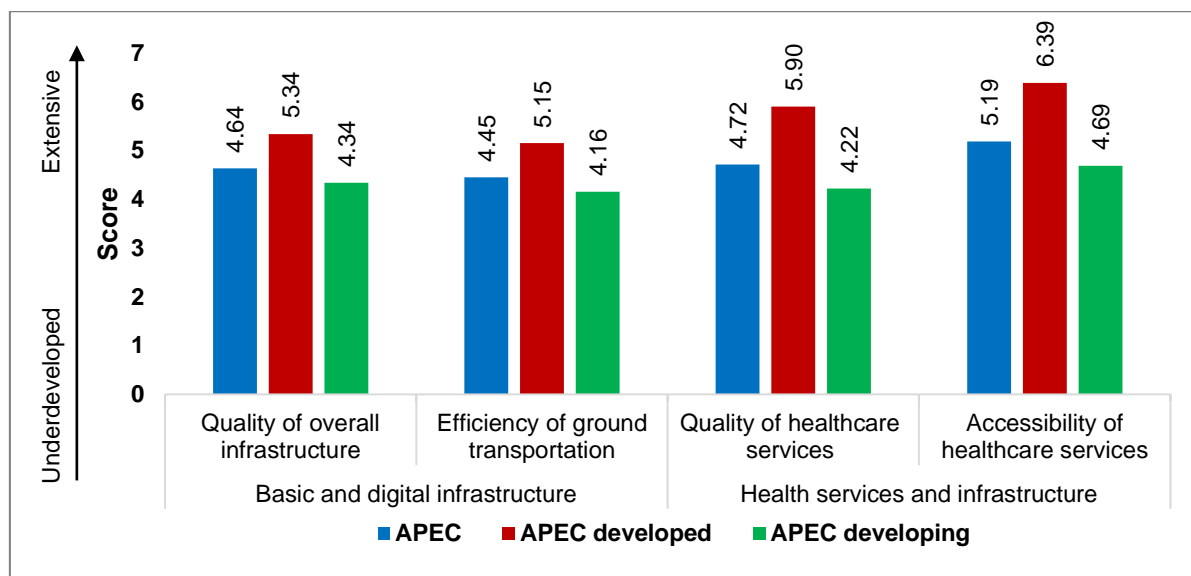


Note: Data for APEC excludes BD; HKC; PNG and CT. Data for ASEAN excludes BD and MMR. Higher score denotes more effective policies.

Source: APEC PSU computations based on data from WEF (accessed 16 Jan 2018)

APEC developed economies scored higher on average in all four indicators compared to their developing counterparts and OECD (Figure 13). Both APEC developing and developed economies exhibited similar trends, scoring the highest in accessibility of healthcare services and the lowest in efficiency of ground transportation.

Figure 13. WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure (2016)



Note: APEC developed economies comprise of AUS; CDA; JPN; NZ; and USA. APEC developing economies comprise of CHL; PRC; INA; ROK; MAS; MEX; PE; PHL; RUS; SGP; THA; and VN.

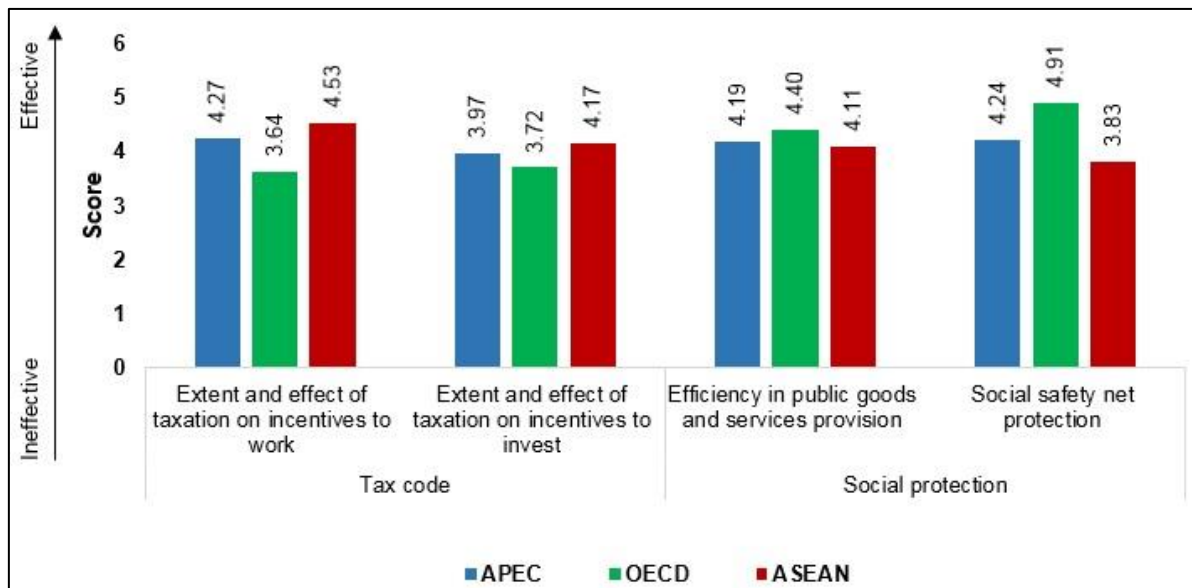
Source: APEC PSU computations based on data from World Economic Forum

APEC economies can improve their fiscal policies through effective use of taxation and social protection programmes. As noted by Fall et al (2015)²⁷, the challenge for many economies is developing a system that minimizes the trade-offs between financial sustainability, adequacy and efficiency. The WEF Inclusive Growth and Development Indicators for Fiscal Transfers measure the perspectives of business executives on an economy's fiscal policies in two areas: 1) tax code; and 2) social protection. Indicators under the tax code measures the extent to which taxes reduce incentives to work or invest, where 0 represents significant reduction in incentives to work/invest while 7 represents no reduction in incentive to work/invest. Indicators under social protection assess the efficiency of government efforts in providing public goods and services, and in formal social safety nets to protect the general population from economic insecurity in an event of job loss or disability. In general, well-targeted fiscal policies raise the productivity and competitiveness of the economy.

Comparing APEC's performance with those of other groups in terms of tax code showed that APEC performed better than OECD, but worse than ASEAN economies (Figure 14). The opposite is observed in social protection, that is, APEC performed better than ASEAN, but worse than OECD economies.

²⁷ Fall, F., D. Bloch, J-M Fournier, and P. Hoeller (2015), "Prudent debt targets and fiscal frameworks," OECD Economic Policy Papers No. 15, OECD Publishing, Paris.

Figure 14. WEF Inclusive Growth and Development Indicators for Fiscal Transfers for APEC, OECD and ASEAN in 2016

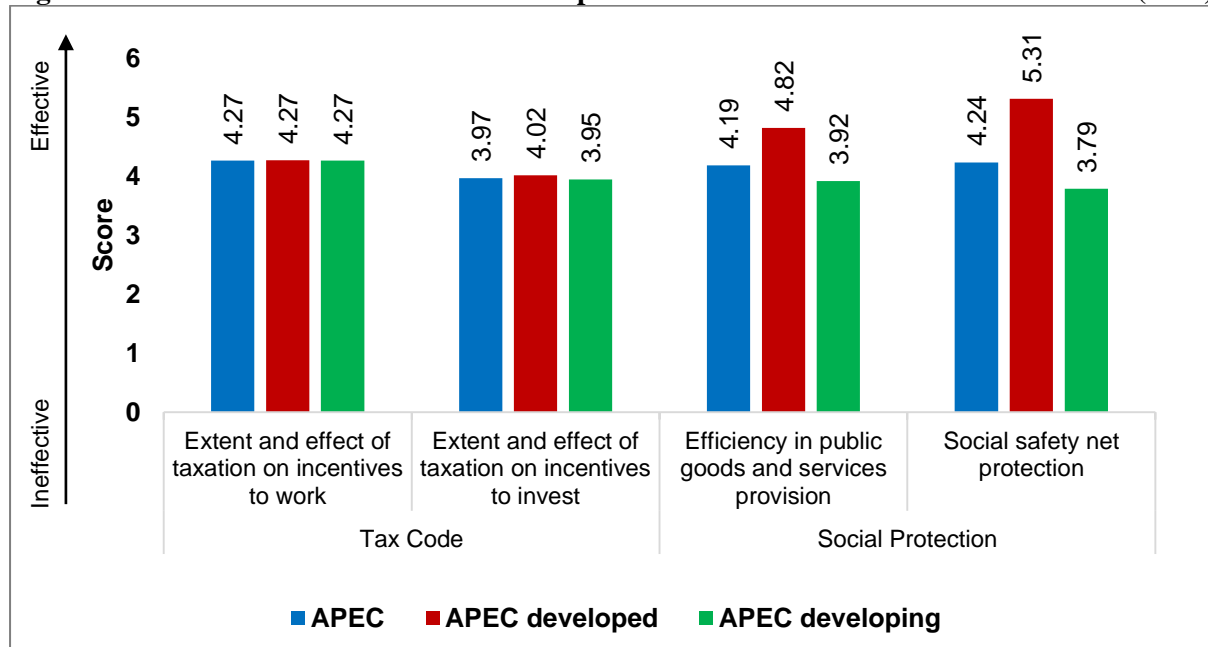


Note: Data for APEC excludes BD; HKC; PNG and CT. Data for ASEAN excludes BD and MMR. Higher score denotes more effective policies.

Source: PSU computations based on data from WEF (accessed 16 Jan 2018)

In terms of tax code indicators, both APEC developing and developed economies appear to have fairly similar average scores (Figure 15). On the other hand, social protection indicators of APEC developed economies showed significantly better average scores than APEC developing economies. Sharing of best practices among economies in these areas may therefore collectively boost the region's performance.

Figure 15. WEF Inclusive Growth and Development Indicators for Fiscal Transfers APEC (2016)



Note: APEC developed economies comprise of AUS; CDA; JPN; NZ; and USA. APEC developing economies comprise of CHL; PRC; INA; ROK; MAS; MEX; PE; PHL; RUS; SGP; THA; and VN.

Source: APEC PSU computations based on data from World Economic Forum

2.4.2. Pillar #2 – Deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers and people with disabilities

Pillar #2 aspires to encourage member economies to enhance their efforts in making market participation more inclusive by involving all segments of their society. Some areas that economies may want to focus their attention on include improving the general business environment; overcoming regulatory restrictions in certain sectors; supporting upgrading efforts; reviewing laws and regulations which protect specific groups against discrimination; and enhancing access to education and other social policies.

Improving the general business environment

Improvements in the general business environment is beneficial to the economy as a whole. While all firms would welcome any efforts by the government to minimize their regulatory burden, improvements in business environment is arguably an inclusiveness endeavour as its benefits are likely to be felt more by MSMEs than their larger counterparts. Moreover, hiring more people or setting up an entire department to deal solely with regulatory issues is not a luxury that many MSMEs can afford – typically, an employee within an MSME often has to deal with several issues simultaneously.

There are indeed several papers showing the burden of complex business procedures and environment tilting the playing field unfavourably towards MSMEs rather than large enterprises. For example, OECD (2001) noted that on average, MSMEs bore over 5 times the administrative costs per employee as compared to larger companies and found that a reduction in business regulations resulted in an extensive fall in the fixed costs imposed on MSMEs, thereby levelling the playing field in the market. In another study, Bickerdyke and Lattimore (1997) found that compliance cost as a proportion of turnover declined with respect to a firm's size.

World Bank's EoDB indicators focused mainly on regulations affecting MSMEs. As discussed in the previous section, an analysis of APEC average distance to frontier scores between 2016 and 2017 showed positive improvements across all areas covered by the indicators, demonstrating that APEC as a region is becoming more facilitative of MSMEs' participation in the markets. The 'Starting a Business' indicator had the best performance with the highest average score of 89.0 in 2017, while 'Getting Credit' reported the most improvements among the indicators (Figure 1 in Section 2.4.1).

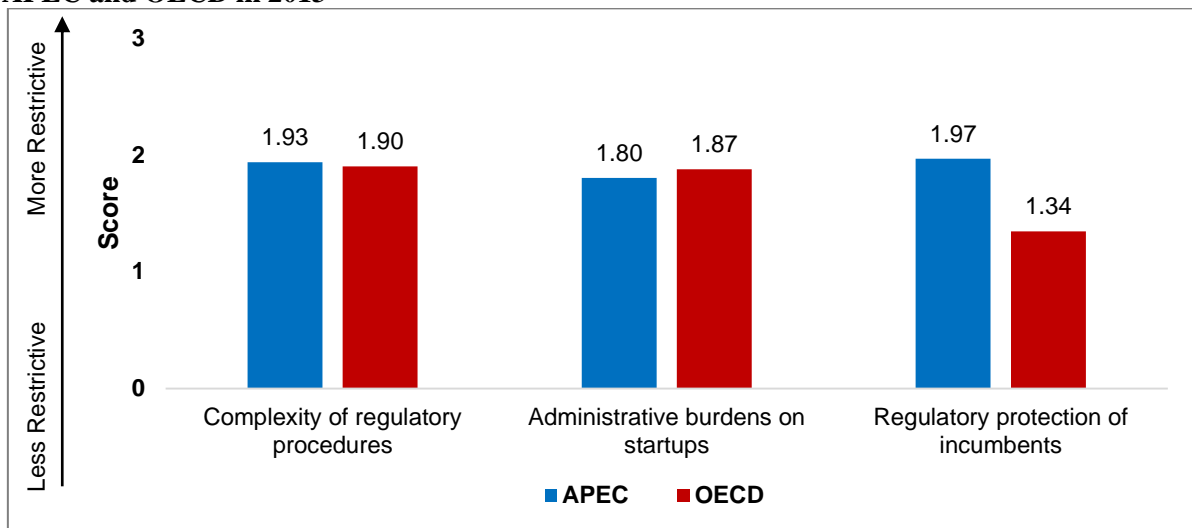
Access to finance has been a recurring concern among MSMEs and it is encouraging to note that APEC economies have made significant headway in this area. One component of 'Getting Credit' measures the depth of credit information, which evaluates the coverage, scope and accessibility of credit information made available through credit bureaus or credit registries. Improved coverage and quality of information provides incentives for lenders as well as borrowers to engage in more lending activity. World Bank's survey investigates credit coverage through the presence of credit service providers such as credit bureaus or credit registries²⁸. For the case of credit bureau coverage, 9 economies as of 2017 had achieved full coverage while 10 other economies had seen improvements. Similarly, improvements in credit registry coverage were seen in 6 economies between 2016 and 2017. Besides population coverage, additional features are now being offered in some economies such as allowing borrowers to access their data and enabling financial institutions to access credit information online. Doing so has raised the quality of information that lenders have on potential borrowers and minimized the information asymmetry which typically impedes MSMEs' access to finance.

²⁸ Both credit registries and credit bureaus are public and private credit information providers. More information can be found at: <http://www.doingbusiness.org/Methodology/getting-credit>.

Another indicator providing insights into an economy’s regulatory environment would be the OECD Economy-wide Product Market Regulation (PMR). It provides an indication of the extent through which policies encourage or discourage competition in both the goods and services sectors. Comparing APEC’s performance vis-à-vis OECD in 2013 showed that the regulatory environment in the former is generally more inhibitory towards competition than the latter. This can be seen from the overall score as well as within each of the three components (i.e. state control, barriers to entrepreneurship, and barriers to trade and investment) (data not shown).

Among the three components, barriers to entrepreneurship is worth analysing further from the perspective of inclusiveness as it provides additional information on the main regulatory challenges that firms including MSMEs may face and consequently, their ability to deepen their participation. Data shows that with the exception of administrative burdens on start-ups, APEC underperformed OECD in terms of complexity of regulatory procedures and regulatory protection of incumbents (Figure 16).

Figure 16. Comparison of scores in the different areas of barriers to entrepreneurship between APEC and OECD in 2013



Note: APEC score is the average score of 11 economies (AUS; CDA; CHL; PRC; INA; JPN; ROK; MEX; NZ; RUS; and USA). OECD score is the average score of all 35 OECD member economies.

Source: APEC PSU compilations based on data from OECD (accessed 13 March 2018).

Improvements in labour market efficiency is desirable to encourage deeper participation. For instance, if hiring and firing practices are too onerous, firms would perhaps prefer to look for other alternatives instead of trying to ramp up their manpower to meet increased demand. If wage determination is inflexible, firms may face difficulty in responding quickly to the changing landscape and thereby remain competitive vis-à-vis their counterparts in other economies. If reward is not correlated to talent/skills, people with relevant skills may prefer not to enter and participate in the labour market. For the APEC region, it appears that more can be done to improve the labour market situation. WEF indicators pertaining to labour market efficiency showed slight deterioration in four out of five areas over the assessed period (Figure 10 in section 2.4.1).

Likewise, improvements in financial market efficiency is good for promoting deeper participation. If venture capital availability is limited, chances of MSMEs getting access to this funding source would be diminished and consequently, reduce their ability to participate in the market. The same can be said about financing through local equity markets. Firms including MSMEs would have much to benefit from continued developments in the financial market. An evaluation of APEC’s performance using WEF indicators pertaining to financial market efficiency shows that all but one indicator (the ability to finance through local equity markets) has seen an improvement in its scores (Figure 11 in section 2.4.1).

Overcoming regulatory restrictions in certain sectors

Certain sectors in the economy may be subjected to more restrictive regulations than that of others. From the perspective of inclusiveness, practices which restrict entry and operations are not encouraged for at least two reasons. One, it prevents firms including MSMEs from deepening their participation in the specific sector. Two, the close linkage between sectors such as services and manufacturing means that competitiveness of one sector would reinforce that of another sector. Nordas and Rouzet (2015) identified that the value-added by services trade contributes about a third of the value of goods exports. Therefore, regulatory policies which negatively affect one sector are likely to have inadvertent spill-over effects on another sector and hence affecting the ability of firms within the sector to deepen their participation.

Evaluation of the situation in APEC vis-a-vis ASEAN and OECD using OECD FDI Regulatory Restrictiveness Index (FDI RRI) shows that APEC outperformed ASEAN but underperformed OECD overall and in the individual sectors (i.e. primary, secondary and tertiary) (Figure 3 in section 2.4.1). Among these sectors, restrictions in APEC is highest in the primary sector, followed by tertiary and then secondary sector.

As shared in the previous section, evaluating the contribution of different restrictions to the APEC scores in 2016 indicates that equity restrictions was the major contributor to both primary and tertiary sectors, followed by screening and approval (Figure 4 in section 2.4.1). While in the secondary sector, both screening and approval as well as equity restrictions were major contributors.

Besides the FDI RRI, OECD has another indicator which specifically analyses and identifies regulatory policies in the services sector. As highlighted in the previous section, comparing scores between 2016 and 2017 showed that the progress made by APEC is mixed (Figure 5 in section 2.4.1). While 6 sectors showed improvements in its score over the assessed period, the remaining sectors have become more restrictive. Top sectors that have become more restrictive include telecommunication, construction, architecture and insurance services. The main contributors to the increase in scores are restrictions on foreign entry and regulatory transparency, as well as barriers to competition in the case of the telecommunications sector.

Supporting upgrading efforts

Continued and deeper participation by MSMEs and labour force requires them to enhance their relative productivity as well as ability to innovate. Indeed, Andrews et al (2015)²⁹ noted that providing larger share of smaller and younger firms with knowledge and advanced skills can minimize the gap between leading and lagging firms, hence ensuring that productivity growth are more inclusive. Doing so not only minimizes the chances of MSMEs being replaced by another more competitive firm, but increases their chances of exporting and accessing the wider market. Data from World Bank's Enterprise Survey showed that among APEC exporting firms, 31.4 percent of them had undertaken R&D activities. In contrast, a lower share of non-exporting firms had done so (18.2 percent)³⁰. Investing in upgrading efforts also relates to expanding a business's product range which is likely to raise the probability of involvement in the value chains. For labour force, supporting their upgrading efforts is about making them relatively more competitive instead of being made redundant in light of the changing economic landscape.

²⁹ Andrews, D., C. Criscuolo and P. Gal (2015), "Frontier firms, technology diffusion and public policy: Micro Evidence from OECD Countries", OECD Productivity Working Papers No. 2, OECD Publishing, Paris.

³⁰ APEC data is the simple average of data from latest available year of 10 economies: CHL (2010); PRC (2012); INA (2015); MEX (2010); MAS (2015); PE (2017); PHL (2015); RUS (2012); THA (2016); and VN (2015).

Both APEC's original and adjusted labour productivity per person employed, as well as the percentage growth of productivity increased between 2016 and 2017 (Figures 7 and 8 in section 2.4.1).

WEF indicators pertaining to business sophistication and innovation concurred with the observation and could shed light on the factors that may have contributed to the increase in labour productivity. For one, the state of cluster development was rated by business executives to have improved from 4.37 in 2016 (i.e. GCR2016-2017) to 4.39 in 2017 (i.e. GCR2017-2018) (Figure 9 in Section 2.4.1). Rating for company spending on R&D has also increased from 4.14 to 4.19 between 2016 and 2017. Likewise, rating for university-industry collaboration in R&D has also increased from 4.23 to 4.28 over the assessed period.

Reviewing laws and regulations which protect specific groups against discrimination and ways to encourage their participation

Encouraging various segments of the society, in particular the under-employed ones, to deepen their participation in the labour force and the economy have been the goal of many economies. Several studies noted the benefits of doing so. For instance, Petersson and Ishi (2017) found a positive relationship between female labour force participation rate and labour productivity as a whole.

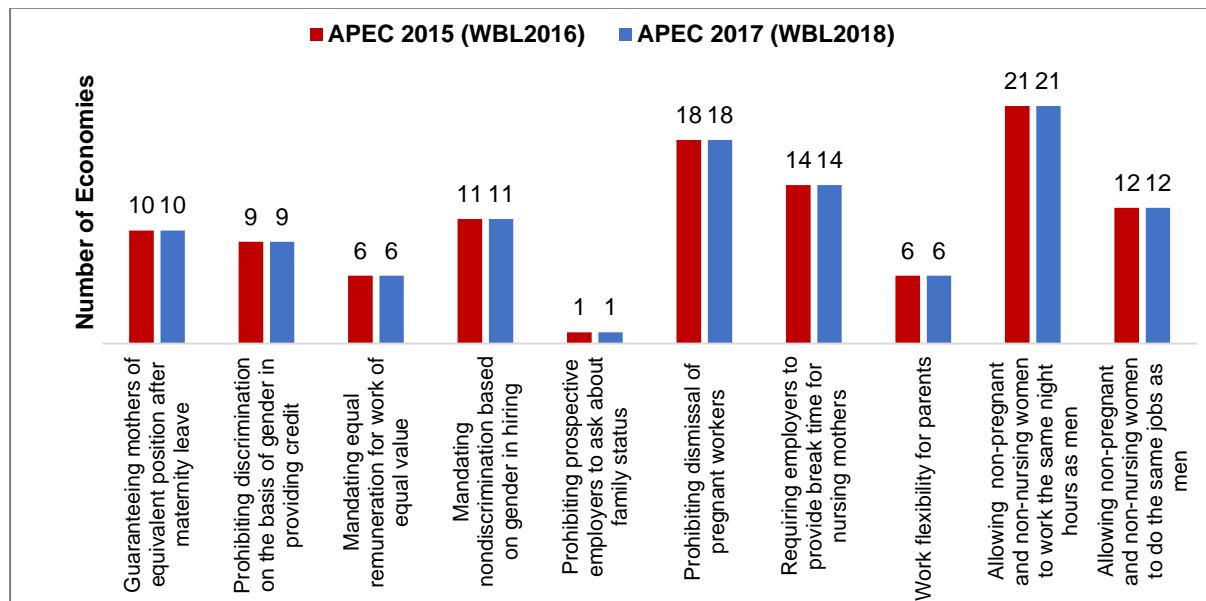
Successfully motivating them to increase their participation, however, is not easy. When an individual considers joining the labour force, many factors are likely to be contemplated such as the ease of finding suitable jobs, flexibility in working hours if one has other commitments like childcare, availability of support mechanisms like elderly-friendly features in the workplace if one is a senior (for examples, see Jaumotte, 2003; Silim and Stirling, 2014; Deloitte, 2016). On the other end of the spectrum, potential hirers would be looking at suitability of skills and access to incentives for hiring individuals from specific groups.

In theory, policymakers are well-positioned to enhance both ends of the spectrum, that is, the desire of individuals to join the labour force, and of the firms to hire these individuals. For instance, to encourage women's participation in entrepreneurship and employment, economies may wish to introduce new laws/regulations as well as improve existing ones. They can also implement whole-of-government approach to ensure consistency of laws/regulations and be a trailblazer in this endeavour.

The success of economies in achieving increased participation can be measured in two different ways. One way is via policy indicator such as the World Bank Indicators on Women, Business and the Law (WBL) which looks at whether the economy has certain regulations deemed as important in encouraging women participation.

It is encouraging to note data from WBL2018 indicating that APEC economies have laws/regulations in different areas that serve to protect women against discrimination. For example, at least two-thirds of economies have laws/regulations prohibiting the dismissal of pregnant workers, requiring employers to provide break time for nursing mothers, and allowing non-pregnant and non-nursing women to work the same night hours as men (Figure 17). Despite these positive observations, however, there has been no increase in the number of economies having such laws/regulations between WBL2016 and WBL2018 (i.e 2015 and 2017). Furthermore, only 1 economy and 6 economies have regulations prohibiting prospective employers to ask about family status and allowing work flexibility for parents, respectively.

Figure 17. Presence of laws/regulations on various aspects that may protect women against discrimination

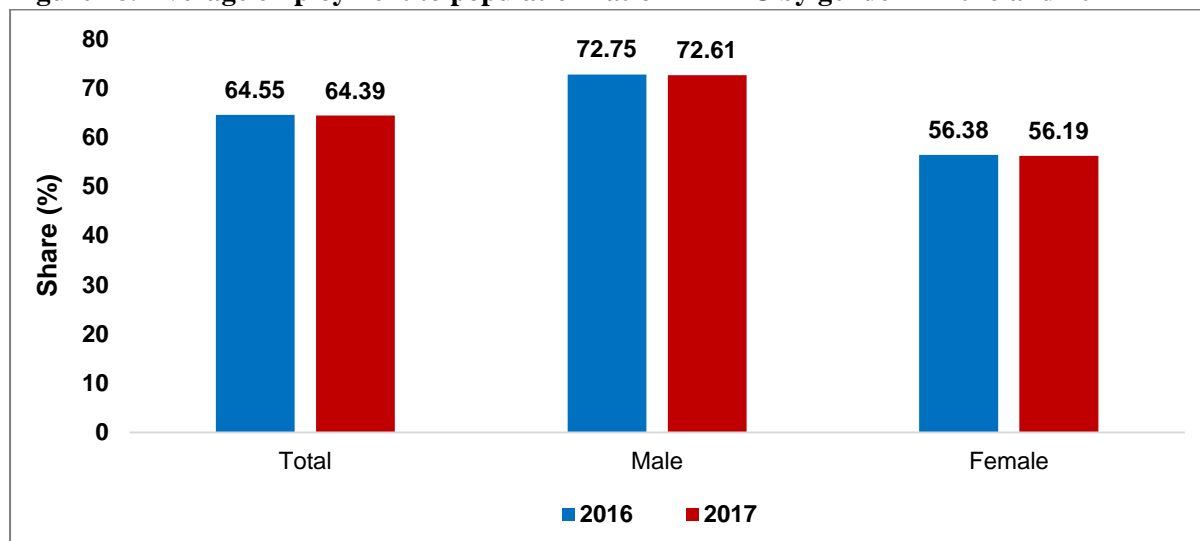


Source: PSU Compilation based on data from World Bank (accessed 29 March 2018)

Another means to monitor success is by looking at outcome indicators such as employment to population ratio, share of youth unemployment, labour force participation rate for age group 65+, etc. Outcome indicators enable policymakers to evaluate if the end objective of policy changes is achieved. Additionally, in the absence of policy indicators, this is the best alternative to monitor progress.

The ILO employment to population ratio measures the proportion of an economy's working age population that is employed. A higher employment to population ratio indicates that more individuals in a population are actively engaged in productive activities within an economy. Evaluation of APEC's overall performance over the assessed period showed that the ratio had declined slightly from 64.55 in 2016 to 64.39 in 2017 (Figure 18). In addition, an analysis by gender shows that both male and female employment to population ratio have fallen.

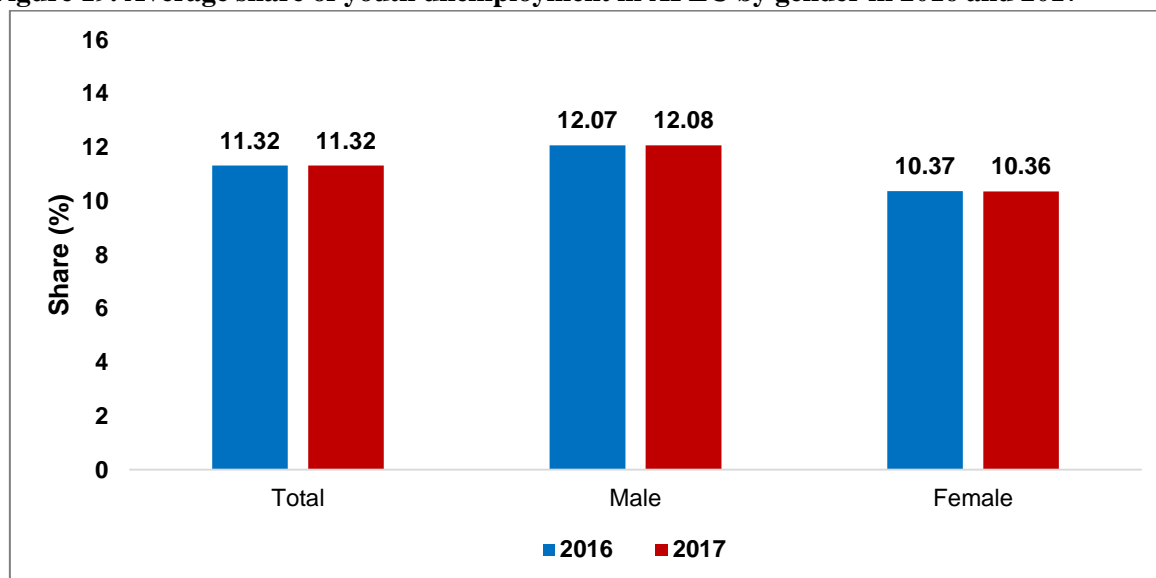
Figure 18. Average employment to population ratio in APEC by gender in 2016 and 2017



Note: The employment to population ratio is based on modeled ILO estimate. APEC employment to population ratio is a weighted calculation based on the total no. of employment and population of all the 21 economies
 Source: APEC PSU compilations based on data from ILO (accessed 15 January 2018)

The ILO share of youth unemployment is a measure of the proportion of the labour force between the ages of 15 and 24 actively looking for but are unable to find employment. Between 2016 and 2017, APEC’s share of youth unemployment stagnated at 11.3 percent (Figure 19). When data was disaggregated by gender, youth unemployment for males had increased slightly while it was the opposite for females.

Figure 19. Average share of youth unemployment in APEC by gender in 2016 and 2017

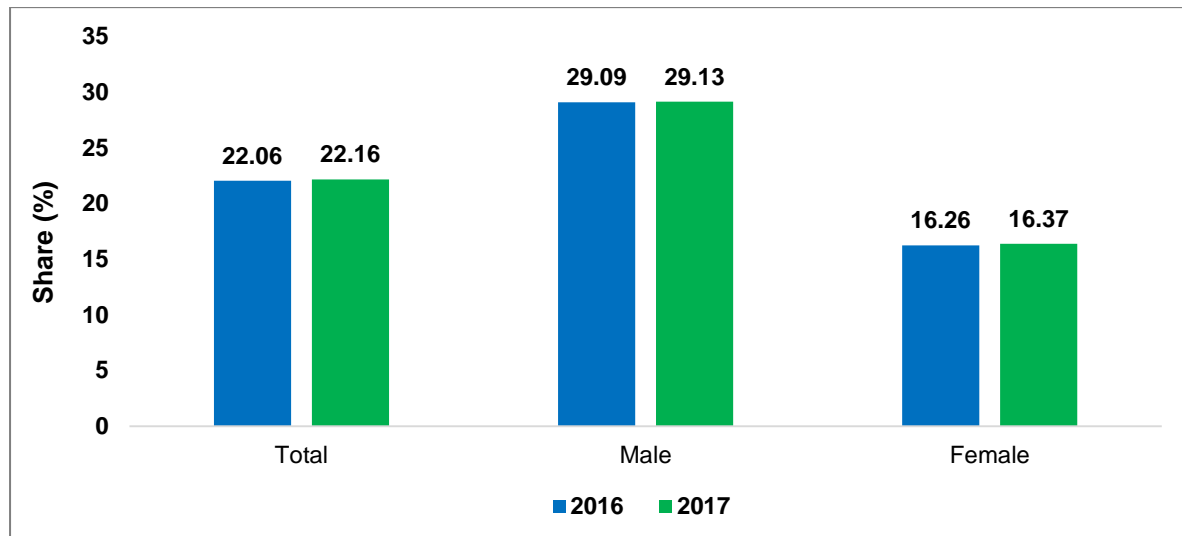


Note: APEC share of youth unemployment is a weighted calculation based on the total number of unemployed youth and youth labour force of all the 21 economies.
 Source: APEC PSU compilations based on data from ILO (accessed 15 January 2018)

ILO Labour Force Participation Rate for Age Group 65+ is an indicator of the proportion of population aged 65 and above that are economically active. It is encouraging to note that APEC’s labour force participation rate for individuals aged 65 and above has seen a year-on-year increase between 2010 and 2017 (data not shown). Particularly during the assessed period (i.e. 2016 and 2017), labour force

participation rate had increased from 22.06 to 22.16 percent (Figure 20). A closer look at participation rate by gender found that male participation rates were higher as compared to females.

Figure 20. Average labour force participation rate for age group 65+ in APEC by gender in 2016 and 2017



Note: The labour force participation rate is based on modeled ILO estimate. APEC labour force participation rate is a weighted calculation based on the total number of labour force and population of all the 21 economies.

Source: APEC PSU compilations based on data from ILO (accessed 15 January 2018)

Enhancing access to education and other social policies as well as infrastructure

Ensuring equal access to education, health and other social services is arguably one way to improve inclusiveness in society. Providing opportunities for an individual to pursue quality education raises his likelihood to participate in the labour market. Patrinos and Psacharopoulos (2004) found that every additional year of schooling yielded an average rate of return of 10 percent. Barro and Lee (2010) estimated that each additional year of schooling increases output per worker between 5 to 12 percent. Furthermore, improving an individual's access to healthcare enhances physical wellbeing and the ability to contribute to the economy. For instance, Swift (2014) indicated that a 1 percent increase in life expectancy raises the GDP of 13 OECD economies by more than 6 percent on average in the long run. Weil (2007) showed that eradicating health gaps between economies could improve labour productivity and reduce productivity inequality among them.

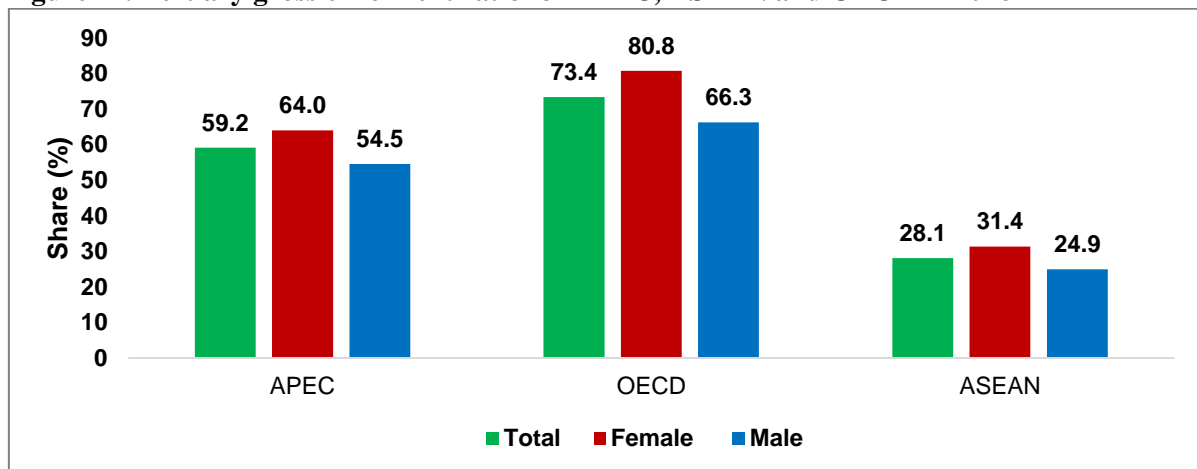
Similarly, improving infrastructure enhances individuals' capacity, including those living in rural and remote areas to actively participate in the economy. For instance, Fan, Zhang and Zhang (2002) found that 3.2 individuals were lifted out of poverty for every RMB10,000 invested in rural infrastructure. OECD (2007) also noted that targeting transport infrastructure in certain geographical areas (e.g. rural and remote areas) may make investments more pro-poor.

One way to measure the level of access to education is the tertiary gross enrolment ratio (GER). It provides the number of students enrolled in the tertiary level of education regardless of age as a share of the official school-age population corresponding to the same level of education. GER is also indicative of improvements in basic education as students need to complete basic schooling and attain the necessary skills before entering tertiary institutions. In other words, an increase in tertiary enrolment rates indirectly shows improved completion rates at the level of primary and secondary institutions.

Within APEC, close to 60 percent of the official school-age population corresponding to the tertiary level is enrolled in tertiary education (Figure 21). By gender, the share of female students who were

enrolled in tertiary institutions in 2016 exceeded that of male students. On average, APEC economies performed better than ASEAN economies, but less so when compared to OECD economies.

Figure 21. Tertiary gross enrolment ratio for APEC, ASEAN and OECD in 2016

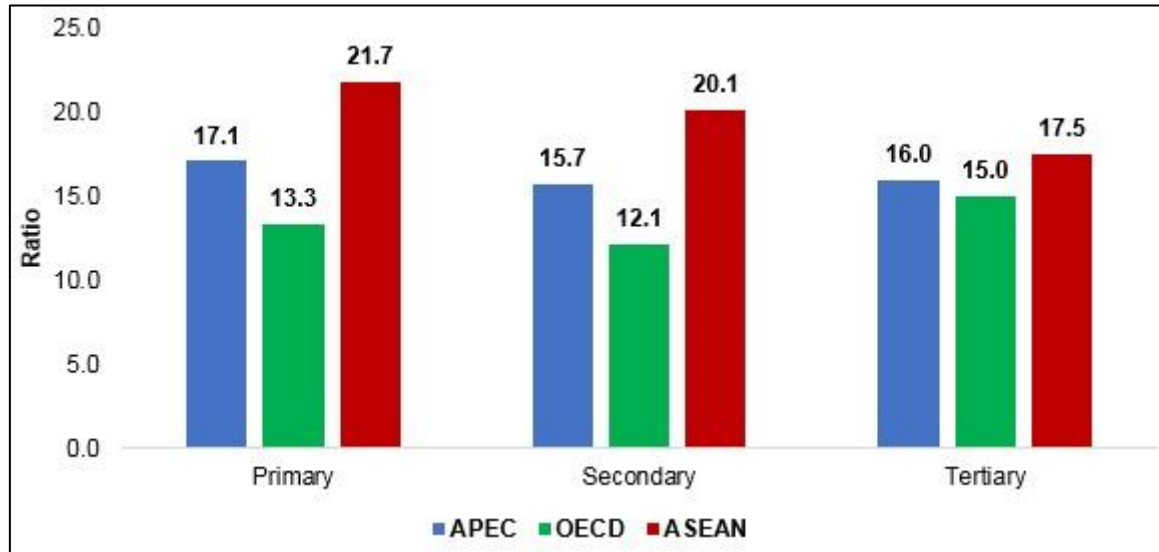


Note: APEC total, female and male tertiary gross enrolment ratio is a simple average of the ratio of 17 economies (AUS; BD; CHL; PRC; HKC; INA; JPN; ROK; MAS; MEX; NZ; PHL; RUS; CT; THA; USA; and VN). For 2016 average ratio, 2015 data is used for BD; CHL; PRC; HKC; INA; ROK; MAS; NZ; RUS; THA; USA; VN, and 2014 data is used for AUS; JPN; MEX; and PHL. For CT, 2016-17 data is used for 2016.

Source: APEC PSU computations based on data from UNESCO and Chinese Taipei's Ministry of Education.

While improving access to education is important, it is also crucial to evaluate the quality of education and one possible measure is pupil-teacher ratio. The number of students per teacher can serve as a proxy of the level of human resources allocated to the education sector. A lower ratio can be indicative of better teaching quality since each teacher arguably can focus his/her effort on fewer number of students. Analysis of data showed that there is a variation in the number of students per teacher across and within each level of education in 2016. For example, while the APEC average ratio was 15.7 at the secondary level, it was 16.0 at the tertiary level (Figure 22). At the primary level, ratio ranges between 10.2 and 30.3, while at the tertiary level, it ranges between 7.0 and 27.2. Comparing data for APEC, ASEAN and OECD showed that APEC economies have larger classes than OECD, but smaller classes than ASEAN across all levels.

Figure 22. UNESCO Pupil-Teacher Ratio comparison among APEC, OECD and ASEAN (2016)



Note: APEC pupil-teacher ratio is the average ratio of 16 economies including BD; PRC (primary and secondary only); HKC (primary and secondary only); INA; JPN ROK; MAS; MEX; NZ; PE (primary and secondary only); PHL (primary and secondary only); RUS (primary and tertiary only); CT; THA; USA; and VN (primary and tertiary only).

For ASEAN, the ratio is the average of 9 economies: BD; KHM (primary and tertiary only); INA; LAO; MAS; MMR (primary and secondary only); PHL (primary and secondary only); VN (primary and tertiary only); and THA.

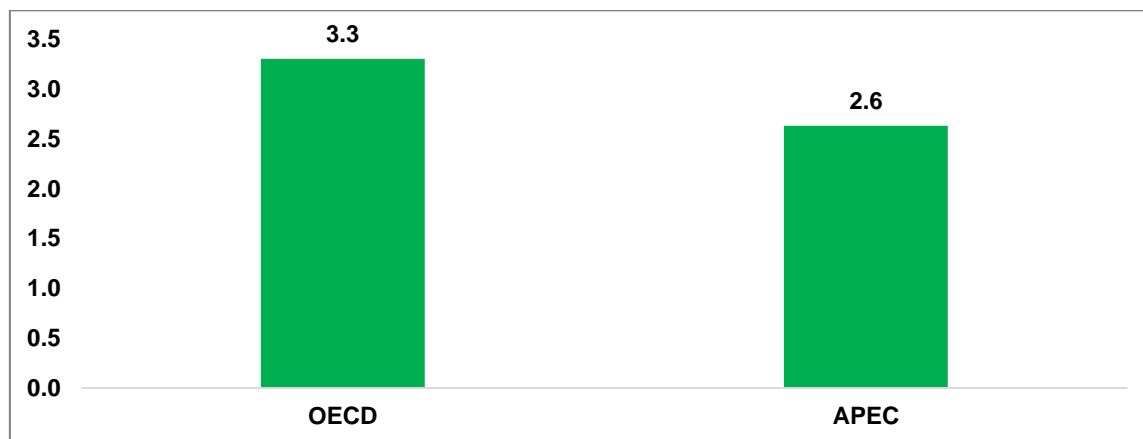
For OECD, the ratio at the primary level is the average of 29 economies: AUT; BEL; CHL (primary and secondary only); DNK; FIN; DEU; GRC; HUN; ISL (primary only); ISR (primary only); ITA; JPN; ROK; LVA; LUX; MEX; NLD; NZ; NOR; POL; PRT; SVK; SVN; ESP; SWE; CHE (primary and tertiary only); TUR; GBR; USA

Source: APEC PSU computations based on data from UNESCO and Chinese Taipei's Ministry of Education.

On access to basic services and infrastructure, analysis of WEF indicators capturing the perspectives of business executives noted that APEC performed better than ASEAN but worse than OECD in all indicators, namely quality of overall infrastructure, quality of domestic transport network, as well as accessibility and quality of healthcare services (Figure 12 in section 2.4.1). However, the large variation in scores within APEC indicates that members can benefit from one another's experience.

Specifically on access to healthcare services, data from World Bank and OECD's number of physicians per 1,000 people provide a measure of the level of human resources in the healthcare sector. Evaluating the data for APEC and comparing it with that of OECD showed that the latter outperformed the former on average (2.6 vs. 3.3 physicians per 1,000 people) (Figure 23). Variation within APEC ranged between 1.8 and 4.0 physicians per 1,000 people.

Figure 23. World Bank and OECD Physicians per 1,000 People, comparison between APEC and OECD (2016)



Note: APEC number of physicians per 1,000 people is the simple average of 10 economies (AUS; CDA; PRC; JPN; ROK; MEX; NZ; CT; RUS; USA).

For the APEC number, 2015 data is used for AUS; CDA; PRC; MEX; NZ; RUS, and 2014 data is used for JPN and US For CT, 2016-17 data is used for 2016.

For the OECD number, the 2016 average uses 2015 data for AUS; BEL; CDA; DEU; HUN; ISL; ISR; LVA; MEX; NLD; NZ; NOR; POL; SVN; ESP; EST, and 2014 data for DNK; FIN; JPN; SWE; USA.

Source: APEC PSU computations based on data from OECD Stat and Chinese Taipei's Ministry of Health and Welfare and Directorate-General of Budget, Accounting and Statistics.

Well-targeted fiscal transfers enable economies to implement critical social policies, some of which have been discussed above. The WEF indicators on fiscal transfers measure the perspectives of business executives on an economy's fiscal policies in two areas: tax code and social protection. In terms of tax code, which essentially assesses the extent in which taxes reduced incentives to work or invest, data showed that APEC outperformed OECD but was behind ASEAN (Figure 14 in section 2.4.1). In terms of social protection, which essentially looks at whether government revenue from various sources including taxation are used in an effective way, two sub-indicators showed that APEC outperformed ASEAN but was behind OECD.

2.4.3. Pillar #3 – Sustainable social policies that promote the other pillars, enhance economic resiliency, and are well-targeted, effective and non-discriminatory

Pillar #3 endeavours to urge member economies to put in place a range of social policies which are not only well-targeted, effective and non-discriminatory, but also boost the economic resiliency of the beneficiaries. Areas of interest for economies can include enhancing access and quality of education; bolstering access and quality of basic services & infrastructure; and having well-targeted fiscal transfers.

Enhancing access and quality of education

Education is a critical component of development and together with areas such as health and living conditions, it forms aspects of an economy's social policy. Increasingly, education has become more important in the wake of the structural unemployment and skills mismatch experienced by economies due to globalisation and technological changes (Krueger et al, 2017). For instance, while digitization has led to job creation for occupations such as data scientists, app developers and social influencers, many of which would probably be unheard of until a decade ago, it has also led to job losses due to automation. In response to these changes, economies can undertake many activities to improve education access, including but not limited to increasing the number of institutions, providing

scholarships for needy students, facilitating upgrading opportunities for working adults as well as promoting the use of online platforms to deliver various online/e-education programmes.

As pointed out in the previous section, one way to measure the level of access to education is the tertiary gross enrolment ratio (GER)³¹. Comparing APEC with other groupings such as OECD and ASEAN indicated that APEC is doing better than ASEAN on average, but below that of OECD (Figure 21 in section 2.4.2). Within APEC specifically, although close to 60 percent of the official school-age population corresponding to the tertiary level is enrolled in tertiary education, there is a large disparity in the enrolment ratio among economies. A similar trend was also observed for gender-disaggregated data.

In addition to enhancing access to education, improving the quality of education is also another vital component. Despite its limitations, pupil-teacher ratio remains one of the more widely-accepted ways to monitor education quality. Low pupil-teacher ratio has been associated with better teaching quality, as it signifies smaller classes and more attention being paid to individual pupils. This is supported by a study by Blatchford et al. (2003)³² which finds smaller class size to be most effective for students in their first year of school.

Analysis of data obtained from UNESCO showed that APEC had lower pupil-teacher ratio than ASEAN, but higher than OECD (Figure 22 in section 2.4.2). This variation is observed across all three levels of education (i.e. primary, secondary and tertiary). Within APEC, the average pupil-teacher ratio for secondary level education is relatively lower compared to that of primary and tertiary level education. There are rather wide variations between economies, however: the ratio for primary level ranges between 10.2 and 30.3, that of secondary level ranges between 8.6 and 28.2, while that of tertiary level ranges between 7.0 and 27.2.

Bolstering access and quality of basic services & infrastructure

Widespread availability of basic services and infrastructure improves social mobility and increases access to economic opportunities across income groups (Calderon and Servén, 2014)³³. They can solve some of the issues faced by low-income groups in their endeavour to increase market participation. For instance, a report by JP Morgan Chase found that low-income residents in Detroit had to travel 15 percent farther than high-income residents to access employment opportunities and other amenities (Farrell, Relihan and Ward, 2017)³⁴.

The WEF Inclusive Growth and Development Indicators for Basic Services and Infrastructure indicators capture the perspectives of business executives on the availability of basic services and infrastructure. Comparing the situation in APEC vis-à-vis OECD and ASEAN, the indicators showed that APEC economies on average scored better than ASEAN economies, but lagged OECD economies (Figure 12 in section 2.4.1).

Within APEC, it was observed that the difference between APEC developed and developing economies is noticeably significant in the health services and infrastructure indicators. Average quality of health

³¹ Tertiary enrolment rates are also indicative of improvements in basic education as students need to complete basic schooling and attain the necessary skills before entering tertiary institutions. Therefore, increase in tertiary enrolment rates demonstrate improving completion rates at the level of primary and secondary institutions.

³² Blatchford, P., Bassett, P., Goldstein, H., & Martin, C. (2003). Are class size differences related to pupils' educational progress and classroom processes? Findings from the institute of education class size study of children aged 5–7 years. *British Educational Research Journal*, 29(5), 709-730.

³³ Calderón, C., & Servén, L. (2014). Infrastructure, Growth, and Inequality. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/20365/WPS7034.pdf>.

³⁴ Farrell, D., Relihan, L., & Ward, M. (2017). Going the Distance: Big Data on Resident Access to Everyday Goods. JP Morgan Chase Institute.

services differed by 1.68 points, while accessibility of healthcare services differed by 1.70 points (Figure 13 in section 2.4.1). It is worthwhile to note that in addition to the observed difference between the two groups, the range of scores amongst APEC developing economies is large, with some scoring above the average for developed economies.

The number of physicians per 1,000 people provides a measure of the level of human resources available in the health sector and therefore, access and quality of provided healthcare services. In this regard, data from World Bank and OECD showed that APEC economies had 0.7 physicians per 1,000 people fewer than OECD economies (Figure 23 in section 2.4.2). This trend is largely similar to earlier observations gleaned from the WEF indicators, implying that APEC can further improve both the quality of healthcare infrastructure (including through implementation of e-health initiatives in rural and remote areas) as well as the number of healthcare personnel.

APEC developed economies had higher levels of physicians per 1,000 people than APEC developing economies. However, the discrepancy between the two groups appeared to be small, with developed economies having 0.3 more physicians per 1,000 people than developing economies on average (data not shown).

Having well-targeted fiscal transfers

Similar to improving basic infrastructure and services, sound use of taxation and social protection policies can support social inclusion by ensuring better redistribution of resources in an economy, which in turn enhances economic resiliency (Samans, Blanke, Hanouz and Corrigan, 2017)³⁵. Indeed, OECD (2015) noted that rising inequality negatively impacts long-term economic growth because of reduced social mobility and unrealised potential in low income households, amongst other reasons³⁶.

From the perspectives of tax code, two sub-indicators from WEF showed that APEC performs relatively better compared to OECD, but had lower scores compared to ASEAN (Figure 14 in section 2.4.1). From the perspectives of social protection, which looks at whether government revenue from various sources including taxation are used in an effective way, two sub-indicators showed that APEC on the contrary had higher scores than ASEAN, but lower than OECD.

Categorizing scores into APEC developed or developing economies indicated that the former performed relatively better in terms of social protection indicators, while the two groups appeared to have similar or fairly close scores pertaining to tax code indicators (Figure 15 in section 2.4.1). Mixed performance among member economies implied that there are differing policy options and room for sharing best practices regarding how economies can improve on their current state of fiscal policies.

³⁵ WEF. (2017). The Inclusive Growth and Development Report 2017. Retrieved from http://www3.weforum.org/docs/WEF_Forum_IncGrwth_2017.pdf

³⁶ OECD. (2015). In It Together: Why Less Inequality Benefits All. Retrieved from https://read.oecd-ilibrary.org/employment/in-it-together-why-less-inequality-benefits-all_9789264235120-en#page1

3. REVIEW OF PROGRESS MADE BY INDIVIDUAL ECONOMIES

3.1. Overview

All 21 economies provided progress updates on their RAASR priorities and related actions. 19 economies, namely Australia; Brunei Darussalam; Canada; Chile; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Peru; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; United States; and Viet Nam gave full updates (i.e. all priorities and related actions identified in their 2016 RAASR Individual Action Plan (IAP) submissions and subsequent revisions). Moreover, Brunei Darussalam identified three additional priorities in its Mid-Term Review submission. Two economies – China and Papua New Guinea – provided partial updates on their priorities.

Collectively, the 21 economies gave updates on 80 priorities and 172 related actions. Categorizing these priorities into the three pillars of RAASR showed that 66 percent pertain to pillar #1 – more open, well-functioning, transparent and competitive markets. 46 percent pertain to pillar #2 – deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers, and people with disabilities, while 34 percent pertain to pillar #3 – sustainable social policies that promote the above-mentioned objectives, enhance economic resilience, and are well-targeted, effective, and non-discriminatory³⁷. At the individual economy level, priorities where updates were given numbered between 1 to 7 priorities.

Priorities and related actions identified and undertaken by economies were varied, even within the same pillar. For instance, under pillar #1, the objectives of identified priorities range from reducing administrative burden and boosting competitiveness and competition in the economy as a whole and in specific sectors including addressing issues related to SOEs to improving infrastructure and liberalizing the market to a greater extent. Under pillar #2, purposes of identified priorities range from enhancing the quality of human resource in the economy and increasing the participation of specific segments of the society such as women, youth, people with disabilities and vulnerable groups in the labour force to eliminating labour duality in the market and providing support to MSMEs in various aspects including access to finance, technology adoption and government procurement. Under pillar #3, aims of identified priorities range from improving the quality of both education and healthcare and ensuring that they respond to industry demands to enhancing social programs in terms of benefits and coverage and using data analytics to identify at-risk households. It is worthwhile to note that priorities may not be mutually exclusive in terms of the RAASR pillars that they endeavor to contribute to. As an illustration, the priority aimed at improving education quality can contribute to both pillars #2 and #3, while that whose objective is to reduce regulatory burden can contribute to both pillars #1 and #2, depending on the actual actions undertaken.

Deeper analysis of the submissions showed that economies have made reasonable progress in various aspects of their priorities and related actions. For example, where economies indicated plans to pass/amend a certain law/regulation in their 2016 RAASR IAP or subsequent revisions, progress was accordingly observed in their 2018 MTR submissions and they range from the draft law/regulation currently being reviewed, at certain stage of its passage through the legislative, having been passed but not enforced yet, to full implementation. Where economies indicated the intent to set up a certain organization/agency in their 2016 RAASR IAP or subsequent revisions, updates include the organization/agency being fully operational or their structures being finalized. Where economies noted the presence of certain programs or the intent to undertake certain activities in their 2016 RAASR IAP, updates ranged from specific (i.e. directly associated with the programs) such as the allocation of budget

³⁷ Shares do not sum up to 100 percent because some priorities are associated with more than one pillar.

to the programs, annual compliance costs which have been saved, the number of workshops that had been conducted and the number of participants who had attended or benefited from the programs, to broad (i.e. might not be attributable only to the programs) such as change in the number of employment in specific sector and contribution of specific sector to the GDP in terms of value-added. Economies may wish to include a mix of specific and broad indicators as they have their strengths and limitations and can serve to complement one another. Specific indicators enable tracking of particular actions in more details, while broad indicators enable economy-level implications to be monitored. Understandably, the fact that certain laws, regulations or programs are either not at the implementation stage yet or having been just implemented means that progress in terms of how their target population have benefited are still unclear at the moment. Furthermore, there have been a reorientation of certain actions in some economies due to changes in the external and domestic environment.

Several economies faced challenges in the course of moving their actions forward. For example, one economy noted that while its original intent of amending certain laws/regulations was to involve the local community in monitoring public investment projects, after the amendments had been done, it realized that the local community did not have the right capability/skills to do so. Another economy shared that while the original intent of drafting a particular framework was to guide the review process of anti-competitive legislations/regulations and that the framework has been created, it lacked information on the institutional setup to undertake the review process. Yet in another economy, while the objective of introducing a policy was to encourage the increased participation of women in leadership positions, the target percentage has not been reached despite it having been rolled out for some time.

Encouragingly, such observations have led to economies to respond by making some changes. For instance, in the first case, the economy is looking at conducting more workshops/training sessions to equip the local community with the necessary skills to monitor public investment projects in their area. In the second case, the economy has set up an inter-agency technical working group (IATWG) comprising of various stakeholders to draft the work plan. In the third case, the economy has implemented many activities such as holding engagement sessions, introducing a programme that provides training and coaching to women, and incorporating the requirements in additional documents. This is indeed the main motivation behind advocating that priorities and related actions be monitored and evaluated - they allow for progress to be tracked and provide the basis for tweaking actions to attain optimum outcome if necessary. In its absence, it would have been difficult to determine if there have been improvements or regressions.

Monitoring and evaluating priorities and actions require indicators to be identified and baseline to be set. In this regard, analysis of submissions indicated that there is room for improvements. Indicators need to evolve along with the action as it progresses and it would be a pity if actions with good intentions are not monitored and followed through because the indicators originally identified are no longer applicable. As an illustration, for economies specifying the ratification of certain laws/regulations as an action, an indicator monitoring the current stage of the draft law/regulation would be useful during the ratification process. However, this is insufficient to determine if the law/regulation has achieved its intended objective of benefiting its target population once it has been ratified and implemented. Here, economies may wish to consider other indicators. If the target recipients are the MSMEs, then perhaps an indicator monitoring how satisfied they are with the implemented measures would be useful. If access to benefits require application by MSMEs, then perhaps an indicator tracking the number of applicants could be used to indicate the awareness and popularity of the measures among MSMEs.

The quality of information captured by indicators can also be improved, particularly for qualitative ones. Provision of information that certain tax incentives have been put in place or certain regulations have been amended without elaborating on their exact nature and target population make it challenging

for the intended beneficiaries to pinpoint what the economies have implemented exactly and how to benefit from them. Noting that there is improved awareness among stakeholders without indicating how awareness was measured make it challenging for the economy to identify what outreach mechanisms work and what do not especially if several mechanisms are being tested.

Specifically on baseline, it was observed that some economies did not clearly identify the baseline conditions against which latest data and information were compared. As indicated earlier, absence of a clear baseline made it challenging to state convincingly if the latest observations are indicative of positive or negative progress. For example, one economy indicated that expenditure in a specific sector had increased by a certain percentage but did not mention the base period. In some cases, latest data and information were not as recent as expected (i.e. 2017 or later) although it is understood that data collection and processing may be costly and economies could not do so as often as they wish. Indicators which are updated regularly ensure that they reflect the situation on the ground as close as possible, hence allowing for more appropriate response.

3.2. Summary of progress review by economies

3.2.1. Australia

Australia identified 5 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) increasing workforce participation; 2) improving competition and reducing administrative burden; 3) supporting growth and higher wages; 4) supporting business and entrepreneurship through innovation and regulatory burden; and 5) market access and trade liberalization. Australia associated each of these priorities with single or multiple pillars identified under RAASR (Table 5).

Table 5. Australia's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Increasing workforce participation		○	○
2	Improving competition and reducing administrative burden	○		
3	Supporting growth and higher wages		○	○
4	Supporting business and entrepreneurship through innovation and regulatory burden	○	○	○
5	Market access and trade liberalization	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on Australia's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Australia provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Increasing workforce participation

Australia introduced an AUD840 million Youth Employment Package in its 2016-2017 Budget. Part of the package comprises the Youth Jobs PaTH (prepare-trial-hire) Programme, which aims to facilitate job seekers under 25 years old to become more competitive in the labour market and hence gain employment. It comprises of three parts, namely: 1) employability skills training for up to six weeks where candidates' basic employability skills are developed; 2) business internship placements of four to twelve weeks for up to 30,000 job seekers annually; and 3) youth bonus wage subsidy for employers to hire young job seekers who have been employed for six months or more. The New Enterprise Incentive Scheme introduced to encourage youths to start their own businesses was expanded in December 2016 to offer an additional 2,300 places per year.

Australia also legislated the Jobs for Families Child Care Package in March 2017. The objective of the package is to provide more than 1.2 million families with simpler, more affordable, more flexible and more accessible child care from 2016 to 2020. Different components of the package are being progressively rolled out. For example, the Child Care Subsidy will start in July 2018. Since its legislation, Australia has strived to improve the package through initiatives such as a new In Home Care program, which will replace the existing Nanny Pilot Programme to better align with key elements of the new package.

Priority 2 – Improving competition and reducing administrative burden

Australia supported the majority of the recommendations of the Competition Policy Review (i.e. Harper Review) and has since amended several key provisions in the Competition and Consumer Act 2010 which came into effect in November 2017. Australia expected these reforms to have positive impact on

its economy. The Federal Government is currently working with the states to implement the Small Business Regulatory Reform Agenda (SBRRA) where the former will pay the latter AUD300 million for undertaking reforms to reduce small businesses' compliance burden. When it is completed, the Federal Government plans to reinvigorate the National Partnership on Regulatory Reform, where states would be encouraged to remove unnecessary regulatory restrictions on competition.

Australia set a target to reduce the net regulatory burden by AUD1 billion per year since 2013. As of December 2017, more than AUD6 billion of annual compliance costs had been eliminated. Australia developed the Regulator Performance Framework in 2015 to encourage regulators to undertake their functions with minimal public impact necessary to achieve their objectives, particularly in terms of compliance cost and noted that the Framework has been successful in increasing transparency after having been in place for two annual reporting cycles. Australia continues to explore ways to strengthen its regulatory reform agenda. For example, it now requires all portfolios to report new and modified measures that have an impact on regulatory burden.

Priority 3 – Supporting growth and higher wages

Australia announced a 10-year enterprise tax plan in its 2016-17 Budget, aimed at encouraging investment, enhancing productivity and creating and supporting jobs, as well as increasing real wages and living standards over time. Measures that have been implemented include: 1) increasing the annual turnover threshold for small businesses from less than AUD2 million to less than AUD10 million, thereby allowing more than 90,000 additional businesses to access existing concessions; 2) reducing the tax rate from 28.5 to 27.5 per cent for incorporated businesses with annual turnover of less than AUD10 million; and 3) providing tax discounts for unincorporated business with annual turnover of less than AUD5 million from 5 to 8 percent. The threshold and tax rate associated with these measures will also be further improved over time until 2026-27. Legislation to effect these subsequent improvements is currently before the Parliament.

Priority 4 – Supporting business and entrepreneurship through innovation and regulatory burden

In December 2015, Australia announced the National Innovation and Science Agenda, which included a commitment of AUD1.1 billion over four years to support innovation by investing in various enablers, including education, research, incentivizing investment and removing regulatory obstacles. Since then, several initiatives have been implemented, such as a new crowd source equity funding framework, tax incentives for start-ups and venture capital, reforms to employee share schemes, and funding to encourage more women to undertake careers in science, technology, engineering and mathematics (STEM). Although most initiatives have been implemented, Australia noted that legislation needed to implement two measures is currently still in Parliament and some measures have longer implementation timelines.

Australia implemented the Growing Jobs and Small Business package in 2016. Measures included immediate deductibility on asset purchases of less than AUD20,000; assistance for employers to take on unemployed job seekers; and the restructure of roll-over relief that defers capital gains tax liabilities. While these measures were originally targeted towards small businesses with an annual turnover of less than AUD2 million, the 10-year enterprise tax plan mentioned above has raised it to AUD10 million.

Priority 5 – Market access and trade liberalization

The Comprehensive and Progressive Agreement for the Trans-Pacific Partnership (CPTPP) economies including Australia reached the final deal in January 2018. The agreement will enter into force when at least half of the eleven signatories have completed their domestic ratification process. In the case of Australia, the CPTPP text and accompanying National Interest Analysis has been tabled in the Parliament. An inquiry is being conducted by the Joint Standing Committee on Treaties, which will report back to Parliament. Australia expects the CPTPP to lead to new free trade agreements (FTAs) between the parties and in the case of itself, noted that there could potentially be new FTAs with Canada and Mexico as well as increased market access to Brunei; Chile; Japan; Malaysia; Singapore; and Viet Nam.

3.2.2. Brunei Darussalam

Brunei Darussalam identified one priority in its RAASR Individual Action Plan (IAP) submission in 2016, namely to establish a business-friendly environment. In its Mid-Term Review template submission, Brunei Darussalam updated the priority identified in its IAP and identified three additional priorities. The four priorities are: 1) increasing the national productivity; 2) ease of doing business in Brunei Darussalam (updated from 2016 IAP priority); 3) business growth; and 4) lower unemployment rate and create industry-ready manpower. Brunei Darussalam associated each of these priorities with single pillars identified under RAASR (Table 6).

Table 6. Brunei Darussalam's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Increasing the national productivity	○		
2	Ease of doing business in Brunei Darussalam	○		
3	Business growth		○	
4	Lower unemployment rate and create industry-ready manpower			○

Source: Compilations by APEC Policy Support Unit (PSU) based on Brunei Darussalam's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Brunei Darussalam provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Increasing the national productivity

Brunei Darussalam proposed restructuring its Law and Welfare Division to optimise human resource allocation and efficiency. The proposal, which is currently under review, identified three units to handle the daily tasks of the division, namely: legal unit, welfare unit, and support services unit. There will be an annual review of the efficiency and effectiveness of these units, and additional support will be provided to divisions that require it.

In line with the above, Brunei Darussalam also proposed reforms to improve key performance indicators (KPI) of the Division. If approved, the revised KPI is expected to increase workforce productivity and accountability, which is in line with the Prime Minister's Office strategic plan. The KPI will be reviewed quarterly to keep them consistent with divisional goals and improve them.

Priority 2 – Ease of doing business in Brunei Darussalam

Brunei Darussalam implemented several legal and regulatory reforms including enhancing the online registration system to facilitate ease of starting a business. For instance, name reservation and company incorporation processes had been merged into a single process. Since October 2016, it takes only one day to incorporate a company, which costs a flat rate of BND300. No cost is incurred to reserve a company name. In addition, certification of the Memorandum and Articles of Association by the Registry of Companies and Business Names (ROCBN) is no longer required. While ROCBN used to charge BND4 to certify each page, authenticated e-copies are now available online for a flat fee of BND5. Other improvements include: elimination of the requirement for companies to file the Return of Allotment of Shares during incorporation and to stamp share certificates, as well as automatic registration to the online Employees Provident Fund system. Moving forward, Brunei Darussalam plans

to explore the utilization of e-signature and enhance the online ROCBN system to improve data sharing between agencies.

Brunei Darussalam undertook reforms to ease obtaining a construction permit. The government has focused on three key areas, namely: 1) streamlining the number of procedures through an online submission system; 2) revising the building guidelines to ensure alignment with the building control order; and 3) conducting more in-depth socialization of reforms to stakeholders to ensure they understand and practice the new processes and regulations. As part of the reforms, Brunei Darussalam implemented a Qualified Persons performance monitoring system to encourage healthy competition and improve efficiency and quality of services. The Ministry of Development is currently looking at enhancing and integrating the existing systems, such as the Public Works Department's utility mapping and Survey Department's GeoPortal.

To ease the process of getting electricity, Brunei Darussalam now allows online application for approval of electrical layout and single-line diagram; as well as for permanent supply and electricity turn-on. Phase 1 of the Supervisory Control and Data Acquisition (SCADA) system for monitoring outages and automatic restoration of power service was completed in January 2017 and operational since March 2017. In addition, a compensation via credit scheme to business owners who experience power outages exceeding 3 hours has been implemented from June 2016. The number of procedures to obtain electricity was reduced from 5 to 3, and businesses can obtain a permanent electricity connection for a newly built warehouse within 17 days compared to 56 days previously.

The Electricity Authority was informally established in June 2017. Its tasks include initiating preparatory work and developing the relevant subsidiary legislations and other frameworks to support the Electricity Order 2017, which will become fully effective in July 2018. Between August and December 2017, the Authority completed drafts of relevant subsidiary legislations such as: 1) electricity licences for power generation, transmission and distribution including grid codes and metering codes; 2) key performance areas; 3) licences for electrical workers, cable detection workers, electrical installations and electrical supply installations; and 4) the Electrical Consumer Appliances (Safety) regulations.

Priority 3 – Business growth

Brunei Darussalam established the Darussalam Enterprise (DARe) in February 2016, a single agency to support and nurture the development of local enterprises, specifically MSMEs which made up about 98.5 percent of total business establishments in the economy. DARe works with over 15 government agencies to set up Business Support Centre, a single venue for government business related services and processes. It also works closely with the Ease of Doing Business (EODB) unit to overcome issues raised by MSMEs. Since its establishment, DARe has introduced various initiatives and assistance programmes to support MSMEs' development, especially in the areas of training and financing, and in providing access to industrial facilities as well as domestic and global markets. Beyond Brunei Darussalam, DARe collaborates and coordinates with numerous bodies such as the ASEAN Coordinating Committee on Micro, Small and Medium Enterprises (ACCMSME) and APEC Small and Medium Enterprises Working Group (APEC SMEWG) on SME-related policies and initiatives. DARe has begun developing baseline data on the MSME landscape in Brunei Darussalam which coupled with inter-agency collaboration on business data reporting, will be able to contribute to measuring the growth of MSME over time.

Brunei Darussalam re-introduced the Microcredit Financing Scheme (MFS) in October 2016 to provide microcredit lending to micro and small enterprises to start and expand their businesses. The maximum

financing amount is BND15,000 per company application and a repayment period of up to 36 months is allowed. The scheme has a total allocated fund of BND1.5 million and is currently offered through Bank Islam Brunei Darussalam (BIBD). The re-introduced MFS is believed to be more efficient and effective in terms of overall administration process and progress monitoring of each borrower, respectively. A SME Loan Committee has also been formed to review and endorse new MFS applications and monitor the review of existing SME Loan Scheme applications including repayment pattern and restructuring. Since its re-introduction, there have been 53 successful applications out of which 11 are for newly registered companies and 42 for existing companies to expand their operations. A total of BND\$490,000 has been credited to the approved companies. Although there were 23 unsuccessful applicants, they are currently being coached to improve their business models. DARE constantly reviews the scheme to explore how it can be enhanced.

Priority 4 – Lower unemployment rate and create industry-ready manpower

Brunei Darussalam established the Manpower Planning Council (MPC) in April 2016 to overcome the three main challenges that the economy is facing to make economic growth more inclusive, namely: 1) high unemployment number; 2) limited supply of skilled workers to support the needs of foreign direct investment (FDI); and 3) non-alignment of courses offered in institutions with industry needs. MPC also noted the absence of an industry-driven manpower framework and minimum wage as policy gaps that need to be addressed. In response, MPC had endorsed a total of 11 priority actions (i.e. 8 short-term, 2 medium-term and 1 long-term) priority actions to reduce unemployment. These include organizing job fairs; establishing a centralised manpower database; reviewing and expanding certain industry frameworks; strengthening the link between education and employment; and supporting lifelong learning. In 2017, 1,195 trainees enrolled in Industry Competency Framework (ICF) programmes, which aim to diversify the supply of skilled workers beyond the oil and gas industry. The Capacity Building Centre (PPK) took in 635 trainees who would be directly employed upon successful completion of their programme. Although the programme currently focuses on the construction sector, there are plans to expand the programme to other industries in the future. Between January and December 2017, there was a reduction in the number of registered jobseekers from 12,934 to 11,095. Unemployment rate was reduced from 5.9 to 5.1 percent over the same period.

JobCentre Brunei (JCB) was established by MPC in January 2017 to facilitate job matching process among local job seekers and to provide support to companies looking for local talent. It aims to be a 'One Stop Career Centre', providing services such as information on current job vacancies, career consultation, and skills training. The number of companies and jobseekers on the portal increased from 397 and 4,957, respectively in August 2016 to 8,383 and 11,389 respectively by 2 December 2017 after registration was made mandatory. The total number of locals recruited via JCB was 3,935 in 2017, compared to 446 in 2016. Data collected through JCB would also make it possible to undertake activities such as profiling of job seekers and targeted interventions, as well as review of current courses and trainings. Future plans for JCB include improving the quality of jobseeker data, including a self-help kiosk on the premises and increasing awareness of JCB and its services.

Brunei Darussalam introduced the i-Ready Apprenticeship Programme, a 3-year programme for unemployed graduates holding a university degree or above with little or no working experience. The host organisation is expected to provide on-the-job training to ensure that the apprentice's development meets industry needs and may employ the apprentice at any time during the programme. As of 9 December 2017, a total of 1,333 apprentices and 241 host organizations had participated in the programme. A monitoring system comprising of a biannual submission of a Performance and Development Plan (i.e. a form to be filled by both the apprentice and supervisor) was put in place. In addition, site visits were also conducted every two months to check on the apprentice and supervisor to

minimize concerns that some host organizations did not provide sufficient coaching. Lessons from programme implementation have led to the proposal of a number of improvements for the next batch of intake such as shortening the advertisement period from 2 weeks to 2 days.

Brunei Darussalam established the Centre for Capacity Building (PPK) in September 2017 to provide trainees with skills in 9 programmes such as heavy vehicle driving, mason plastering, insulation and blaster painting. These skills programmes were designed from industry-based curriculum and was delivered by industry experienced instructors from Registered Training Organizations (RTOs). 23 workshops and 6 open practical training grounds were set up as part of the infrastructure to run these programmes. Trainees are provided with a Conditional Offer of Employment (COEs) by companies involved in the Pulau Muara Besar (PMB) refinery and petrochemical project and would be directly employed upon completion of programme. The initial intake comprised of 635 trainees, with plans to expand enrolment to 3,000 trainees in 2018 and beyond. New programmes such as those pertaining to the transport, textile and services sectors are currently in the pipeline.

3.2.3. Canada

Canada identified 5 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) fostering open trade, fair tax system and strong financial sector; 2) advancing labour market reform, educational attainment and skills; 3) improving infrastructure; 4) encouraging innovation and enhancing environmental sustainability; and 5) promoting inclusive growth. In its RAASR Mid-Term review submission in 2018, Canada identified additional sub-actions under priority 1. Canada associated each of these priorities with single or multiple pillars identified under RAASR (Table 7).

Table 7. Canada's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Fostering open trade, fair tax system and strong financial sector	○		
2	Advancing labour market reform, educational attainment and skills		○	
3	Improving infrastructure	○		○
4	Encouraging innovation and enhancing environmental sustainability	○		○
5	Promoting inclusive growth		○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Canada's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Canada provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Fostering open trade, fair tax system and strong financial sector

Canada eliminated tariffs on a broad range of ingredients for the food manufacturing sector, as well as some inputs in the consumer goods and transportation sectors. Canada indicated that provisional application of the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) came into effect in September 2017 while it seeks full ratification. On the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Canada noted that it was signed in March 2018 and is currently in the midst of ratification. Furthermore, the rules of origin requirements pertaining to its Least Developed Country (LDC) Tariff regime were revised to grant duty-free treatment for more apparel products imported from LDCs. Canada's Customs Tariff legislation was also streamlined in terms of administration and structure. Where necessary, Canada will introduce outstanding legislations and regulations to allow for implementation of identified measures.

Canada pledged CAD796 million to the Canada Revenue Agency over a period of five years to address tax evasion and improve tax compliance. In its 2017 Budget, Canada provided an additional CAD523.9 million to this initiative. It is also working to close tax loopholes via a series of actions announced in 2018, which are expected to have a fiscal impact of CAD5 billion over 5 years. To enhance tax integrity, Canada is in the midst of implementing some key recommendations from the G20/OECD Base Erosion and Profit Shifting (BEPS) project. These include: 1) introducing legislation requiring multinationals to file economy-by-economy reports; 2) adopting the OECD Transfer Pricing Guidelines; 3) becoming a signatory to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (MLI) and exploring ratification in 2018; and 4) encouraging spontaneous information exchange on certain tax rulings between the Canada Revenue Agency and other tax administrations. Moving forward, Canada plans to invest a further CAD90.6 million over five years to address additional tax evasion and avoidance cases identified via its enhanced risk assessment systems.

Canada conducted a comprehensive public consultation as part of its efforts to renew legislation pertaining to the financial sector. Budget 2018 also proposed introducing legislative amendments to ensure legislative framework is able to respond to trends and issues emerging in the sector. Canada has pre-published regulations required to put in place bail-in regime for banks for comments, and its Office of the Superintendent of Financial Institutions has released a draft guidance for public consultation. To strengthen the housing finance system, Budget 2017 allocated close to CAD40 million to Statistics Canada over a period of five years for the development of a new Housing Statistics Framework. Other measures aimed at improving the housing finance system include: 1) expansion of mortgage rate stress tests to all uninsured mortgages originating from federally-regulated lenders; 2) increasing mortgage insurer capital requirements; and 3) lowering the loan-to-value ratio limits for non-conforming loans and home equity lines of credit in markets with rapid home price increases. Canada updated that although household debt remains high, growth in mortgage debt decreased from 6.0 percent in Q4 2016 to 4.9 percent in Q4 2017.

Priority 2 – Advancing labour market reform, educational attainment and skills

Canada is investing a total of CAD2.5 billion in improving the current Employment Insurance (EI) system over two years. Since 2016, key accomplishments include improving service delivery; allowing claimants to maintain their EI status while enrolling in self-funded training; making EI more responsive to the evolving needs of Canadians by making the current Working While on Claim pilot project permanent; and extending EI benefits to support parents and children. Furthermore, legislations have been introduced to expand access for new entrants and re-entrants and temporarily extend benefits in areas experiencing high levels of unemployment. Canada plans to continue improving its EI system over time.

Canada is implementing various skills and training programmes to help youth and indigenous people in gaining employment. Since 2016, it has made significant investments including CAD339 million over three years in the Youth Employment Strategy which is aimed at doubling the number of jobs provided by the Canada Summer Jobs Program. Close to 35,000 additional summer job placements were created in 2016 and 2017. An Expert Panel on Youth Employment was also created to help assess the challenges faced by vulnerable youth in finding and keeping jobs. The panel issued a report highlighting 13 recommendations and additional resources have been allocated to implement a renewed Youth Employment Strategy. Furthermore, Canada invested CAD15 million to support Aboriginal Skills and Employment Training Strategy (ASETS) over two years which benefited nearly 57,000 people in 2016 and 2017. In line with the change of focus from rapid re-employment to training for high-quality, better-paying jobs, ASETS has recently been replaced by the Indigenous Skills and Employment Training Program. An incremental funding of CAD447 million over five years to support the program was announced in Budget 2018.

Canada aims to improve educational outcomes through reforms in post-secondary education and investments in the education of indigenous youth. In 2016-2017, there was a 50 percent increase in Canada Student Grants for low-and middle-income families and part-time students. Additionally, the loan repayment threshold under the Canada Student Loans Program's Repayment Assistance Plan was increased to ensure student debt is more manageable. In 2017-2018, a flat-rate contribution model was introduced to better determine loan eligibility, allowing students to obtain valuable work experience without reducing their level of financial assistance. Starting in 2016-2017, Canada would invest CAD2.6 billion over five years in on-reserve primary and secondary schools particularly in the areas of language and cultural programming, literacy and numeracy, as well as special needs education. It is also investing a total of CAD969.4 million in educational infrastructure on reserve over a five year period.

Starting 2017-2018, a total of CAD140 million over five years would be provided to support post-secondary education for First Nations, Inuit and Métis students. Moreover, the Canadian government is currently partnering with First Nations stakeholders to co-develop a plan that will transform how government funds primary and secondary education on reserve. Census 2016 showed that the percentage of registered First Nations people aged 18-24 living on reserve who had completed high school had increased by 10 percentage points relative to that in 2006.

Priority 3 – Improving infrastructure

Canada introduced a 12-year CAD180+ billion infrastructure plan recently. Following the commencement of Phase 1 which is focused on supporting clean growth and job creation, Canada has committed an additional CAD81.2 billion over a period of 12 years which will focus on five infrastructure priorities, namely: public transit; green infrastructure; social infrastructure, trade and transportation, and rural and northern infrastructure. Canada is currently in the process of negotiating Integrated Bilateral Agreements with the provinces and territories to deliver CAD33 billion of this funding. Ten such agreements have already been signed. Canada has also launched the Canada Infrastructure Bank, which will invest in new, revenue-generating infrastructure projects that serve the public interest and seek to attract private sector and institutional investors to such projects.

Priority 4 – Encouraging innovation and enhancing environmental sustainability

Canada has allocated increasing resources over the years to encourage innovation. These include: CAD2 billion over three years (starting in 2016-2017) to support post-secondary research and innovation infrastructure development; and CAD950 million over five years (starting in 2017-2018) to support newly-selected business-led innovation networks and clusters to facilitate commercialization of scientific research results. Since then, additional measures have been announced such as: close to CAD4 billion over five years (starting in 2018-19) to support Canadian researchers in various aspects including investments in laboratories, equipment and infrastructure; CAD1.26 billion over five years (starting in 2017-2018) to create a new Strategic Innovation Fund aimed at attracting and supporting new high quality business investments; and CAD2.6 billion over five years (starting in 2018-2019) to support business innovation programming. Various programs have also been streamlined to facilitate access and utilization of innovation programs by businesses.

Canada provided early strategic funding to support activities in the area of clean technology. These include: more than CAD1 billion over four years (starting in 2017-2018) to support clean technology in various sectors such as forestry, fisheries, mining, energy and agriculture; and more than CAD130 million over five years (starting in 2016-2017) to support clean technology R&D and demonstration. Canada has allocated CAD2 billion over four years (starting in 2017-2018) and CAD345.3 million over five years (starting in 2016-2017) to establish Low Carbon Economy Fund and address air pollution respectively. It has also released draft legislative proposals pertaining to the federal carbon pricing system and a regulatory framework on the federal approach to carbon pricing for large industrial facilities for public comments.

Priority 5 – Promoting inclusive growth.

Canada implemented a middle class tax cut in 2016 - reducing the second federal personal income tax rate from 22 to 20.5 percent, funding it partially by introducing a new top federal personal income tax rate of 33 percent for individuals with more than CAD200,000 on taxable income. A total of nearly 9

million Canadians are benefiting from this measure, with singles and couples seeing their average annual tax reduced by CAD330 and 540, respectively.

Canada introduced a new, tax-free, income-tested Canada Child Benefit (CCB) to provide greater support to low and middle-income families. During the first year of implementation (i.e. 2016-2017 benefit year), over 3.3 million families received more than CAD23 billion in CCB payments. Additionally, nine out of ten families received more in child benefits than under the previous system, seeing their annual child benefits increased by CAD2,300 on average. CCB was also estimated to help lift 300,000 children out of poverty and could have contributed to the rebound in Canada's economy which started in mid-2016. Beginning in July 2018, benefit amounts and income thresholds for the CCB will be indexed to inflation to ensure the real value of benefit is maintained over time. Additional funding has been committed via Budget 2018 to expand outreach efforts and support tax filing for indigenous people and individuals in vulnerable communities so that they can access the full range of social benefits such as CCB.

Canada has invested in various programs over the years to improve the socio-economic conditions of its Indigenous Peoples. These include: CAD8.4 billion over five years (starting in 2016-2017) on primary and secondary education, on-reserve education infrastructure, child welfare program, quality housing, water and wastewater infrastructure as well as social infrastructure (quality housing, early learning and child care and health, cultural and recreational facilities); CAD828.2 million over five years (starting in 2017-2018) to improve the health outcomes of First Nations and Inuit; and CAD118.5 million over five years (starting in 2017-2018) to support the Urban Indigenous Strategy. 54 long-term drinking water advisories had been lifted between November 2015 and March 2018. Budget 2018 made further investment to improve the efforts, totalling CAD3.57 billion.

Canada improved the Retirement Income System by increasing the Guaranteed Income Supplement (GIS) top-up benefit by up to CAD947 annually for the most vulnerable single seniors; canceling the increase in eligibility age for Old Age Security (OAS) and GIS; and enhancing the Canada Pension Plan (CPP) to increase the maximum benefit by approximately 50 percent. About 900,000 single seniors are benefiting from the GIS top-up and the change is helping to lift 13,000 vulnerable seniors (12,000 of which are women) out of poverty.

3.2.4. Chile

Chile identified 3 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) to foster productivity; 2) to expand the capacity of economic growth; and 3) to promote inclusive growth. Chile associated each of these priorities with the following pillars identified under RAASR (Table 8).

Table 8. Chile RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	To foster productivity			○
2	To expand the capacity of economic growth			○
3	To promote inclusive growth		○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Chile's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Chile provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – To foster productivity

Chile proposed a new infrastructure fund in 2016 to develop, build, maintain and finance public multi-purpose infrastructure through cooperation with third parties. The fund became operational following its approval by Congress in January 2018 and was embedded within broader governance framework aimed at developing a strategic multi-year infrastructure plan separate from the political cycle and safeguarding against fiscal risk among others. In addition, the Superintendency of Pension put in place new rules to allow Pension Funds and Solidarity Unemployment Fund to be invested in alternative assets (including shares of infrastructure concession and real estate companies) since November 2017. Besides allowing infrastructure-related entities to obtain funds from wider sources, the expansion of the range of assets where funds can be invested are expected to aid individuals in obtaining a higher pension. On average, Chile spent approximately 2.1 percent of its GDP on infrastructure over the last decade. The budget of the Ministry of Public Works currently stood at USD3 billion, while investment by private sector reached USD10 billion in 2017. Moving forward, the government plans to enhance infrastructure provision for the agriculture, livestock and forestry industries by establishing clear rules and incentives as well as implementing the “National Policy of Rural and Agricultural Development”.

Chile has undertaken several activities to encourage higher level of investment and boost private sector confidence. Since 2016, Chile has facilitated the credit evaluation process of the banking industry and institutional investors through the provision of an Internal Revenue Service (IRS) technological tool which allows company tax information to be accessed. In addition, Chile introduced international custodians and recognized overseas payment infrastructure to increase the liquidity of fixed income instruments and reduce transaction cost in foreign currencies, respectively. To further streamline and improve the investment process, Chile recently introduced the “Pro-investment Agenda” bill and established the Office of Management of Sustainable Projects. Measures that have been announced by the President include creating a digital platform to process administrative procedures and allowing municipalities to grant a provisional patent for two years to certain businesses. Data from Capital Goods Corporation showed that private investment in Chile rose by approximately USD1.5 billion in 4Q 2017, bringing the total private investment in 2017 to about USD11.4 billion.

Chile recognizes the importance of scientific research for its future development and has modernized its educational curriculum as well as organized capacity building programs to reflect this. It adopted improved budgeting process to enhance the capacities of universities in the area of science and

technology. In October 2016, the Production Development Corporation (CORO) set up 3 technology transfer hubs which brought together 26 universities, 8 scientific technological centers, 4 International Centers of Excellence, 2 Investment Funds and 6 trade associations. Chile also created a Ministry of Science & Technology to coordinate the national system of Science, Technology and Innovation. Chile indicated that both public and private R&D funding had increased by 5.4 and 8.6 percent respectively in 2016 compared to previous year. Despite the increase, Chile noted that total expenditure in R&D remained relatively low compared to the OECD average (0.37 vs. 2.38 percent). Moving forward, Chile has outlined a series of proposals aimed at investing in various stakeholders such as researchers and universities; developing plan for transfer of technology and knowledge; and improving the capacities of public sector in employing technology to identify opportunities and address various challenges among others.

Priority 2 – To expand the capacity of economic growth

Chile has undertaken many activities to build capacity and create opportunities to promote services export. These include reviewing regulations and procedures as well as tax and customs pertaining to services trade; analysing existing public and private financing mechanisms for the sector; issuing a new international coding system through the National Customs Service; and implementing a new portal to provide information or policies of procedures for service export. Furthermore, Chile has further facilitated the movement of people as well as increased recognition of qualifications within the Pacific Alliance. Chile estimated that these efforts had led to service exports to increase by 10.5 percent in 2017. Non-traditional services such as engineering services, architecture services and R&D services are also gaining ground and they collectively accounted for about 40 percent of Chile's services exports since 2016. Looking forward, Chile plans to expand the definition of service exports eligible for VAT exemptions and introduce mechanisms to avoid double taxation of service exports among others.

Chile has implemented several initiatives to facilitate investment and entrepreneurship. These include creating a digital platform called “Chile Atiende” to streamline procedures for starting a business; introducing “Pymes Digitales (Digital SMEs)” to enhance connectivity and deliver training through digital platforms; establishing an Electronic Registry of Guarantees and credit information platforms on invoices and crowdfunding to improve access to financing by SMEs; adapting tax incentive laws on R&D for use by firms of smaller size and new ventures; modernizing the governance of institutions that support entrepreneurship and innovation; as well as empowering the National Productivity Commission to identify and assess the impact of different government regulations and initiatives on productivity. Thus far, Chile has seen improvements in its Ease of Doing Business ranking from 57 in 2016 to 55 in 2017, while its distance to frontier scores over the same period improved from 70.85 to 71.12. Its future plans include to promote financing of projects from early stage until they become financially sustainable.

Priority 3 – To promote inclusive growth

Chile's Production Development Corporation (Corfo) has identified 7 key sectors to be part of its strategic specialization program, namely: mining; tourism; food; construction; creative economy; fisheries and aquaculture; and advanced manufacturing. The 2018 budget of Corfo was increased by 12.1 percent to provide funding to these sectors. Chile shared that each strategic program would be allocated about USD200 million of funding annually for 3 years. It is in the midst of developing roadmaps for these key sectors, which would then be validated by the Committee for Ministers for Competitiveness

Chile is exploring the use of both public and private mechanisms to improve access to funds by SMEs. It has established a new line of credit for intermediaries and non-bank financial institutions to facilitate smaller firms in accessing loans through savings and credit cooperative and leasing companies among others. It also established a maximum period for acknowledgement of invoice receipt to enable SMEs to access funds earlier. These initiatives are believed to have contributed to the increase in private credit market participation by SMEs from 16.7 percent in 2015 to 19.6 percent in 2017. Its future initiatives include drafting a new law to provide the legal foundation for secured transactions and lending and improving the understanding of supply chain finance particularly by MSMEs involved in cross border trade.

Chile has introduced many initiatives aimed at enhancing women's integration and participation in the labour market. These include providing universal nursery care for mothers who have children under 2 years old; providing flexibility for workers with family commitments; expanding the coverage of programs which would allow children to stay in school after school hours; and implementing job-training programs for women in jail. The Women, Business and the Law 2018 report released by World Bank gave Chile relatively high scores in terms of providing incentives for women to work as well as their access to institutions (100 and 91 respectively on a scale of 0 to 100). However, there remains room for improvement in areas such as building credit and protecting women from violence which had scores of 25 and 40, respectively. Future initiatives under consideration include promoting women participation in high public positions and maintaining the commitment of having 40 percent women in the directories of Public Company System.

3.2.5. China

China identified 2 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) speed up innovation-driven development; and 2) deepening the reform of state-owned enterprises. The RAASR pillars associated with each of these priorities can be seen in Table 9.

Table 9. China's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Speed up innovation-driven development	○	○	○
2	Deepening the reform of state-owned enterprises	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on China's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

China provided updates for both priorities and some related actions. Below is a summary of progress by priority.

Priority 1 - Speed up innovation-driven development

China has made progress in technological innovation within fields such as aerospace; communications and navigation; high-speed rail; deep-sea exploration science; and infrastructure construction. Chinese firms continued to find new applications using mobile internet technology and have entered into sectors such as big data, artificial intelligence and biomedicine. China has also formed a number of innovation clusters in Beijing, Shanghai, Hefei, and Guangdong-Hong Kong, China-Macau, China Greater Bay Areas. In line with these trends, China's R&D intensity (i.e. the proportion of R&D expenditures in GDP) rose to 2.11 percent in 2016, a year-on-year increase of 0.06 percentage points. It is expected to reach about 2.25 percent in 2018. The share of contribution from scientific and technological progress in China's economy grew to 56.2 percent in 2016, 0.9 percentage points higher than the 2015 level. It is expected to reach about 58 percent by 2018 and achieve the target of over 60 percent by 2020.

The Chinese government has enhanced efforts aimed at streamlining government functions, delegating power, strengthening regulation and optimizing services to encourage innovation and entrepreneurship. One way of encouraging entrepreneurship has been through incubators, with over 2 million people employed in business incubators, and an average of 43 jobs created by each new enterprise. China has also established a technology intermediate service systems where a range of activities such as technology consulting, training, investment and financing can be accessed. After two revisions in 2013 and 2014, the Catalogue of Investment Projects Subject to Government Approval was further revised in 2016 to liberalise the approval process, where there was a reduction in the number of enterprise investment projects subject to central government approval by more than 90 percent. Additionally, from 2016 to 2017, a total of 120 innovation and entrepreneurship demonstration bases were set up. Between 2016 and 2017, about 16,000 new businesses were registered daily. Moving forward, China hopes to optimize its innovation and entrepreneurship ecosystem and promote deeper integration of innovation and entrepreneurship within the real economy.

China released the "Implementation Plan for Deepening the Reform of Scientific and Technological System" in 2015 which laid out 143 tasks in 10 fields to be completed by 2020. As of April 2017, 83 tasks were completed, representing 58 percent of the total number. Policies to support innovation in the economy include: preferential tax policies for equity incentives, venture capital and technology investment; reviewing the "Law on Promoting the Transformation of Scientific and Technological Achievements" to expedite assessments and relax evaluations; and allowing researchers and teachers to undertake paid part-time work as cooperative instructors in colleges and universities so as to promote

talent exchange between enterprises and high education institutions. China also involved university research institutes and industry leaders when formulating various national technology innovation programs, plans, policies and standards. Future reforms include enhancing intellectual property rights (IPR) creation, protection and use, as well as attracting international talents to work in science and technology programs in China.

Priority 2 - Deepening the reform of state-owned enterprises

China has rolled out reforms of its state-owned enterprises (SOEs) which includes allowing for mixed ownership of SOEs. By end-2017, three batches of pilot program involving 50 SOEs had been carried out under the supervision of the State-owned Assets Supervision and Administration Commission (SASAC). China indicated that two-thirds of its central enterprises managed to achieve mixed ownership. On the status of incorporation reform, China noted that more than 90 percent of SOEs and 97.8 percent of their subsidiaries at all levels have been incorporated. It expects all such enterprises to be incorporated as scheduled by 2020. With these reforms, China hopes to transform its SOEs into fully independent market entities which are self-disciplined, capable of managing their own business risks and responsible for their own profits and losses.

Between 2016 and 2017, state-owned investment and operation companies were reshuffled at the central and local levels. As of October 2017, 10 state-owned investment and operation companies which came under the purview of SASAC had their related businesses reorganised to ensure more efficient allocation of state-owned capital. Through these comprehensive reforms, China looks to remove ineffective assets, phase out inefficient production capacity and enhance the regulation of state-owned assets.

3.2.6. Hong Kong, China

Hong Kong, China identified 7 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) to maintain an internationally competitive regulatory environment and strengthen financial stability; 2) to enhance functioning of the financial and capital markets; 3) to develop a Trade Single Window; 4) to enhance the flow of employment information in the labour market; 5) to provide support for the development of youth; 6) to enhance the employability of the vulnerable populations (e.g. youth, women, older workers, people with disabilities) through specialized programs; and 7) to implement the new kindergarten education policy. Hong Kong, China associated each of these priorities with single or multiple pillars identified under RAASR (Table 10).

Table 10. Hong Kong, China's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	To maintain an internationally competitive regulatory environment and strengthen financial stability	○		
2	To enhance functioning of the financial and capital markets	○		
3	To develop a Trade Single Window	○		
4	To enhance the flow of employment information in the labour market	○		
5	To provide support for the development of youth		○	
6	To enhance the employability of the vulnerable populations (e.g. youth, women, older workers, people with disabilities) through specialized programs		○	
7	To implement the new kindergarten education policy		○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on Hong Kong, China's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Hong Kong, China provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – To maintain an internationally competitive regulatory environment and strengthen financial stability

Hong Kong, China's Legislative Council passed the Banking (Amendment) Ordinance 2018 in January 2018 to provide for recovery planning by authorized institutions, to change the limitations on authorized institutions' exposures, and to empower the Monetary Authority (MA) to make rules for such limitations. The Legislative Council also passed the Banking (Capital) (Amendment) Rules 2017 and Banking (Liquidity) Amendment Rules 2017 which came into force in January 2018. Hong Kong, China plans to continue implementing latest standards prescribed by Basel Committee on Banking Supervision.

Hong Kong, China established an Independent Insurance Authority (IIA) in end-2015 to comply with international requirements set by the International Association of Insurance Supervisors. The IIA took over the regulatory functions of the Office of the Commissioner of Insurance in June 2017 and will take over the existing Self-Regulatory Organizations (SROs) to implement a statutory licensing regime for insurance intermediaries by 2019.

Hong Kong, China's Financial Institutions (Resolution) Ordinance (FIRO) establishes a resolution regime that sets out a framework of powers necessary for the orderly resolution of systemically

important financial institution and at the same time, protects financial stability and continuity of critical services in tandem so as to minimize the risks posed to public funds. Hong Kong, China plans to continue operationalizing the resolution regime. As an example, a permanent Resolution Office has also been established by the MA in April 2017 to implement FIRO for the banking sector.

Hong Kong, China has enhanced the payout capability of the Deposit Protection Scheme by enacting the Deposit Protection Scheme (DPS) (Amendment) Ordinance 2016. The adoption of gross payout approach has made it possible for affected depositors to access their deposits in a failed bank within seven days under most circumstances. The Amendment Ordinance has been operating smoothly since its enactment in 2016.

Priority 2 – To enhance functioning of the financial and capital markets

Hong Kong, China's financial infrastructure has been enhanced to strengthen its status as the global offshore Renminbi (RMB) business hub. For example, the Shenzhen-Hong Kong Stock Connect which came into operation in December 2016 provides an additional channel for international investors to use their RMB to invest in People's Republic of China's stock market through Hong Kong, China's platform. Likewise, investors from People's Republic of China can trade stocks listed in Hong Kong, China's stock market using RMB. This was further boosted by the launch of Bond Connect in July 2017 which allows international investors to conduct bond investments in People's Republic of China's through Hong Kong, China's platform. Hong Kong, China continued to host the largest offshore RMB liquidity pool, amounting to some RMB600 billion. Despite the slowdown in trade settlement and RMB financing activities in the past two years, Hong Kong, China's payment system continued to record a high average daily turnover of RMB900 billion in 2017.

Hong Kong, China established the Infrastructure Financing Facilitation Office (IFFO) in July 2016 to facilitate infrastructure investments and their financing. The number of international organizations joining IFFO as partners have increased from 41 as of the launch of IFFO in 2016 to 78 at the end of 2017. Since its launch, IFFO has hosted and participated in 20 conferences, seminars and workshops, including collaborating with the International Finance Corporation (IFC) and Harvard Kennedy School to provide high quality training workshops to public and private sector stakeholders in the region.

Hong Kong, China enhanced its competitiveness as a regional hub for corporate treasury centres (CTCs) through the Inland Revenue (Amendment) (No. 2) Ordinance 2016 which reduces the profits tax payable for specified treasury activities by qualifying CTCs. It has also conducted outreach activities to around 300 corporations between June 2016 and end-2017, of which 40 indicated that they were actively considering setting up CTCs or had already done so by end-2017.

Hong Kong, China noted that in line with its goal of promoting the economy as an asset management centre, a number of leading international asset managers have expanded their operations and several prominent asset owners have also set up their Asian investment hub in Hong Kong, China.

Hong Kong, China has undertaken many activities to facilitate the development of financial technologies (fintech) ecosystem. In terms of research and application, the monetary authority (HKMA) has published two whitepapers on distributed ledger technology (DLT), completed first phase of research on Central Bank Digital Currency (CBDC), and developed an Open Application Programming Interface (API) framework for the banking industry. In terms of industry liaison, the HKMA had organized 21 events, spoke at 70 fintech-related events and held 300 regulatory meetings with the industry between 2016 and 2017. On the regulatory interface, 26 new technology products involving nine banks had been tested in the Fintech Supervisory Sandbox (FSS) from 2016 to 2017. On talent

development, the HKMA and Hong Kong Applied Science and Technology Research Institute launched the Fintech Career Accelerator Scheme (FCAS) to nurture fintech talents by placing undergraduates and postgraduates in the HKMA and banks to work full-time on fintech-related projects. Moving forward, actions planned by Hong Kong, China include developing the Global Trade Connectivity Network (GTCN) with Singapore to connect the trade/trade finance platforms between the two economies that digitalize trade and trade finance and expanding FCAS to provide summer internship outside of Hong Kong, China and full-time graduate positions.

Priority 3 – To develop a Trade Single Window

Hong Kong, China is in the midst of implementing a Trade Single Window to provide a single platform for one-stop lodging of all trade documents. It will be rolled out in phases, with Phase 1 to be launched in 2018. Technical feasibility studies of future phases have also begun.

Priority 4 – To enhance the flow of employment information in the labour market

Hong Kong, China launched the Higher Education Employment Information e-Platform (HEEIP) in December 2016 to strengthen employment support for job seekers with higher education. It enables job seekers to obtain information on the labour market in the economy as well as search for suitable openings. Since its launch in December 2016, a total of more than 27,000 vacancies requiring a minimum of Bachelor's degree have been posted. Furthermore, the average number of page views per day was approximately 10,000 as of end-December 2017.

Priority 5 – To provide support for the development of youth

Hong Kong, China launched a HKD300 million Youth Development Fund (YDF) in July 2016 to support the development of innovative youth activities and assist youth in starting their own businesses. The Entrepreneurship Matching Fund under the YDF approved HKD24.31 million of funding in 2017 to about 100 teams comprising of approximately 200 young entrepreneurs. New round of funding applications will be called in late 2018.

Hong Kong, China launched the Funding Scheme for Exchange in Belt and Road economies which supported 67 overseas exchange projects involving about 1,600 young participants between 2016/2017 and 2017/2018. It also approved nearly HKD300 million of funding under the Funding Scheme for Youth Exchange in Mainland and Funding Scheme for Youth Internship in Mainland which benefited about 45,000 young participants. An additional HKD100 million of funding has been approved to support some 30 projects involving about 900 young participants under the Funding Scheme for International Youth Exchange.

Priority 6 – To enhance the employability of the vulnerable populations (e.g. youth, women, older workers, people with disabilities) through specialized programs

Hong Kong, China continued to implement specialized employment programmes which provide financial incentives to encourage employers to hire various disadvantaged groups. Pertaining to the employment of middle-aged and mature persons, surveys on retention status conducted up to April 2017 showed that 78 percent of the cases under the programme had a retention period of 4 months or above and 64 percent stayed in employment for at least 6 months. With regards to young people, training allowances for trainees under youth employment programmes were increased in 2017 to make them

more attractive. Based on the survey conducted on young people who enrolled under the specialized programme and completed the 12-month support services in the 2015/2016 programme year, more than 70 percent remained in employment at the time of survey. On employment of persons with disabilities, a survey conducted in 2016 showed that 93 percent of employers who participated in the programme found the financial incentives useful in encouraging them to try or continue to employ persons with disabilities. With the tightening of the labour market, programme enrolments by various disadvantaged groups dropped in 2017 vis-à-vis 2016. Hong Kong, China will be increasing the amount of allowance payable to employers under these specialized employment programmes in 2018 to encourage more to employ job seekers from various disadvantaged groups.

Priority 7 – To implement the new kindergarten education policy

Starting from the 2017/18 school year, Hong Kong, China has implemented the new kindergarten (KG) education scheme. Under the new KG policy, Hong Kong, China provides eligible KGs with a basic subsidy to offer three-year quality half-day services for all eligible children aged between three and six. An additional subsidy is also provided to eligible KGs offering whole-day and long whole-day services. With the subsidies, in the 2017/18 school year, about 90 percent of the Scheme-KGs offering half-day programmes are free while about 70 percent of the Scheme-KGs offering whole-day programmes collect school fees below HKD1,000 per month. Various measures have also been put in place by Hong Kong, China to further improve the quality of KG education such as enhancing the teacher-pupil ratio, upgrading teachers' professional competence, revising the curriculum guide as well as enhancing governance and transparency of Scheme-KGs. Furthermore, a longitudinal research study was commissioned to a tertiary institution to examine the effectiveness of providing quality KG education in Hong Kong, China based on frontline experience of KGs in the first three years of implementation of the new KG policy.

3.2.7. Indonesia

Indonesia identified 2 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) to implement good regulatory practices (GRP) in policymaking; and 2) to improve economic competitiveness. Indonesia associated each of these priorities with single or multiple pillars identified under RAASR (Table 11).

Table 11. Indonesia's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	To implement good regulatory practices (GRP) in policymaking			○
2	To improve economic competitiveness	○	○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Indonesia's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Indonesia provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – To implement good regulatory practices (GRP) in policymaking

Indonesia indicated that regulatory reform remains a priority of its development plan. In 2015, Indonesia developed the National Strategy on Regulatory Reform 2015-2025, which was further sub-divided into five-yearly medium-term goals (i.e. 2015-2019 and 2020-2025). In line with the goal of decreasing regulatory burden, Indonesia noted that all line ministries and local governments have made progress in amending, revoking or simplifying regulations and procedures which have been identified as barriers to enhancing business climate. To date, 204 regulations have been simplified and deregulated via the 1st to 16th economic policy packages. Indonesia has also seen an improvement in its WEF regulatory burden index from 3.8 in 2015 to 4.1 in 2017 on a scale of 1 to 7 (best). Furthermore, Indonesia is making regulatory impact assessment (RIA) a mandatory requirement of any policy regulation to be issued at the Ministerial level. To ensure that RIA has been conducted on draft regulations and that they are in line with the development agenda, Presidential Decree No. 7/2017 was enacted to authorize the Coordinating Ministry of Economic Affairs to review and supervise the process.

Priority 2 – To improve economic competitiveness

Indonesia has introduced 16 economic policy packages since 2015 to improve the state of its economy. Objectives of these packages include boosting competitiveness, increasing employment opportunities, enhancing purchasing power as well as raising the level of investment. Indonesia has made good progress on some of its identified goals. On access to education, Indonesia provides educational grants to school-age children via the Smart Indonesia Program. As of December 2017, approximately 18 million children had benefited from the program. On access to health services, the National Health Cover Program was initiated in 2014 to integrate all existing programs. Total health coverage had increased from 51.8 percent in 2014 to 76.6 percent in 2018. On labour protection, the Workers' Social Security Agency was set up in 2015 to provide universal social security to both formal and informal workers. 25.6 million workers including 1.6 million informal workers had been registered by 2017. On SMEs' access to finance, People's Business Financing Program made it possible for MSMEs and cooperatives to access government-guaranteed loans provided by participating financial institutions. By end-2017, IDR95.6 trillion of loans had been disbursed. The government has plans to make IDR120 trillion available in 2018 and reduce the annual interest rate from 9 to 7 percent. On ease of doing

business, Indonesia has reduced the time and procedures for starting a business to 22 days and 11 procedures, respectively. It also reduced the time and procedures for dealing with construction permits to 191 days and 11.2 procedures, respectively. Furthermore, Indonesia has established 76 bonded logistics centres by 2017. Despite the positive progress, Indonesia has identified some challenges. For example, it noted that the government needs to bridge the financial gap between average medical cost and average premium fee paid by an individual to be part of the National Health Cover program. Moreover, the national enrolment rate for elementary school has fallen slightly from 107.96 to 105.89 between 2015 and 2017.

3.2.8. Japan

Japan identified 5 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) cultivation of new promising growing markets; 2) promotion of local Abenomics – vitalisation of local areas; 3) regulatory and system reforms to realize revolution in productivity; 4) taking in overseas growing markets; and 5) realization of a society in which diversity is accepted and all citizens are included. Japan associated each of these priorities with multiple pillars identified under RAASR (Table 12).

Table 12. Japan’s RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Cultivation of new promising growing markets	○		○
2	Promotion of local Abenomics – vitalisation of local areas	○	○	○
3	Regulatory and system reforms to realize revolution in productivity	○		○
4	Taking in overseas growing markets	○	○	○
5	Realization of a society in which diversity is accepted and all citizens are included	○	○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on Japan’s submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Japan provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Cultivation of new promising growing markets

Japan has undertaken several measures aimed at increasing business readiness to fourth industrial revolution. In FY2016 and FY2017, Japan provided support for 16 projects pertaining to the creation of “smart factories” that would be able to share collected data across different management organizations. Support was also provided for the uptake of robots by SMEs through the introduction of “New Strategy for Robot” in 2015, which reduced the production and operationalization cost of robots by 20 percent and aimed to double the number of experts on robots. In addition, the Artificial Intelligence Research Centre (AIRC) was set up under the National Institute of Advanced Industrial Science and Technology (AIST) in May 2015. At the international stage, Japan concluded the Hannover Declaration to strengthen its cooperation framework with Germany on the fourth industrial revolution. Moving forward, Japan plans to introduce a new bill which would allow regulatory sandbox to be applied to certain innovative projects as well as provide corporate tax reduction for firms investing in internet of things (IoT).

In an effort to provide personalized healthcare services using IoT, Japan’s Ministry of Economy, Trade and Industry demonstrated a program in FY2016 which utilized individual medical and health information from corporate insurers to prevent diabetes among mild diabetics and diabetes preliminary groups from becoming full-blown. The program also led to the development of the Health Information Sharing Rule Definition Document. A large-scale, in-depth study was started in FY2017 to gather more information and improve services. Furthermore, Japan enacted the “Act on Anonymously Processed Medical Information to Contribute to Medical Research and Development” in May 2017 to allow for treatment and check-up data to be collected, while ensuring that they are securely managed and anonymized for use. Japan had also been using technologies such as robot and sensor to improve the quality and productivity of nursing care. In FY2016, Japan experimented on the effectiveness of nursing robots at long-term care facilities and in FY2018, the introduction of monitoring sensor system allowed

Japan to revise the additional long-term care fees for staff on night shift. Moving forward, Japan plans to maximize the utilization of technological innovation, particularly those supporting independence, so as to optimize health care and medical treatment provision.

Japan fully liberalized its electricity and gas retail market in 2016 and 2017 respectively, which in turn attracted new market entrants from different industries and increased competition. In line with the Act for Partial Revision of the Electricity Business Act and Other Related Acts enacted in June 2015, Japan will continue to undertake reforms in the power, gas and heat supply industry.

Japan has introduced many initiatives to turn sports into a growth industry. It released the “Stadium and Arena Reform Guidebook” to provide measures that should be taken into consideration to improve profitability as well as case studies on how IT can be used to enhance customer experience. Since FY2016, Japan has provided support to 12 projects related to the development of advanced stadiums and arenas. Furthermore, the Sports Management Personnel Platform Council meetings, which comprise experts from various stakeholders discussed several issues such as the development and utilization of sports management personnel, establishment of the tentatively-named “Sports Management Personnel Platform”, requirements of sports organization managers and educational curriculum. In addition, Japan compiled case studies aimed at enhancing the integration of sports with other fields including IT, healthcare and tourism.

Japan has undertaken many measures to revitalize markets for transactions of existing houses. These include: 1) extension of a system to certify houses of long-lasting quality to cover renovated existing houses in FY2016; 2) public support for a comprehensive mechanism to ensure that existing houses are properly appraised since FY2016; 3) introduction of preferential tax treatment for renovated houses considered to be of long-lasting quality in FY2017; 4) introduction of a good quality marking system for houses that meet conditions such as quake resistance and those that disclose information on the history of renovations in April 2018; and 5) partial amendment of the Real Estate Brokerage Act to encourage real estate brokers to engage experts in performing home inspections and therefore, overcome concerns over transactions as well as provide more accurate information to customers. Japan aims to double the market size from JPY11 trillion in 2013 to JPY20 trillion in 2025.

Priority 2 – Promotion of Local Abenomics (Vitalisation of Local Areas)

Japan noted that promoting the use of IT and improved cooperation between relevant stakeholders would be able to revitalize and enhance productivity of its services industry. However, data showed that labour productivity in the service industry had increased by only 0.2 percent in 2016, which is lower than that in 2015 (1.3 percent). Japan had attributed the lower increase in labour productivity to the growth of workforce in the industry (1.7 percent).

Japan is advocating its mid-ranking firms, SMEs and micro enterprises to undertake reforms by improving support for management know-how and encouraging technological development among others. It also promotes dialogues between management and external stakeholders such as financial institutions in an effort to enhance the supply of capital to firms. It indicated that the number of MSMEs with account surplus had increased to 932,000 in FY2015.

Japan carried out agricultural reform with a view towards economic growth and regional revitalization, based on the “Plan to Create Dynamism through Agriculture, Forestry and Fisheries and Local Communities” established in December 2013. The plan was later revised when Japan released the “Policy Package for Enhancing Competitiveness of Japan’s Agriculture” as part of the broader plan to accelerate reform in November 2016. Based on these, Japan has taken various measures including: 1)

strengthening cooperation between Public Corporations for Farmland Consolidation to core farmers through renting and subleasing (Farmland Banks) and Agricultural Committee members to promote optimization of farmland use; 2) introducing the Revised Land Improvement Act in 2017 which subsequently led to the establishment of a system to allow for infrastructure development project to proceed without consent from business farmers; and 3) establishing guidelines for ensuring safety on agricultural vehicles using driving and operation systems to realize smart agriculture. Japan noted that these measures had collectively led to a value chain valued at JPY5.5 trillion in FY2015. Exports of agricultural, forestry and fishery products and foods increased from JPY745.1 billion in 2015 to JPY807.1 billion in 2017. Moreover, the share of farmland used by business farmers increased from 48.7 percent in FY2013 to 55.2 percent in FY2017, while the number of corporate farmers rose from 18,857 in February 2015 to 21,800 in February 2017.

To enhance its position as a tourism-oriented economy, Japan revised and introduced several regulations and systems. These include: 1) amending “The Guide-Interpreter Business Law” and “Travel Agency Act” in 2017 to improve productivity in the industry; 2) introducing “Private Lodging Business Act” in 2018 to facilitate the provision of diverse accommodation services; and 3) introducing “International Tourist Tax” to secure funds for tourism promotion. It also commenced operation of the Trusted Traveller Program (TTP), extending the scope of foreign nationals who are eligible to use automated gates to those staying as “Temporary Visitor” and certified as trusted traveller under certain criteria. Furthermore, immigration examination was expedited via the introduction of “Bio Carts” to obtain personal identification information while waiting in line. Japan had also registered 198 organizations as Destination Marketing/Management Organizations (DMOs) by end-2017. Japan shared that the number of foreign tourists visiting Japan increased from 24.04 million in 2016 to 28.69 million in 2017, while consumption by foreign visitors increased from JPY3.7 trillion in 2016 to JPY4.4 trillion in 2017.

Priority 3 – Regulatory and system reforms to realise revolution in productivity

Japan undertook several steps to enhance corporate governance. Japan Financial Services Agency (JFSA) revised the Stewardship Code in 2017. JFSA and the Ministry of Justice (MOJ) had also amended the Cabinet Office Order and the Ordinance of MOJ respectively to unify overlapping disclosure elements in business and annual securities reports. The Tokyo Stock Exchange revised the Corporate Governance Code while JFSA released the Guidelines for Investor and Company Engagement in June 2018. Moreover, discussions on revision of the Companies Act including allowing the process of shareholders’ meeting to be conducted electronically had led to the adoption of Interim Proposal concerning Revision of Companies Act in February 2018.

JFSA published the “Principles for Customer-Oriented Business Conduct” to encourage competition among financial service providers by introducing better financial products and services for example. The principles had been adopted by 1,313 financial service providers as of March 2018. To promote financial innovation through fintech, JFSA amended several laws and regulations including the Banking Act to ease investment in the industry and to create an environment aimed at accelerating open innovation by banks and companies. JFSA also encouraged financial institutions to provide intermediation functions based on business assessments or support to solve customers’ core business issues. Moreover, Japan promoted the use of tax incentive scheme through Nippon Individual Service Accounts (NISA) in 2014 to ensure stable asset building by households and by March 2018, 11 million NISA accounts had been opened. Japan noted that these measures had collectively raised Tokyo’s ranking in the Global Power City Index from 4th in 2015 to 3rd in 2017. Furthermore, Japan was ranked 24th in the World Bank’s Ease of Doing Business ranking among developed economies in 2017, up by two positions compared to 2016. It is currently ranked 9th in the World Economic Forum’s Global Competitiveness Index.

To expand private sector participation in Public-Private Partnerships/Private Finance Initiative (PPP/PFI) projects, Japan introduced the “Action Plan for Promoting PPP/PFI” and identified airports, waterworks, sewerages, roads, cultural facilities, public housings, passenger terminal facilities and meetings, incentives, conferences and exhibitions (MICE) facilities as priority areas. In addition, the Cabinet Office promoted PPP/PFI projects through the formation of regional platforms. Between FY 2013 and 2016, the total size of PPP/PFI projects was valued at JPY11.5 trillion.

Priority 4 – Taking in overseas growing markets

Japan introduced the “New Major Export Nation Consortium” initiative to improve the collaboration between relevant agencies in providing assistance to SMEs looking to expand its overseas business. The initiative led to the development of systems to provide SMEs with information and consultation services among others. The initiative is believed to have supported the increase in exports and overseas sales of SMEs from JPY12.6 trillion in FY2010 to JPY14.7 trillion in FY2015. Japan noted that 474 experts stand ready to provide advice ranging from finding business partners to establishing commercial presence to SMEs at the end of FY2017.

In an effort to expand its infrastructure exports, Japan has compiled and annually revised its “Export Strategy for Infrastructure Systems” since 2013. Moreover, measures in both the “Partnership for Quality Infrastructure” and the “Expanded Partnership for High-quality Infrastructure Initiative” introduced in 2015 and 2016, respectively have had their implementation frameworks established. Japan has also appointed infrastructure project officers (194 as of May 2018) in its embassies and consulates around the world to collect local information and support Japan infrastructure overseas expansions. Where necessary, local private consultants were also engaged to improve information gathering and analysis. These initiatives are believed to have contributed to the JPY21 trillion which Japan had received from infrastructure project orders in 2016.

As part of its endeavour to attract more inward foreign direct investment, the Working Group for Revising Regulations and Administrative Procedures under the Council for Promotion of Foreign Direct Investment in Japan discussed issues impeding foreign investment in the economy and compiled the final report in 2017. In addition, the Council launched the Support Program for Regional Foreign Direct Investment in Japan in 2018 to advance regional revitalization through FDI. Furthermore, 126 diplomatic missions have been established as contact points to collect various types of information including potential foreign direct investment and how to improve investment environment in Japan. They are also involved in promoting Japan as an attractive investment destination through means such as events. Other initiatives include implementation of the “Five Promises for Attracting Foreign Businesses to Japan” and “Policy Package for Promoting Foreign Direct Investment into Japan to Make Japan a Global Hub”. The measures could have contributed to the size of the inward FDI stocks in Japan, which was valued at JPY28.6 trillion in 2017.

Japan is a signatory of many economic partnership and investment-related agreements as well as tax treaties. It finalized the negotiation of the Japan-EU Economic Partnership Agreement (EPA) in December 2017 and signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in March 2018. On investment-related agreements, several that came into force since April 2017 include Japan-Saudi Arabia, Japan-Uruguay, Japan-Iran, Japan-Israel, Japan-Oman and Japan-Kenya. Japan has also started negotiations with 11 other economies since 2017. With these agreements, Japan noted that 40 percent of its trade value were conducted with its EPA/FTA partners. Moving forward, besides bringing CPTPP and Japan-EU EPA into force as soon as possible, Japan aims to initiate bilateral investment treaty negotiations with 6 economies by end-2018.

Priority 5 – Realization of a society in which diversity is accepted and all citizens are included

Japan has undertaken several activities to support working style reform. To improve the working conditions of non-regular workers, Japan formulated draft guidelines to ensure proper adherence to the Labour Contract Act, Part-time Labour Act and Worker Dispatching Act. In June 2017, the Council of Labour Policy proposed a law on “equal pay for equal work”. In April 2018, the Cabinet adopted and submitted to Diet a bill to develop relevant laws for promoting working-style reform and it was passed in June 2018. Japan plans to finalize the draft guidelines and provide consultation to company owners about the employment conditions of non-regular workers by setting up centers supporting the promotion of working-style reform. To promote the employment of the elderly, Japan ensured that measures are in place to secure the employment of workers up to age of 65. In addition to providing subsidies to firms that raise the mandatory retirement age to 65, Japan also provided subsidies to firms that extend employment to age 65 and older as well as those which create conducive working environment for the elderly. Moreover, Japan had increased the budget for such support from JPY2,591 million in FY2017 to JPY4,368 million in FY2018. Some of the above measures are believed to have led to improvements in areas such as wage differences between part-time and full time workers (from 56.6 percent in 2014 to 59.4 percent in 2017) and employment rate of individuals above age 65 (from 21.7 percent in 2015 to 23 percent in 2017).

Japan has implemented many measures to increase its birth rate to 1.8 and create an environment where no one would be forced to leave their jobs for nursing care. The “Act on Promotion of Women’s Participation and Advancement in the Workplace” came into force in April 2016 and since then, various stakeholders including national and local governments as well as private sector had been required to formulate employers’ action plan to concretize initiatives and provide targets in support of the Act. On supporting youths and families with small children, the “Child Welfare Act” was revised in 2016 to enshrine the obligation for municipal governments to establish comprehensive support centers for childcare. On increasing childcare arrangements, Japan committed to providing 500,000 children with such arrangements by end of FY2017. Besides improving the working conditions and supporting career development schemes for childcare providers, Japan instituted a pay rise of 2 percent in 2016 to reduce the wage gap between them and female workers in other industries. On increasing nursing care arrangements, Japan revised the long-term care fees in 2017 and introduced a system where salary is raised based on skills and experience. Moreover, manual on ICT utilization for operational efficiency by service providers were formulated and further standard specifications of ICT as well as the guideline of productivity improvement at long-term care services are expected to be developed in 2018. On supporting activities of people with disabilities, implemented measures include amending the “Act on Comprehensive Support for persons with Disabilities” in 2016 to enhance coordination between firm and family of the disabled, raising the pay level and improving the employment quality of the disabled, as well as building integrated community care system to respond to mental disorders. On supporting activities of people who are fighting intractable diseases and cancer, implemented measures include strengthening the Intractable/Rare Disease Consultation Support Center and establishing Cancer Counselling Support Center in every designated cancer care hospitals. Some of the above measures had led to: 1) the provision of childcare arrangements for 593,000 children by end of FY2017; 2) possible narrowing of wage gap between childcare and nursing care providers with those of females in other industries; 3) increase of college enrolment rates of disadvantaged children; and 4) increase the proportion of women section managers in private companies to 10.9 percent in 2017. Among measures that are currently in the pipeline include eliminating childcare waiting lists, enhancing information disclosure pertaining to implementation of the “Act on Promotion of Women’s Participation and Advancement in the Workplace”, and providing free higher education to low income children from April 2020.

3.2.9. Korea

Korea identified 4 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) fostering an open, competitive, and seamless economic environment; 2) economic empowerment of women; 3) reducing labour market duality; and 4) promoting inclusive growth through the development of well-functioning safety net programs. The RAASR pillars associated with each of these priorities can be seen in Table 13.

Table 13. Korea's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Fostering an open, competitive, and seamless economic environment	○		
2	Economic empowerment of women		○	
3	Reducing labour market duality		○	
4	Promoting inclusive growth through the development of well-functioning safety net programs			○

Source: Compilations by APEC Policy Support Unit (PSU) based on Korea's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Korea provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Fostering an open, competitive, and seamless economic environment

Korea has put in place policies aimed at invigorating its services sector. For example, tax incentives to encourage SMEs to undertake investment and R&D activities in the sector have been extended. Furthermore, existing policies such as ceiling on crowd funding have been raised. Moving forward, Korea plans to simplify market entry to stimulate activities in growth sectors such as accommodation and car rentals for foreign visitors. Korea noted that employment in the services sector (as a percentage of total employment) has increased from 70.1 percent in 2015 to 70.5 percent in 2017.

In line with its open trade policies, Korea has participated in multilateral, regional and bilateral initiatives. Korea currently has 15 free trade agreements (FTAs) with 52 economies and is negotiating 4 agreements at the moment, namely Regional Comprehensive Economic Partnership (RCEP), Korea-China-Japan FTA, Korea-Ecuador Strategic Economic Cooperation Agreement (SECA), and Korea-Israel FTA.

Priority 2 – Economic empowerment of women

Korea has implemented policies to promote women employment and support their lifecycle career development. Examples include provision of alternative working arrangement for pregnant staffs and expansion of childcare leave allowance as well as other enhancements to the Act on Equal Employment Opportunity and Work-Family Balance Assistance. Korea shared that female employment rate stood at 56.9 percent in 2017 (vs. 55.7 percent in 2015), while the number of people on childcare leave has increased from 87,326 in 2015 to 90,123 in 2017. In addition, the number of men on childcare leave has increased from 4,872 in 2015 to 12,043 in 2017. Korea plans to continue efforts in facilitating women's entry into the workforce and will put in place comprehensive services to provide customized employment support for each career path.

The Family-Friendly Certificate Program was introduced to encourage companies to promote work-life balance as part of their corporate culture. The number of certified companies has increased from 253 in 2015 to 2,802 in 2017. Korea has also established the Academy for Promising Women to provide capacity-building programs for highly-educated women with the purpose of advancing them into core leadership within their organizations. The number of trainees in the Academy has risen from 7,067 in 2015 to 7,328 in 2017. In addition, Korea has increased the number of Saeil Center whose objective is to facilitate women re-employment from 147 in 2015 to 155 in 2017.

Priority 3 – Reducing labour market duality

Korea introduced Guidelines for Employment Stability of Fixed-term Workers to encourage businesses to improve the employment terms of non-regular workers. Moreover, Korea included discrimination against non-regular workers in the mandatory checklist for labour inspections in 2016, which have led to revelations of discrimination cases followed by measures to redress the situation. Korea noted that the number of businesses complying with the Guidelines has increased from 40 to 220 between 2015 and 2017, while hourly wages for non-regular workers as a percentage of that of regular workers have increased from 65.5 percent in 2015 to 66.3 percent in 2016. Moving forward, Korea plans to restrict the employment of non-regular workers only on reasonable grounds and will conduct a complete overhaul of the system so as to redress discrimination.

Priority 4 – Promoting inclusive growth through the development of well-functioning safety net programs

Korea undertook several policy steps to improve the Basic Livelihood Security Program (BLSP) including expanding the population coverage, increasing the level of benefits, and incentivizing recipients to develop self-reliance. For instance, the threshold income to qualify as livelihood benefit recipients as a percentage of median income has been increased from 28 percent in 2015 to 30 percent in 2017. The total number of BLSP recipients have increased from 1.32 million in 2015 to 1.63 million in 2016, while the average monthly cash benefit has risen from KRW407,000 in 2015 to KRW510,000 in 2016. The 1st Comprehensive Plan on the BLSP that Korea is currently implementing aims to further streamline access, particularly to households with severely disabled and old-age family members.

Korea has enhanced measures to identify at-risk households so that timely service can be provided to them. For instance, it utilizes big data on electricity and water supply cuts as well as delinquent payments to identify and support at-risk households. Korea has also increased the number of government officers dedicated to social welfare works and strengthened financial support to local government since they can more effectively reach out to residents in their jurisdictions. In line with this, the local administrative offices have expanded their integrated case management services. The number of households introduced to case management services have increased from 488,788 to 617,964 households between 2015 and 2017.

3.2.10. Malaysia

Malaysia identified 3 priorities in its RAASR Individual Action Plan (IAP) submission in 2016 and subsequent revision, namely: 1) public consultation reforms; 2) strengthening SMEs participation in the domestic and international markets; and 3) deeper participation/involvement of women in the decision making position in the government and private sector. Malaysia associated each of these priorities with single pillars identified under RAASR (Table 14).

Table 14. Malaysia's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Public consultation reforms	○		
2	Strengthening SMEs participation in the domestic and international markets		○	
3	Deeper participation/involvement of women in the decision making position in the government and private sector		○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Malaysia's submission of 2016 Individual Action Plan and subsequent revision as well as 2018 RAASR Mid-Term Review Template.

Malaysia provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1: Public consultation reforms

Malaysia noted that transforming the public services sector for greater efficiency and productivity is one key area in the 11th Malaysia Plan. To strengthen the engagement mechanism between the government and the private sector particularly in policy development, Malaysia has released circular, policies and guidelines over the years, namely the online public consultation circular (2012), the National Policy for the Development and Implementation of Regulations (NPDIR) (2013), and Guideline on Public Consultation Procedures (2014). Malaysia also conducted annual capacity building on Regulatory Impact Assessment (RIA) and published Annual Report on Modernisation of Regulations (ARMR) to share improvements in the regulatory environment with stakeholders. Malaysia is currently collaborating with World Bank to develop a unified online public consultation platform. Besides creating a more inclusive regulatory process and enhancing trust towards the government, the website is expected to eliminate inconsistency in the implementation of the public consultation process when completed by end-2018. Despite Malaysia's ranking on transparency of government policy falling from 19 in 2015 to 30 in 2017, the economy observed that RIA has been conducted on increasing number of business regulations – from 27 in 2014 to 35 in 2017.

Priority 2: Strengthening SMEs participation in the domestic and international markets

Malaysia established the SME Integrated Plan of Action (SMEIPA) to monitor the implementation and performance of SME development programs by different ministries and agencies. It also has information on the impact and outcome of each program. 154 programs were carried out in 2016 which benefitted 529,390 SMEs, 9.3 percent higher than the original projected number of 484,216 SMEs. 30 and 46 market access programmes were implemented in 2016 and 2017 respectively. To avoid duplication of capacity building assistance programs provided by ministries and agencies, Malaysia set up "Scenic", an integrated database participated by 38 ministries and agencies which have been running since January 2018. In addition, Malaysia developed the SME Competitive Rating for Enhancement

(SCORE) to rate and enhance SMEs competitiveness based on their performance and capabilities. Originally introduced in 2007, Malaysia noted that as of February 2018, more than 10,000 SMEs have obtained a score of 3 stars and above. Particularly on promoting e-commerce participation, Malaysia established the Digital Free Trade Zone (DFTZ) which includes the provision of state-of-the-art platform for SMEs and enterprises in November 2017 and more than 2,000 SMEs have been onboarded to date.

Priority 3: Deeper participation/involvement of women in the decision making position in the government and private sector

Malaysia introduced the Policy of At Least 30% Women in Decision-Making Positions in the Corporate Sector in 2011 to increase women's contribution at leadership positions. In 2017, 4 engagement sessions were conducted with corporate business leaders in collaboration with Bursa Malaysia and Securities Commission to improve awareness and buy-in with regards to this policy. In April 2017, the Securities Commission indicated that the new Malaysian Code of Corporate Governance (MCCG) would require publicly-listed companies (PLCs) with market capitalization of RM2 billion and above to have 30 percent women as board members. During the 2018 Budget Speech delivered to the Parliament in October 2017, the Prime Minister announced that all government-linked companies (GLCs), government-linked investment companies (GLICs) and Statutory Bodies must achieve the target of at least 30 percent women on board by 2018. As of December 2017, statistics from Bursa Malaysia showed that there was 19.3 percent women placed in the board of directors of the top 100 PLCs by market capitalization in Malaysia, higher than that in Hong Kong, China; Japan; and Singapore. Despite the progress, Malaysia noted that more could be done and indicated that in January 2018, the Securities Commission named and shamed 7 PLCs in the top 100 PLCs by market capitalization in Bursa Malaysia for not having women as board members.

3.2.11. Mexico

Mexico identified building a traffic light score methodology (TLSM) as a priority in its RAASR Individual Action Plan (IAP) submission in 2016. Mexico associated this priority with RAASR pillar #1 (Table 15).

Table 15. Mexico's RAASR priority and associated pillar

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Building a traffic light score methodology (TLSM)	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on Mexico's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Mexico provided updates for its priority and related action.

Priority 1 – Building a traffic light score methodology (TLSM)

In 2012, Mexico formally implemented ex-post Regulatory Impact Assessment (RIA) as a mechanism to review if regulations had effectively achieved their original objectives in terms of efficiency, efficacy, and impact. Although the results of this initial effort were satisfactory, Mexico decided to continue improving domestic mechanisms so as to strengthen the ex-post evaluation of regulations as well as its analytical depth. Mexico resolved to make the development of a methodology aimed at verifying the quality of the ex-post RIA as its domestic priority. By including the development and dissemination of this methodology as part of its RAASR Individual Action Plan (IAP), Mexico hopes to contribute towards efforts of improving the quality of regulatory stock in the APEC region.

The aim of the traffic light score methodology (TLSM) is to generate sufficient oversight on whether regulations are delivering the intended impacts, and to provide systematic feedback on the robustness of assumptions used in ex-ante RIA.

Mexico listed nine activities under this priority, namely: 1) reviewing international best practices pertaining to ex-post evaluation of regulation; 2) revising methodologies for assessing ex-post RIA; 3) developing methodology to assess the quality of ex-post RIA; 4) applying the methodology to a case study; 5) training staff of CONAMER, Mexico's National Commission of Better Regulation, on using the methodology; 6) disseminating the methodology among regulators and stakeholders; 7) selecting regulations to apply the methodology; 8) sharing the methodology and findings with APEC economies; and 9) requesting the adoption of methodology by APEC economies.

Mexico has completed eight of the nine activities. Specifically, the following results of Mexico's IAP stood out: (1) 25 officials from CONAMER had been trained in the use of the TLSM methodology; (2) three ex-post RIAs on regulations of technical standards using the TLSM methodology were reviewed; (3) TLSM training workshop was organized by CONAMER in Viet Nam and participated by APEC economies. Particularly on the latter, economies have committed to submit case studies involving the TLSM methodology.

This year, Mexico plans to finalize the activities of its IAP by compiling the case studies from APEC economies and integrating them into a final TLSM methodology document, which would be made available to the APEC community in order to facilitate the adoption of this tool.

3.2.12. New Zealand

New Zealand identified 4 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) significantly lifting the rate of business investment as a percentage of GDP to accelerate growth; 2) creating internationally connected businesses that are able to add value to volume and seize opportunities in an increasingly Asia-Pacific centered world; 3) pursuing and maintaining a high quality regulatory environment; and 4) creating appropriate, resilient infrastructure to develop connections and supporting future investment, growth and quality of life. New Zealand associated each of these priorities with single or multiple pillars under RAASR (Table 16).

Table 16. New Zealand's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Significantly lifting the rate of business investment as a percentage of GDP to accelerate growth	○	○	
2	Creating internationally connected businesses that are able to add value to volume and seize opportunities in an increasingly Asia-Pacific centered world	○	○	○
3	Pursuing and maintaining a high quality regulatory environment	○		
4	Creating appropriate, resilient infrastructure to develop connections and supporting future investment, growth and quality of life	○	○	

Source: Compilations by APEC Policy Support Unit (PSU) based on New Zealand's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

New Zealand provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Significantly lifting the rate of business investment as a percentage of GDP to accelerate growth

New Zealand launched the Investment Attraction Strategy in 2015 to improve the efficiency and alignment of investment effort. One goal of this strategy is to attract high-value foreign direct investments with a total value of NZD5 billion into the economy by 2018. Thus far, New Zealand has attracted NZD4.7 billion of FDI and expects to achieve the set target by the end of the FY2017/2018 financial year. Pertaining to the goal of attracting at least 10 new international companies to undertake R&D activity by 2020, seven has been achieved so far. On doubling the capital that investor and entrepreneur migrants have brought over from NZD3.5 billion to NZD7 billion by the end of 2018, over NZD6 billion new capital has been brought to New Zealand as of the first six months of FY2017/2018 financial year. New Zealand is exploring various options to refresh the Investment Attraction Strategy and they include sharpening the definition of high quality investment with a stronger regional focus and sectoral priorities, as well as improving implementation and process efficiency.

New Zealand established the Provincial Growth Fund (PGF) to provide NZD1 billion annually over three years to help lift productivity potential in various regions. It is currently in the design phase and will commence operation on 1 July 2018. Among the expected outcomes of the PGF and by extension, the regional economic strategy are increased regional output; increased number, size and scale of Māori businesses; lower rates of youths not in employment, education and training; as well as reduced digital divide. The setting up of the Regional Economic Development Unit is foreseen to align and leverage

cross-government activity pertaining to PGF and also improve the government's engagement with the regions.

New Zealand is in the process of passing the Financial Services Legislation Amendment Bill (the Omnibus Bill) which introduces a whole new regulatory regime for financial advice provision. When enforced in 2019, it is expected to establish a more leveled playing field, encourage investment in financial markets, and consequently a more competitive and productive economy.

Priority 2 – Creating internationally connected businesses that are able to add value to volume and seize opportunities in an increasingly Asia-Pacific centered world

New Zealand formed the Tourism Chief Executives' Group in mid-2016 to oversee the delivery of government tourism strategy, which was developed to increase the number of tourists while managing the potential pressures that this may have on businesses, communities, and infrastructure. Indicators monitored showed that New Zealand is moving in the right direction. For example, direct airline capacity to the economy increased by 7.8 percent between 2016 and 2017, while international conference and convention arrivals grew by 4 percent year-on-year as of March 2017. Direct employment in the tourism sector had also grown by 9.3 percent between 2016 and 2017. Additionally, the Minister of Tourism approved 34 applications through the first funding round of the Tourism Infrastructure Fund (TIF) in December 2017, which has dual aims of protecting and enhancing the economy's reputation as a tourist destination as well as helping communities cope with the pressures created by tourism growth. Work is currently ongoing under the Sector Workforce Engagement Programme (SWEP) to address the labour needs of tourism sector.

New Zealand refreshed the *He kai kei aku ringa* (Crown Māori Economic Growth Partnership) in 2017 to achieve an overarching goal of 20 percent increase in annual Māori median income to NZD31,800 by 2021. To support Māori economic development by encouraging participation in ICT sector and access to Māori language and culture through ICT, *Ka Hao* (Māori Digital Technology Development Fund) had awarded NZD30 million worth of grants. The first Māori business accelerator program comprising of 10 teams was funded out of the Māori Innovation Fund and began in February 2018. Despite these achievements, New Zealand has noted that there remain challenges to be addressed. For example, while Māori unemployment rate fell from 13.9 percent in March 2012 to 9.9 percent by September 2017, youth unemployment rates remained higher than national average. With the formation of the new government in late 2017, New Zealand is finalizing the priority actions to fulfil the *He kai kei aku ringa* strategy and at the same time, consistent with the new government's priorities. It also plans to focus on increasing cross-government collaboration to deliver on *He kai kei aku ringa*.

Priority 3 – Pursuing and maintaining a high quality regulatory environment

Seven regulatory agencies had published regulatory stewardship strategies to set out their approaches to fulfilling the 2017 Government Expectations for Good Regulatory Practice. These strategies showed considerable progress, particularly in regards to assessments of the fitness-for-purpose of the respective regulatory systems, and agencies continue to undertake reviews and necessary legislative updates. Moreover, the Ministry of Business, Innovation and Employment (MBIE) introduced the Regulatory Systems Amendment Bill to address the issue of getting parliamentary time for repairs and maintenance of existing legislation, which was subsequently passed in 2017. Preparations are currently underway for a second similar Bill. A cross-agency Statutes Repeal Bill was also passed in 2017 to help make the statute book easier for users.

In addition to requiring regulatory agencies to publish Regulatory Impact Statements (RISs) on any policy proposals that require regulatory change, a revised set of Impact Analysis Requirements were introduced in mid-2017 to more effectively support regulatory decision-making. These revisions include a new requirement to encourage early consideration of the elements of impact analysis during the policymaking process; clearer criteria for exemptions when providing a formal Regulatory Impact Assessment (RIA) and determining responsibility for quality assurance; and tailoring RIA templates to encourage proportionate effort and resource in regulatory policy development. The government is currently developing a survey to collect additional information on individual attitudes and capability in policy agencies pertaining to RIA. It is also working on an automated system to enable administrative decisions to be made more quickly, objectively and transparently.

Priority 4 – Creating appropriate, resilient infrastructure to develop connections and supporting future investment, growth and quality of life

New Zealand is currently implementing the Ultra-Fast Broadband (UFB) Initiative to bring faster and better internet access to 80 percent of the population. NZD1.35 billion and NZD210 million would be invested by the government under phase one and two respectively. Uptake to the initiative has been promising – the percentage of people accessing fibre broadband is at 40 percent and expected to continue increasing. To further facilitate uptake, a legislation was passed in 2017 to allow for a streamlined installation process of UFB connections on shared property.

3.2.13. Papua New Guinea

Papua New Guinea identified 3 priorities in its RAASR Individual Action Plan (IAP) submission in 2016 and subsequent revision, namely: 1) encouraging a low cost, competitive and transparent business environment, leading to greater participation in the domestic and international economy; 2) promoting greater participation from all segments of the community through financial inclusivity and greater public participation in policy and regulatory development; and 3) sustainable social policies that promote priority 1 and 2 objectives, enhance economic resiliency, and are well-targeted, effective and non-discriminatory. Papua New Guinea associated each of these priorities with single or multiple pillars under RAASR (Table 17).

Table 17. Papua New Guinea's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Encouraging a low cost, competitive and transparent business environment, leading to greater participation in the domestic and international economy	○	○	
2	Promoting greater participation from all segments of the community through financial inclusivity and greater public participation in policy and regulatory development	○	○	○
3	Sustainable social policies that promote priority 1 and 2 objectives, enhance economic resiliency, and are well-targeted, effective and non-discriminatory	○	○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on Papua New Guinea's submission of 2016 Individual Action Plan and subsequent revision as well as 2018 RAASR Mid-Term Review Template.

Papua New Guinea provided updates for two priorities and some related actions. Below is a summary of progress by priority.

Priority 1 – Encouraging a low cost, competitive and transparent business environment, leading to greater participation in the domestic and international economy

Papua New Guinea is undertaking several activities to facilitate the conduct of business. It has begun upgrading the IT systems of its border agency from ASYCUDA++ to ASYCUDA WORLD in order to reduce clearance times and improve inter-agency coordination. It plans to roll out the upgrade across all ports by end-2018. The Papua New Guinea Customs Service Container Examination Facility in Port Moresby is now operational and is expected to reduce both clearance time and cost since it minimizes the need for physical inspection. It is now in the process of building another similar facility in the Port of Lae. Papua New Guinea is also in the midst of various reforms pertaining to its electronic payment system which when realized, would allow trading partners to pay taxes and duty online.

Papua New Guinea has initiated a series of activities to modernize and enhance its competition and consumer policies. In May 2017, the Consumer and Competition Framework Review (CCFR) was published with key recommendations including the development of a formal National Competition Policy Statement, a draft of which is scheduled to be submitted by August 2018. PNG also aims to introduce the Independent Consumer and Competition Commission (ICCC)'s Leniency Program, which would offer cartel and other anti-competitive behaviour partial or full immunity from prosecution in order to improve the investigative process. The ICCC Act is currently being amended to make it mandatory for mergers or acquisitions meeting a certain threshold to be notified to the ICCC.

To develop a more competitive and efficient tax system, Papua New Guinea has adopted various measures which are broadly in line with the recommendations of the comprehensive Taxation Review completed in October 2015. Papua New Guinea is also building the leadership and management capacity of relevant agencies through the Pacific Managers' Development Program; conducting a Tax Administration Diagnostic Assessment (TADAT) and responding to identified issues; as well as continuing a reform program started in 2013 to modernize the taxpayer registration system. In preparation to sign the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI), Papua New Guinea has drafted a position paper and submitted it to the OECD Secretariat. Signing of the MLI will allow Papua New Guinea to implement the minimum standards and other treaty provisions highlighted by the OECD/G20 project to address base erosion and profit shifting.

Papua New Guinea gazetted the Public Private Partnership (PPP) Act in early 2018 and is currently redrafting its National Procurement Policy (NPP). The PPP Act aims to provide guidelines for private sector engagement on the provision of economic and social infrastructure programs in support of the government's developmental objectives. A PPP Centre will be established in 2018-2019 to help operationalize the Act. The NPP, on the other hand, aims to reform the current procurement process so as to address issues pertaining to capacity, compliance, and fragmentation, and therefore, increase the overall efficiency.

Priority 2 – Promoting greater participation from all segments of the community through financial inclusivity and greater public participation in policy and regulatory development.

In order to promote financial inclusion and literacy, Papua New Guinea adopted the National Financial Inclusion Strategy in December 2016 and is currently developing a Financial Inclusion policy to support the implementation process. The aim of the National Financial Inclusion Strategy is to reach an additional 2 million unbanked and low-income citizens by 2020, with 50 percent being women. From 2014-2017, 1.8 million new bank accounts have been opened. Other quantitative targets, including total bank accounts accessible by mobile, number of people or businesses with an insurance policy, and percentage of resolved complaints to financial institutions, may be challenging to reach by 2020 but show gradual progress.

3.2.14. Peru

Peru identified 2 priorities in its RAASR Individual Action Plan (IAP) submission in 2016 and subsequent revision, namely: 1) to establish clear rules, effective procedures and predictable results in the resolution of anticompetitive behavior considering the recent modifications done on the free competition act; and 2) to produce and maintain regulations of quality, reducing costs and burdens to consumers and enterprises while legitimate public policy objectives are pursued. Both priorities are associated with pillar #1 of RAASR (Table 18).

Table 18. Peru's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	To establish clear rules, effective procedures and predictable results in the resolution of anticompetitive behavior considering the recent modifications done on the free competition act	○		
2	To produce and maintain regulations of quality, reducing costs and burdens to consumers and enterprises while legitimate public policy objectives are pursued	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on Peru's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Peru provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – To establish clear rules, effective procedures and predictable results in the resolution of anticompetitive behavior considering the recent modifications done on the free competition act

Peru published the Leniency Program Guidelines in 2017 to make rules pertaining to this program more transparent and predictable. In the 2018 Antitrust Writing Awards, the Guidelines was one of the five selected under the “Best Soft Law” category. Peru noted that applications for leniency has increased since the program was introduced and its competition agency (i.e. INDECOPI) received four applications in 2016, which is one of the highest number in the history of antitrust enforcement in the economy. To date, four additional applications had been received. Examples of cases currently being investigated by INDECOPI include those related to the sales of natural gas for vehicles in Lima and Callao; and diesel and liquid fuel markets in Chimbote City. Furthermore, the leniency program has made it possible for the longest-running cartel in Peru which pertains to the sales of toilet paper to be disrupted. The entire case was completed in 15 months, which was relatively shorter than the average time of 26 months in 2016.

Peru utilizes several medium to raise public awareness about the work carried out by INDECOPI as well as to disseminate relevant information including that on the Leniency Program. These include issuing press releases, sharing informational brochures and videos on popular websites, carrying out dissemination campaigns in local newspapers, radio programs and legal journals as well as participating in various conferences.

Priority 2 – To produce and maintain regulations of quality, reducing costs and burdens to consumers and enterprises while legitimate public policy objectives are pursued

In January 2017, Peru's Vice-Ministerial Coordinating Council agreed to implement first stage-Regulatory Impact Assessment (RIA) process to review draft regulation before it is sent to the Council

for approval. The reviewing institutions are the Presidency of the Council of Ministers, the Ministry of Justice and the Ministry of Economy and Finance. In May 2017, the Ministry of Economy and Finance, in collaboration with OECD, organized a workshop whose objective is to equip public officials with the necessary skills to undertake RIA and make quality assessment of RIA. 250 draft regulations had been reviewed so far. To reduce government bureaucracy, Peru approved Legislative Decree 1310 which required all existing administrative procedures put in place by entities within the national government to be reviewed and simplified. In addition, the Decree necessitates ex-ante evaluation of every new procedure. These reviews are to be conducted by the Commission on Regulatory Quality whose members, similar to the first stage-RIA process, include representatives from three institutions (i.e. the Presidency of the Council of Ministers, the Ministry of Justice and the Ministry of Economy and Finance). The Supreme Decree No. 075-2017-PCM and the Handbook for Regulatory Quality Analysis further clarified that the review process should apply the four principles of legality, necessity, effectiveness and proportionality. All existing and new administrative procedures are now analyzed.

One recommendation of the Regulatory Policy Review conducted by the OECD is the establishment of an oversight body in the executive branch to coordinate most of the regulatory policy activities and tools that are currently scattered across several ministries, agencies and offices. Peru indicated that the establishment of this body is still pending but noted that activities indicated earlier such as the first stage-RIA process and the establishment of the Commission on Regulatory Quality to review both existing and new procedures have led to improvements in the quality of regulations and procedures.

3.2.15. The Philippines

The Philippines identified 6 priorities in its RAASR Individual Action Plan (IAP) submission in 2016 and subsequent revision, namely: 1) improving the efficiency of the logistics sector; 2) improving broadband access and usage; 3) developing and Institutionalizing Quality Regulatory Management System (QRMS); 4) improving access of micro, small and medium enterprises (MSMEs) to financial services; 5) promoting skills development opportunities; and 6) making the economy's legislative and regulatory framework more conducive to the promotion of market competition. The RAASR pillars associated with each of these priorities can be seen in Table 19.

Table 19. The Philippines's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Improving the efficiency of the logistics sector	○		
2	Improving broadband access and usage	○		
3	Developing and Institutionalizing Quality Regulatory Management System (QRMS)	○		
4	Improving access of Micro, Small and Medium Enterprises (MSMEs) to Financial Services		○	
5	Promoting Skills Development Opportunities			○
6	Making the economy's legislative and regulatory framework more conducive to the promotion of market competition	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on The Philippines' submission of 2016 Individual Action Plan and subsequent revision as well as 2018 RAASR Mid-Term Review Template.

The Philippines provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Improving the efficiency of the logistics sector

The Philippines is in the midst of establishing a single window or one-stop shop to simplify the accreditation and registration processes for Multimodal Transport Operators (MTOs) and to reduce transaction costs. The Department of Transportation (DOTr) has created an inter-agency technical working group (IATWG) whose role includes drafting the Joint Department Order (JDO) for the establishment of a Steering Committee and IATWG for the implementation the ASEAN Framework Agreement on Multimodal Transport (AFAMT). The IATWG is currently reviewing the draft JDO and plans to expand its membership to include other relevant agencies such as the Bureau of Customs, Civil Aviation Authority of the Philippines, Land Transportation Office, Office for Transport Security, Philippine Coast Guard and Philippine Ports Authority.

To adhere to the terms of the AFAMT which requires the establishment of a national competent body to implement the agreement, the Philippines is currently in the process of issuing an Executive Order (EO) from the President designating the DOTr as the national competent body for multimodal transport and providing for the creation of the Office for Multimodal Transport and Logistics within the department. The draft EO has been submitted to the IATWG for review. The Philippines plans to conduct capacity building events to familiarize DOTr staffs with topics related to logistics and multimodal transport operation.

Priority 2 – Improving broadband access and usage

In June 2017, the Philippines introduced a comprehensive National Broadband Plan (NBP) which comprises of three major components: 1) investment in broadband infrastructure; 2) policy and regulatory reforms; and 3) stimulating demand for broadband. Through the NBP, the Philippines strives to create an environment of fair competition for consumers, increase investment and innovation, and ensure a more efficient allotment and management of assets. Progress pertaining to the different aspects of the plan including land acquisition, signing of memoranda of agreement and securing of permits from the relevant authorities have been positive. The Philippines has also implemented other complementary initiatives such as the Free WiFi Internet Access in Public Places Project and the National Government Portal. The former aims to expedite government's effort to improve internet accessibility to the population and bridge the urban-rural digital divide, while the latter is a single window for all public services. In 2017, a total of 1,049 free WiFi sites in public places can be found across the economy. In addition, 252 out of 271 national government agencies had a web presence, while 240 local-level agencies in Tuguegarao, Iloilo, Pampanga, Baguio, Legazpi and Palo-Leyte now had fiber connections through the Government Network (GovNet) project.

Priority 3 – Developing and Institutionalizing Quality Regulatory Management System (QRMS)

The Philippines introduced the Modernizing Government Regulations (MGR) Program to improve the regulation formulation process by government agencies. MGR is a collaboration between the National Economic and Development Authority (NEDA) and the Development Academy of the Philippines (DAP) to integrate overlapping initiatives, develop a quality regulatory management system (QRMS), and incorporate new tools such as a regulatory impact assessment (RIA). As part of the program, regulatory environment reviews were conducted for the food production, food processing, food services, logistics and tourism sectors in 2016, and for the chemicals, housing, logistics, power and public transportation sectors in 2017. Participation in the capacity building activities under the MGR program has been increasing – the number of participating agencies rose from 17 in 2016 to 47 in 2017, well beyond the original target of 22. More RIA training courses and technical assistance package for customized RIA capacity building are in the pipelines.

The Philippines has several documents whose objective is to encourage and institutionalize RIA in the regulation formulation process. For example, Memorandum Circular No. 27 issued by President Duterte in October 2017 directed NEDA to promote its use along with other tools by regulatory agencies in support of the Philippine Export Development Plan. The Expanded Anti Red Tape Act (EARTA) requires regulations proposed by both national government agencies and local government units (LGUs) to undergo RIA. Despite positive progress such as the production of 14 regulatory impact statements (RISs) by government agencies with regulatory functions such as NEDA, Department of Tourism (DOT) and Department of Labour and Employment (DOLE) in 2016, it was observed that the Philippines still does not have a single RIA manual and training curriculum for all agencies as of end-2017. Moreover, agencies have yet to institutionalize RIA following the approval of EARTA by the Bicameral Conference Committee. Moving forward, NEDA intends to produce a policy framework to institutionalize good regulatory practices (GRPs) and expand the number of agencies selected to undergo RIA capacity building.

The Philippines introduced Project Repeal in 2016 as a systematic method for reviewing regulations that are no longer relevant to the regulatory functions of the government. Regulations that are deemed outdated or detrimental to the economy are repealed, delisted, amended or consolidated. To date, the Philippines has hosted three Repeal Days (two in 2016 and one in 2017) where progress were presented.

In 2017, 13 agencies participated in the Repeal Day and a total of 976 policies were reviewed. The Philippines is currently considering several initiatives including expansion of Project Repeal to cover laws on top of issuances and showcasing selected reviewed policies as case studies.

Priority 4 – Improving access of Micro, Small and Medium Enterprises (MSMEs) to Financial Services

Credit information of borrowers can help financial institutions (FIs) in assessing credit risk and hence make more informed decisions. To help develop a sustainable credit information ecosystem, the Credit Information Corporation (CIC) set up the credit information system in June 2015 to accommodate all potential FIs considered as submitting entities (SEs) under the Credit Information System Act. SEs are required to submit 60-month historical data as well as current data. The system used a phased progressive approach to onboard basic credit data because of variation in data quality among FIs in the economy and it was estimated that up to two years would be required to onboard a significant quantity of usable data. As of 2017, approximately 5 million data subjects and approximately 23,000 contract accounts from 200 lenders have been collected. Other achievements include technology enhancements to the CIC system to allow for real-time data clearing and processing, and adoption of IFC World Bank guidelines to make the system operational.

In 2017, the Philippines passed the Secured Transactions Bill in the House of Representatives, which is expected to be interpellated in the Senate. The Bill attempts to align the Philippine legal framework with international best practices for creating secure transactions and collateral registries (STCR) in order to improve the regulatory framework and increase credit flow to MSMEs. The Philippines continues to work with legislators and key partners to ensure the passage of the Secured Transactions Bill and will work toward creating the STCR once the Bill is signed into law.

Priority 5 – Promoting Skills Development Opportunities

The Philippines is currently drafting the National Technical Education and Skills Development Plan (NTESDP) for 2017-2022 to ensure that its Technical Vocational Education and Training (TVET) programmes can meet the challenges of global competition and social equity. The NTESDP has three predominant aims, namely: 1) keeping up with industry demands; 2) scaling up TVET's capacity to meet skill requirements; and 3) ensuring that TVET policies are flexible and sustainable enough to address the needs of its beneficiaries. TVET completion rate stood at 95 percent in 2016, while TVET certification rate as of August 2017 was about 93 percent. The Technical Education and Skills Development Authority (TESDA) is also working on the creation of ASEAN TVET Development Council to facilitate regional collaboration among ASEAN economies in the development of resilient labour force, and promote comparable standards and qualifications across the region.

Priority 6 – Making the economy's legislative and regulatory framework more conducive to the promotion of market competition

The Philippine Competition Commission (PCC) has drafted a framework for amending, repealing, and consolidating anti-competitive legislations and regulations. While a preliminary list of potentially anticompetitive legislations and policies have been identified by the PCC, the framework currently does not have any specific guidance on the institutional arrangements to facilitate the systematic review process. The PCC intends to create an inter-agency technical working group (TWG) in partnership with the House of Representatives and the Senate to help draft a work plan and oversee the review of legislations and regulations.

3.2.16. Russia

Russia identified 6 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) more competitive markets; 2) securing employment of women with young children and people with disabilities; 3) sustainable social policies through quality job creation, modernization of existing jobs and boosting labour productivity; 4) development of regulatory impact assessment tools and reducing the regulatory burden; 5) new tariff policy development; and 6) wider use of e-government technologies for improving the quality of life, doing business and public administration. In line with the increased focus on developing its digital economy, Russia updated priority 6 to “comprehensive digital economy development, including wider use of e-government technologies for improving the quality of life, doing business and public administration”. In addition, Russia identified additional actions for priorities 2 and 4 in their Mid-Term Review Template submission. Russia associated each of these priorities with single or multiple pillars under RAASR (Table 20).

Table 20. Russia’s RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	More competitive markets		○	
2	Securing employment of women with young children and people with disabilities		○	
3	Sustainable social policies through quality job creation, modernization of existing jobs and boosting labour productivity			○
4	Development of regulatory impact assessment tools and reducing the regulatory burden	○		
5	New tariff policy development	○		
6	Comprehensive digital economy development, including wider use of e-government technologies for improving the quality of life, doing business and public administration	○	○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on Russia’s submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Russia provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – More competitive markets

Russia’s Ministry of Economic Development launched a pilot project in 2016 to develop business units within existing Multifunctional Public Services Centres to provide information and consulting services to MSMEs. Based on the latest available information, a total of 541 Multifunctional Centres for business had been established in 39 regions and Russia plans to set up more in 2018. Russia indicated that it has approximately 700 organizations/centres in 2017 whose objective is to support MSMEs’ development, which includes guarantee companies, microfinance organizations, business support centres, social innovation centres and business incubators. This is an increase of 12 percent relative to that in 2015. Russian Small and Medium Business Corporation (RSMB Corporation) also launched MSMEs Business Navigator - a free web tool for entrepreneurs - in August 2016. The aim of the MSMEs Business Navigator is to serve as a one-stop-shop for entrepreneurs to receive services to help launch their new businesses. The MSMEs Business Navigator also includes the Stream System, which assists MSMEs in accessing analytics, creating landing pages, and optimizing advertising campaigns. A mobile application version has also been introduced.

Russia implemented a two-tier system to provide MSMEs with increased access to public procurement. To ensure compliance, the RSMB Corporation is tasked to evaluate the public procurement of 35 largest federal public companies and 55 selected federal public companies, while authorized regional authorities are responsible for evaluating the public procurement of 135 selected regional public companies. Based on the conformity assessment of procurements by biggest buyers with state ownership conducted by the RSMB Corporation, the total amount purchased from MSMEs had increased from USD930 million by end of 2015 to USD24.3 billion and USD35.8 billion by end of 2016 and 2017, respectively. Surveys also revealed that the credibility of MSMEs in terms of contractual performance and cost savings from the perspectives of large firms had increased. Furthermore, MSMEs made up 28 percent of the firms from which infrastructure monopolies and state-owned companies procured items from in 2016, higher than the initial target of 25 percent. Finally, RSMB Corporation had managed to increase the number of products whose procurements MSMEs can participate in from 8,400 items in 2015 to 162,400 items by February 2018.

Russia has introduced many programs within the ambit of the National Guarantee System (NGS) to enhance financial support for MSMEs. For example, the Program to Stimulate MSMEs Crediting fixes the final interest rate for loans starting from RUB3 million (about USD47,000) at 10.6 percent for micro and small companies and 9.6 percent for medium-sized companies. In addition, RSMB Corporation launched the Concessional Leasing Program for MSMEs in 2017 to support MSMEs in modernizing their fixed assets. Specifically for lending to women entrepreneurs, RSMB Corporation in collaboration with All-Russian Public Organization of Small and Medium-Sized Business (OPORA RUSSIA) launched the Mama-Entrepreneur training program for women on maternity leave, with underage children as well as those registered with the employment service. Upon completing the training program, participants would be able to take a loan at a rate of 10.6 percent per annum. Russia indicated that the total value of issued guarantees and warranties had increased from RUB100.08 billion (about USD1.585 billion) in 2016 to RUB138.36 billion (about USD2.193 billion) in 2017 and estimated that 99,600 new jobs would have been created as a result.

Priority 2 – Securing employment of women with young children and people with disabilities

Russia is looking at increasing the labour participation of vulnerable groups including individuals with disabilities. It noted that the public employment service had helped 89,000 disabled people to find jobs in 2017, an increase from 55,800 in 2016. The employment rate of disabled people seeking help in finding employment stood at 39 percent at the beginning of 2017, which is relatively higher than that in 2012 (36.7 percent). An action plan to increase the labour force participation of vulnerable groups has been prepared for the period 2017-2020 and once implemented, it is expected to have additional positive impacts on inclusive growth.

In May 2017, the Decree of the Government of the Russian Federation No. 893-r was approved. Its main purpose is to increase the level of employment of persons with disabilities by improving the effectiveness of employment services for disabled individuals, improving the monitoring system for employed persons with disabilities in quota jobs, and further enhancing the conditions which are facilitative towards employment of persons with disabilities. Russia indicated that 44,200 jobs were created for persons with disabilities between 2013 and 2015, and that 42.4 percent of the total number of persons with disabilities who applied for employment were employed in 2016. It expects the implementation of the Decree to lead to more participation by persons with disabilities in the labour force.

Russia is adopting several measures to increase the participation of women with young children in the labour market. For instance, it is organizing vocational training for women who are on leave to attend

to a child under three years of age. Increasing number of targeted women had participated in the training – 16,100 in 2016 vs. 13,100 in 2013. Russia is also enhancing the number of places in pre-school educational institutions and indicated that as of February 2016, 99.23 percent of children aged between 3 and 7 have access to pre-school education. The implementation of these measures between 2013 and 2016 have led to 76 percent of women aged 20-49 with children under the age of 18 to be employed, exceeding the employment rate for the entire population by 10 percentage points.

Priority 3 – Sustainable social policies through quality job creation, modernization of existing jobs and boosting labour productivity

To stimulate quality job creation, modernize existing jobs, and increase productivity, Russia undertook reforms of 856 professional education standards, 971 federal standards of professional education, and 1,724 accredited programs of professional education in 2016. Additionally, the “World Skills Russia” professional excellence contest was held in 84 regions in 2016 to attract labour to primary employment territories on the regional level. Moreover, the “Work in Russia” portal was launched in July 2015 to assist those seeking jobs in other localities and had attracted 20.2 million visitors in 2016. All of the above exceeded their set targets in 2016.

Priority 4 – Development of regulatory impact assessment tools and reducing the regulatory burden

Russia is extending regulatory impact assessment (RIA) implementation on draft regulatory acts following the adoption of Presidential Decree No. 601 in May 2012 which was aimed at improving the public administration system. Furthermore, the Decree of the State Duma of the Federal Assembly of the Russian Federation released in April 2017 included an amendment which made it possible for RIA to be conducted on drafts of federal law adopted in the second reading. Specifically, the revised Regulation of the State Duma requires the Council of the State Duma to send the bill to the government for the conduct of RIA according to the requests of the responsible committee.

Russia adopted Decision No. 813 in July 2017 to optimize mechanisms of RIA at various stages. Improvements have been made in several areas including the timing of public discussions about regulatory drafts, changes in regards to the procedural order of various stages, and updates to the subjects of RIA implementation. Russia indicated that RIA were conducted on more than 550 regulatory drafts.

Since 2017, Russia has made attempts to decrease the number of mandatory requirements so as to minimize administrative burdens. The federal executive authorities have published on their websites lists of legislations establishing various mandatory requirements to serve as basis for further discussions. In addition, 19 expert working groups were created to improve control and supervision activities, while 6 expert working groups were created for different entrepreneurial activities. More than 700 proposed ideas from the enterprise community had been considered. Moreover, 13 roadmaps illustrating various strategies for reducing the number of mandatory requirements in various areas were approved. As part of the roadmap implementation, a total of 62 events have been proposed for the period of 2017-2018.

Russia began to implement the ex-post evaluation of regulatory policies (EPE) in January 2016. EPE is conducted on the most important legal acts regulating business activities and aims to revise inefficient ones. The initiative can be participated by a wide range of interested stakeholders including academics, experts and business representatives. The Ministry of Economic Development conducted EPE with regards to 8 regulatory legal acts in 2017 and plans to do so for 11 regulatory legal acts in 2018.

Priority 5 – New tariff policy development

Russia is in the midst of undertaking numerous legislation initiatives in its efforts to support the development of a new tariff policy. For instance, one measure adopted under this initiative is the Calculation Procedure of the Most Admissible Annual Change of Evolution Coefficient of Tariffs for Services of Public Telecommunication and Public Mail Service by the Method of Limit Pricing and its Regulations. It aims to ensure that regulated sectors where monopoly exists such as telecommunications would have the discipline of a competitive market. Additionally, the Methodological Council for Tariff Regulation has been established in the Federal Antimonopoly Service (FAS) Russia and is responsible for considering issues pertaining to the legislative provision of competitive tariff regulation in the areas of gas supply and electricity. An automated monitoring system has also been introduced to help manage state regulation and supervision of natural monopolies through price monitoring and disclosure of information by federal authorities via the unified state information system (UAIS). More initiatives are in the pipelines.

Priority 6 – Comprehensive digital economy development, including wider use of e-government technologies for improving the quality of life, doing business and public administration

In December 2016, Russia set the goal of developing the Federal Programme on “Digital Economy in the Russian Federation 2017-2024”. The programme, which was developed and endorsed in July 2017, is in line with other existing programme and laws such as: 1) Federal Programme on “Information society 2011-2020” of 15.04.2014; 2) Federal Law of 27.07.2010 No. 210-FZ "On the organization of public and municipal services", Federal Law on Amendments of 23.06.2016 No. 219-FZ to the Federal Law “Civil Status Act”. It aims to: 1) create the digital economy ecosystems; 2) eliminate existing as well as new obstacles and restrictions for the creation and development of both traditional and new industries including high-tech businesses; and 3) increase the competitiveness of individual sector and the economy as a whole in the global market. A critical component of the programme pertains to structural reform activities, with a special focus on promoting a more open, well-functioning, competitive, and transparent management of business activities, as well as broad participation by all sectors of the population in accessing state and municipal services electronically. Areas which these structural reform activities can be categorized into include staff and education, research and technical competence, information infrastructure and information security. Five relevant sub-programmes and their associated roadmaps had been developed to facilitate the implementation of this programme. In 2018, Russia adopted the Act on “State information system ‘Standard cloud solution for automation of monitoring activities’” to improve the efficiency of state and municipal monitoring functions using ICT.

3.2.17. Singapore

Singapore identified 2 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) to ensure that government institutions and regulatory framework remain optimally structured and aligned with evolving industry trends and needs; and 2) to enhance competition and quality of service in infrastructural sectors, such as telecommunications. Singapore associated the two priorities with RAASR pillar #1 on more open, well-functioning, transparent and competitive markets (Table 21).

Table 21. Singapore's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	To ensure that government institutions and regulatory frameworks remain optimally structured and aligned with evolving industry trends and needs.	○		
2	To enhance competition and quality of service in infrastructural sectors, such as telecommunications.	○		

Source: Compilations by APEC Policy Support Unit (PSU) based on Singapore's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Singapore provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1: To ensure that government institutions and regulatory frameworks remain optimally structured and aligned with evolving industry trends and needs.

Singapore has carried out several organizational restructuring and changes to boost the responsiveness of the government to technology advancements. In May 2017, the Smart Nation and Digital Government Office (SNDGO) was established under the Prime Minister's Office (PMO), while Government Technology Agency (GovTech), a statutory board previously under the Ministry of Communications and Information (MCI), was placed under the PMO to be the implementing agency of SNDGO. Both SNDGO and GovTech made up the Smart Nation and Digital Government Group (SNDGG) whose responsibilities include applying digital and smart technologies to improve citizens' lives in key domains, in partnership with other government agencies, industry and the public; developing digital enablers and platforms for Smart Nation to grow economic value and catalyse innovation; as well as driving digital transformation for the public service to continue to deliver improved public services to citizens. Furthermore, besides regulating the telecommunications and media sectors, the Info-communication Media Development Authority (IMDA) has also been tasked to lead Singapore's digital transformation with infocommunications media and enhance Singapore's data protection regime in order to reap the benefits of the digital economy. As Singapore becomes more connected, IMDA will also implement digital inclusion programmes to address the digital society pillars of Singapore's Smart Nation Vision.

Payment services in Singapore are currently governed by two pieces of legislations, namely the Payment Systems (Oversight) Act (PSOA) and the Money-changing and Remittance Businesses Act (MCRBA). The PSOA regulates designated payment systems and the holders of stored value facilities, while the MCRBA regulates money changing and remittance businesses. Advances in technology have expanded the range of payment services that warrant regulation, and blurred the lines between currently regulated payment services, such as stored value facilities and remittance. The Monetary Authority of Singapore (MAS) has proposed to bring the two pieces of legislations under a single framework. When it comes into force, the proposed Payment Services Bill (PSB) will be applied on an activity basis and a payment service provider need only hold a single license to carry out different payment activities. The PSB will

also strengthen protection and facilitate system interoperability. MAS has conducted public consultation and intends for the PSB to come into force in 2019. To encourage collaboration within the industry, MAS has also established the Payments Council comprising of representatives from banks, payment service providers, businesses and trade associations to develop broad strategies to drive electronic payment adoption.

Singapore's Energy Market Authority (EMA) has enhanced the regulatory framework to allow the entry of intermittent generation sources. Besides launching the Central Intermediary Payment Scheme to facilitate small consumers in receiving payment for injecting excess electricity into the grid and adding a Solar Photo-Voltaic (PV) guide on licensing and market registration requirements to facilitate information searching, it has streamlined and simplified market registration and payment process for mid-sized solar consumers (above 1MW and less than 10MW). In addition, EMA is evaluating the reserves cost allocation framework to better appreciate the impact of solar on its power system. Singapore has also awarded SGD24 million in research grants to develop solar forecasting capabilities and test-bed utility scale Energy Storage Systems (ESS). Thus far, Singapore has seen a significant increase in installed capacity of solar PV from 0.3MWac in 2008 to 112.3MWac in 2017.

In 2016, Singapore launched the inaugural Singapore Electricity Market Outlook (SEMO), a publication to provide forward-looking information such as projected demand and supply conditions to facilitate power generation investments. In 2017, the second edition was published in partnership with the Singapore Exchange (SGX) and has a section on the Electricity Futures Market to facilitate investment decisions among industry players. SEMO is expected to be published on an annual basis and include topics of interest to potential investors.

Priority 2: To enhance competition and quality of service in infrastructural sectors such as telecommunications

Singapore's IMDA structured the 2016 Spectrum Auction into two stages to facilitate the entry of a new Mobile Network Operator (MNO): 1) the New Entrant Spectrum Auction in December 2016 for pre-qualified parties who do not currently operate a mobile network; and 2) the General Spectrum Auction in April 2017 for incumbent market players and successful bidder from stage 1. As a result, IMDA has managed to award a single package of 60MHz of spectrum to provide International Mobile Telecommunications (IMT) and IMT-Advance services to a fourth entrant (i.e. TPG Telecom Pte Ltd). In addition, IMDA awarded the remaining 175MHz of spectrum in the 700MHz, 900MHz and 2.5GHz spectrum bands to four winning bidders including the new entrant via the General Spectrum Auction. The allocation is expected to allow industry players to roll out and enhance their mobile networks and therefore, meet increased demand as well as support new growth areas.

In 2016, IMDA has adopted a two-pronged approach to facilitate the entry of Mobile Virtual Network Operators (MVNOs), namely by: 1) requiring MNOs to negotiate in good faith with MVNOs who request for wholesale access; and 2) publishing negotiation principles for MVNOs. Application guidelines have been put in the IMDA's website as well. In 2017, Singapore welcomed the entry of 2 new MVNOs (Circles.Life and Zero Mobile).

3.2.18. Chinese Taipei

Chinese Taipei identified 5 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) building a comprehensive competition regime for fair competition; 2) forging a competitive regulatory environment; 3) promoting financial inclusion; 4) fostering MSMEs' development and internationalization; and 5) deepening women's economic participation. Chinese Taipei associated each of these priorities with single pillars identified under RAASR (Table 22).

Table 22. Chinese Taipei's RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Building a comprehensive competition regime for fair competition	○		
2	Forging a competitive regulatory environment	○		
3	Promoting financial inclusion		○	
4	Fostering MSMEs' development and internationalization		○	
5	Deepening women's economic participation		○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Chinese Taipei's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Chinese Taipei provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Building a comprehensive competition regime for fair competition

Chinese Taipei amended 31 regulations under its Fair Trade Act between 2016 and 2017, with the aim of keeping its competition law up to date. For instance, the “Thresholds and Calculation of Sales Amount which Enterprises of a Merger Shall File with the Fair Trade Commission” was revised to adopt a standalone threshold for the global sales of merging parties. Article 11 of the Fair Trade Act was amended to increase the merger review period from 30 calendar days to 30 working days. When reviewing a hostile acquisition, the competition authority is required to provide parties disagreeing on the merger with necessary information in advance and obtain their opinions on hostile takeover. Moreover, eight administrative regulations and directives pertaining to market competition were enacted.

Priority 2 – Forging a competitive regulatory environment

Chinese Taipei improved its online registration and inquiry service for property secured transactions to include new functions such as case status enquiry, statistics on public inquiry cases, payment status and so on. Multiple debtors and creditors will also be able to input their information into a single application. Between 2016 and 2017, over 166,000 cases were handled online through the Property Secured Transaction Online Registration website. In addition, approximately 18.7 million inquiries have been made since 2016. However, Chinese Taipei also noted that despite these improvements, its ranking in the World Bank's Ease of Doing Business fell from 11th in 2016 to 15th in 2017 and will continue to pursue additional reforms moving forward.

Chinese Taipei extended the preview period for draft laws and regulations from a minimum of 14 days to 60 days in principle to allow stakeholders sufficient time to express opinions. These draft laws were also posted on an online Join Platform to facilitate public feedback. A Regulatory Impact Analysis (RIA) Operations Handbook was completed in August 2017, with government officials encouraged to refer to it for practical operations of RIA. Furthermore, 24 public consultation education and training sessions as well as 39 seminars on good regulatory practices (GRPs) have been held with participation totalling at more than 3,000 experts and civil servants as of end-2017.

Priority 3 – Promoting financial inclusion

Chinese Taipei is on its fifth 3-year program (2018-2020) for Financial Literacy, which aims to improve financial education of different demographics through various channels such as social advocacy, different forms of media, and organising educational activities. While information on this phase is not available yet, Chinese Taipei indicated that on its fourth 3-year program (2015-2017), the Financial Supervisory Commission (FSC) and related financial organizations organized a total of 13,657 social advocacy activities, 6,502 on campus promotion activities and 1,223 charity activities, which were participated by about 4.32 million people.

Chinese Taipei has implemented a "Program to Encourage Lending by Domestic Banks to Small and Medium Enterprises" since July 2005. As at end-November 2017, loans extended to MSMEs by domestic banks amounted to NTD6,030.2 billion (USD202.56 billion), up by NTD3,495.4 billion (USD117.41 billion) from the end-June 2005. Loans extended to SMEs by domestic banks accounted for 59.8 percent and 62.4 percent of total loans extended to all enterprises and private enterprises, respectively.

Chinese Taipei launched the "Creating Digital Financial Environment 3.0" program to help financial industries benefit from the development to provide the public with convenient digital financial services. The program aims to encourage financial institutions to adopt online services and mobile payment options. The Legislative Yuan passed the Financial Technology Development and Innovative Experimentation Act on 29 December 2017 to establish a regulatory sandbox mechanism which creates a safe environment for fintech R&D and pilot trials. As at end-December 2017, some of Chinese Taipei's achievements include: 12 types of banking business being allowed to accept online applications; 21 securities firms accepting the signing of trading agreement documents electronically; as well as 14 life insurance firms, 14 non-life insurance firms and 8 insurance brokers being approved to conduct online insurance business.

Priority 4 – Fostering MSMEs' development and internationalisation

Chinese Taipei noted that MSMEs are the backbone of its economic growth and to that end, has continued to implement activities aimed at enhancing their development and internationalization. For example, Chinese Taipei hosted a series of Online-to-Offline (O2O) events to equip MSMEs with skills needed to meet challenges of a digital nature. In conjunction with these events, Chinese Taipei published the APEC Guidebook on SME Digital Resilience, the APEC SME Monitor, and a collection of 100 APEC O2O Best Practices. A regulatory adjustment mechanism and a regulatory sandbox were introduced to lower compliance costs for MSMEs when laws and regulations are either enacted or amended. After the launch of the sandbox on 1 August 2017, nearly 60 applications were filed, and 39 of them were accepted. 62 meetings with MSMEs were also organized to understand their needs and concerns. Chinese Taipei promoted its "Digital Care Plan" to assist rural MSMEs in forming digital clusters and entering digital market places. This increased online business opportunities for MSMEs by an estimated 30 percent. As of 2017, the Small and Medium Enterprise Credit Guarantee Fund (SMEG) which was established to assist SMEs financing offered credit guarantee to 311,465 SMEs with insufficient collateral, hence enabling them to obtain NTD1,163 billion of credit from financing institutions.

Priority 5 – Deepening women's economic participation

Chinese Taipei implemented the "Comprehensive Child-Rearing Environment Program" in 2016 to increase female labour force participation rate by establishing more public preschools and encouraging employers to set up childcare facilities and measures. The "Gender Equality in Employment Act" was

amended in 2016 to require employers with over 100 employees to provide suitable in-company childcare facilities and measures, which will be subsidised by the government between 2016 and 2018. As at end-2017, Chinese Taipei has provided subsidies to 394 employers to facilitate the setting up of childcare facilities. It has also built 190 public preschool institutions. Female labour force participation rate in 2017 stood at 50.92 percent.

The Gender Equality Policy Guidelines of Chinese Taipei was promulgated in 2011 to regulate at least a third of positions in all committees under the Cabinet, state-owned enterprises (SOEs) and the senior rank civil servants be filled by each gender. These guidelines were revised in 2017 to expand the application of the “one third” principle to organisations such as labour unions, civil organizations, and private enterprises. Progress has been mixed so far. While the number of female senior rank civil servants reached 32.5 percent in 2016, SOEs whose board members and directors achieved the target declined from 25.0 percent in 2016 to 8.3 percent in 2017. In addition, the number of female ministers was 16.7 percent in 2017, far from the one third goal. Other cases saw the one third target missed slightly – females in positions equivalent to directors and supervisors in labour unions increased from 30.3 percent in 2015 to 30.5 percent in 2016. Through the Gender Equality Promotion Program for the period of 2019-2022, the Cabinet plans to enhance collaboration between relevant ministries so as to better tackle the issue.

3.2.19. Thailand

Thailand identified regulatory reform to facilitate ease of doing business as a priority in its RAASR Individual Action Plan (IAP) submission in 2016. Thailand associated this priority with RAASR pillar #1 on more open, well-functioning, transparent and competitive markets as well as pillar #2 on deeper participation in those markets by all segments of society, including MSMEs, women, youth, older workers, and people with disabilities (Table 23).

Table 23. Thailand's RAASR priority and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Regulatory reform to facilitate ease of doing business	○	○	

Source: Compilations by APEC Policy Support Unit (PSU) based on Thailand's submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

Thailand provided updates for its priority and related action.

Priority 1 – Regulatory reform to facilitate ease of doing business

Thailand aimed to improve services to businesses through three main ways: 1) conducting a study on legal and regulatory constraints that hinder business operations; 2) supporting and facilitating foreign trade and investment; and 3) improving access to capital to increase competitiveness of trade and investment sectors.

On (1), the Office of the Public Sector Development Commission (OPDC) in collaboration with the Office of SMEs Promotion (OSMEP) and World Bank collected information on the legal and regulatory practices pertaining to all ten indicators covered by ease of doing business (EoDB) in 2016. Following presentation of key recommendations, workshops were organized to help the relevant authorities to develop action plans and set specific goals in priority reform areas in February-March 2017.

On (2), Thailand shared that various government agencies have adopted electronic systems to reduce cost and accelerate procedures. For example, the Port Authority of Thailand has used the National Single Window system to report the number of moored ships and inventory. The Customs Department has developed the e-Transition system to accelerate customs processes, while the Department of Employment within Ministry of Labour, together with the Board of Investment (BOI) and the Immigration Bureau have come up with an online Single Window System for Visa and Work Permits to reduce the time as well as documentation required for application. In addition, the Department of Business Development has developed an Online Electronic Corporate Registration System (e-Registration) to enable owners to reserve names and register companies. One Stop Service Centers (OSS) for investment have also been established in all 10 Special Economic Zones in Thailand.

On (3), Thailand improved access to capital for SMEs by relaxing regulations on the use of collateral. The Secured Transaction Act B.E. 2558 (2015) was amended to expand the range of assets such as machines, bank deposits or inventory to be used as collateral. The amendment also made collateral registration easier and enabled parties to bargain on collaterals. Furthermore, the Bankruptcy Act (Business Reorganization for SMEs) No. 9, 2016 was passed in April 2016 to facilitate MSMEs in resolving financial distress by submitting a business reorganization plan.

Thailand noted that its EoDB ranking improved from 46th in 2016 to 26th in 2017. Private investment grew by 1.7 percent in 2017, while export value and volume grew by 9.7 and 5.9 percent respectively in 2017, an improvement from 2016 where export value and volume grew by 0.1 and 0.5 percent respectively.

3.2.20. United States

The United States identified 5 priorities in its RAASR Individual Action Plan (IAP) submission in 2016, namely: 1) growing businesses and creating jobs; 2) strengthening the digital economy; 3) infrastructure permitting modernization; 4) improve patent pendency and quality; and 5) expand access to foreign markets. The United States associated each of these priorities with single or multiple pillars identified under RAASR (Table 24).

Table 24. United States' RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Growing businesses and creating jobs	○	○	○
2	Strengthening the digital economy	○	○	○
3	Infrastructure permitting modernization	○	○	○
4	Improve patent pendency and quality	○		
5	Expand access to foreign markets	○	○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on United States' submission of 2016 Individual Action Plan and 2018 RAASR Mid-Term Review Template.

The United States provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Growing businesses and creating jobs

The Small Business Administration (SBA) approved close to 69,000 loans for small businesses in 2017, which translated to more than USD30 billion being loaned to these businesses. To expand the participation of lenders in its programs, SBA conducted lender relations specialist (LRS) training and developed materials for lenders in 2017. Furthermore, several improvements were made to the SBA electronic platform such as: furnishing additional data on loans so as to improve risk management; streamlining payment and reporting system; and ensuring that lenders have access to real-time data on their performance. Recently, the streamlining of rules and elimination of obsolete regulations pertaining to SBA's small business programs has led to a 50 percent increase in turnaround time for loan applications. SBA plans to continue enhancing the efficiency of its small business loan program and expects the simplified process as well as improving economic conditions to increase loan volume.

The SBA worked with various federal departments on their small business prime contracting goals to make sure that small businesses are able to provide goods and services to the federal government. In 2016, small businesses were awarded close to USD100 billion in federal contracts and SBA surpassed its goal of distributing 23 percent of federal contracting dollars to small businesses. In 2017, SBA introduced an online certification portal which provided better functionality in terms of document upload and process streamlining. By offering flexibilities to contracting officers, SBA was able to exceed its targets to allocate certain percentage of government contracts in dollar terms to service-disabled veterans and small disadvantaged businesses. Moving forward, SBA plans to improve the certification process via an online portal and in doing so, minimize the amount of administrative paperwork on both applicants and its employees. Besides conducting outreach programs to encourage participation of disadvantaged small businesses in government contracting, SBA also plans to create certification for women-owned and economically disadvantaged businesses.

To strengthen entrepreneurial ecosystems, SBA provided mentoring, business advice, and training assistance to more than 1.5 million entrepreneurs and small business owners. SBA also had trade financing experts at trade shows to provide counsel to small business exhibitors. Despite export training for lenders rising from 4,547 in 2016 to 5,546 in 2017, the United States noted that export training for small businesses fell slightly from 8,274 in 2016 to 8,096 in 2017. As exports are a priority of the US administration, SBA plans to continue engaging with small businesses and inform them about how

export financing can be used to support their export activities. SBA is looking to train 4,500 lenders and 8,400 small businesses on export financing in 2019.

Priority 2 – Strengthening the digital economy

In its efforts to improve broadband infrastructure and use, the National Telecommunications and Information Administration (NTIA) provided 117,072 miles of broadband network to underserved areas in the US in 2017, exceeding its target of 116,000 miles. The NTIA also provided broadband technical assistance to 400 communities in 2017, exceeding its target of 250 communities. In addition, the NTIA also achieved its goal of making available 500 MHz in bandwidth to support wireless broadband service by 2020. Acknowledging that internet is critical to enable economic growth, the Department of Commerce is developing new standards to mitigate network congestion, enhance cybersecurity and facilitate interoperability. Indeed, it developed a Cybersecurity Framework to provide guidelines, best practices and standards, as well as supported 16 critical infrastructure sectors to integrate the Framework into their products. Moving forward, NTIA plans to focus on collecting data from existing communities served by its broadband technical assistance program.

Priority 3 – Infrastructure permitting modernization

Standardizing interagency coordination in the infrastructure permitting process is a priority of the US administration as it removes duplication, enhances efficiency, and leads to improved decision-making. Indeed, relevant agencies have started to implement the “Fixing America’s Surface Transportation Act” that created the Federal Permitting Improvement Steering Council (FPISC) and assigned it to improve infrastructure transparency and coordination among agencies. For its part, the FPISC released its first series of recommended best practices in 2018. These include ways to improve early stakeholder engagement, enhance coordination between federal and non-federal entities and utilization of tools such as Geographic Information Systems (GIS). In 2018, agencies also agreed to process environmental reviews and render decisions for major infrastructure projects collectively by using collaborative timetables and engaging senior officials, among others.

The current US administration has set a goal of reducing the time for the federal government’s processing and authorization of new major infrastructure projects to an average of 2 years on average. As indicated by the 2018 FPISC best practices guide, one way this can be achieved is to provide project sponsors/applicants of an applicable project with information about an agency’s permitting review process, including all relevant steps prior to the application process and after receipt of application. To this end, the current administration has set indicators to improve the efficiency of agency staff in processing permits and the President’s management team plans to publish an accountability system guidance document. Implementation will start later this year and accountability data will begin to be published in 2019.

To measure the functioning of the permitting and review process, the current US administration is employing interagency tools and plans to create organizational health indicators. The Permitting Dashboard, an online tool for infrastructure permitting, will start to collect data pertaining to time and cost measures. Besides holding agencies accountable for their performance, such information will enable them to identify issues and areas for improvements. Moreover, agency leaders have asked relevant officials to advocate project-specific improvements in infrastructure permitting within their agencies.

An action plan involving various stakeholders, including the Council on Environmental Quality, the Office of Management and Budget, and the FPISC, was also formulated to put in place existing reforms, evaluate processes among agencies and identify additional reforms.

Priority 4 – Improve patent pendency and quality

The US Patent and Trademark Office (USPTO) continues to improve its patent review efficiency. Some of its achievements include: 1) reducing the initial response to a patent application from 17.3 months in 2015 to 16.3 months in 2017; 2) reducing the time for a total patent review from 26.6 months in 2015 to 24.2 months in 2017; and 3) reducing patent backlog from 553,221 patents in 2015 to 526,579 patents in 2017. USPTO plans to hire more patent examiners over the next five years and will increase its use of technology and process improvements to shorten processing time and further reduce backlog. It identified reducing the first action response time to less than 15 months and total patent review time to less than 24 months as targets to be achieved in 2019.

To improve the quality of patent examination, USPTO has introduced new initiatives that provide patent examiners with tools to capture and review data accurately. The “smart form” logic, for example, allows patent reviewers to only see forms and questions that are applicable to their type of review, hence boosting data quality and facilitating documentation. It has also identified new metrics to measure work quality and these include those measuring efficiency of internal processes and stakeholder perceptions. Furthermore, USPTO maintains the provision of comprehensive technical and legal training to patent examiners and attorney. USPTO noted that it met or exceeded all of its statutory patent correctness goals in 2017. Moreover, USPTO created and released updated datasets pertaining to patents including claims and litigation in formats which are facilitative for public use and academic research so as to maximize use of quality patent data. Besides continuing to offer training whose objective includes helping examiners rationalize their decisions, USPTO plans to use results from a pilot study on best examiner practices for prosecution records as inputs for future initiatives.

USPTO is part of various initiatives whose objective includes increasing collaboration between patent offices globally and therefore, reduce duplication and redundancy as well as increase examination efficiency. Besides participating in two bilateral collaborative search pilots with Japan and Korea, it remains engaged in work sharing via the Patent Prosecution Highway (PPH) and Patent Cooperation Treaty (PCT). Indeed, the Global PPH has established a single set of standards among patent offices globally and USPTO has filed 48,404 PPH filings as of 30 September 2017. USPTO plans to continue exploring how to best utilize Global Dossier, a single online source for viewing all patent applications submitted by an applicant across patent offices globally, to minimize the burden on applicant to provide such information and improve its review quality.

Priority 5 – Expand access to foreign markets

The exports of transportation-related goods and services contribute to the US economy. In this regard, the Department of Transportation (DoT) continues with efforts to make sure that the US is competitive in foreign markets and that domestic movement of goods is not impeded. While progress updates on the US transportation exports are not yet available, the US noted that improving the state of surface transportation infrastructure, including domestic freight networks, is a priority of the current administration.

3.2.21. Viet Nam

Viet Nam identified 6 priorities in its RAASR Individual Action Plan (IAP) submission in 2016 and subsequent revision, namely: 1) improving competition policy to enhance the efficiency of resource allocation and utilization in key economic sectors; 2) improving public investment efficiency; 3) improving investment-business environment to strengthen microeconomic foundation; 4) promoting the application of good regulatory practices; 5) promoting the contribution of service sector to the economic development; and 6) improving the quality of human resource. Viet Nam associated each of these priorities with single or multiple pillars identified under RAASR (Table 25).

Table 25. Viet Nam’s RAASR priorities and associated pillars

No.	Priority	Pillar #1	Pillar #2	Pillar #3
1	Improving competition policy to enhance the efficiency of resource allocation and utilization in key economic sectors	○		
2	Improving public investment efficiency	○		
3	Improving investment-business environment to strengthen microeconomic foundation	○		
4	Promoting the application of good regulatory practices	○		
5	Promoting the contribution of service sector to the economy development	○		
6	Improving the quality of human resource		○	○

Source: Compilations by APEC Policy Support Unit (PSU) based on Viet Nam’s submission of 2016 Individual Action Plan and subsequent revision as well as 2018 RAASR Mid-Term Review Template.

Viet Nam provided updates for all priorities and related actions. Below is a summary of progress by priority.

Priority 1 – Improving competition policy to enhance the efficiency of resource allocation and utilization in key economic sectors

Viet Nam has conducted reviews to identify areas in which state-owned enterprises (SOEs) have received preferential treatment and changed its regulations accordingly. Thus far, it has conducted 10 workshops on competitive neutrality. It also noted the increased awareness about the topic among relevant stakeholders including competition authority, as well as improved consensus on the need to address practices which are deemed to be non-competitive neutral. Noting that principles and aspects of competitive neutrality can be better defined, Viet Nam plans to formulate additional regulations pertaining to it moving forward.

In an effort to separate the ownership and administrative management function of SOEs by the state, Viet Nam has passed a resolution to establish the Commission of Managing State Capital. State ownership in 21 major SOEs will be managed through the Commission when operational. Currently, Viet Nam is finalizing the organizational structure and personnel for the Commission, improving relevant regulations to ensure effective operations of the Commission, and developing clear mandate for government agencies to conduct consultation with private sector.

Viet Nam has undertaken a series of activities to promote the use of economic evidence in competition policy enforcement. Thus far, it has carried out two APEC-funded trainings on the importance and

methods to employ evidence in competition policy, as well as published a research report on the topic³⁸. Although there is improved awareness on the use of economic evidence, Viet Nam noted that its use has yet to be incorporated in the amendment to the Competition Law. It plans to conduct more training and introduce a work plan to further promote its use.

Priority 2 – Improve public investment efficiency

Viet Nam approved the medium-term public investment plan for 2016-2020 and conducted a number of trainings to provide local officials with information pertaining to the plan. The training also covered the appraisal aspects of public investment, which is gaining importance in the project cycle. Indeed, Viet Nam has revised the guidelines and criteria to appraise public investment projects. Moving forward, Viet Nam will be developing a handbook on public investment appraisal and improving various regulations to guide the implementation of the Law on Public Investment.

Specifically on improving community monitoring of public investment projects, Viet Nam noted that while the enforcement of the Law on Public Investment would achieve this objective, the capacity of stakeholders such as local community to analyze reports and data provided would need to be further strengthened. To that end, besides conducting stocktaking of efforts on this front, Viet Nam plans to provide more training for the local community as well as enhance dialogues between local governments and community on public investment projects.

Priority 3 – Improve investment business environment to strengthen microeconomic foundations

Viet Nam implemented Resolution No. 19-2016/ND-CP to improve the economy's standing pertaining to the World Bank Ease of Doing Business indicators and World Economic Forum Global Competitiveness indicators. On the World Bank indicators, Viet Nam noted that while it has met its targets related to border and documentary compliances for export and import as well as getting credit, it has not done so on obtaining construction permit, contract enforcement and resolving insolvency. On the World Economic Forum indicators, Viet Nam has yet to meet its targets pertaining to effectiveness of anti-monopoly policy, flexibility of wage determination, and availability and affordability of financial services. Moving forward, Viet Nam plans to continue enhancing efforts to improve its business environment.

Viet Nam indicated that all government agencies have developed their own plans to implement Resolution No. 19-2016/ND-CP and therefore contribute to enhancing the business environment under their purview. By end-2017, five ministries/agencies namely Ministry of Industry and Trade (MOIT), Ministry of Agriculture and Rural Development (MARD), Ministry of Construction, Ministry of Information and Communication (MOIC) and State Bank of Viet Nam (SBV) have reviewed and proposed plans to remove and revise business regulations. Ten other ministries are currently reviewing and preparing their recommendations.

Priority 4 – Promote the application of good regulatory practices

³⁸ APEC. (2018). Use of Economic Evidence: Experience from APEC Members and Implications to APEC Developing Economies and Viet Nam. Retrieved from <https://www.apec.org/Publications/2018/04/Use-of-Economic-Evidences>.

Viet Nam has required all policies and regulations to receive comments from the public and the business community. Comments can be provided via online platform, written submissions or during attendance at workshops.

Priority 5 – Promote the contribution of service sector to the economy development

Viet Nam has reviewed and improved policies to restructure the service sector as well as promote the export of services. Key sectors identified include ICT, financial services, education, logistics, transport, healthcare, tourism and professional services. Moving forward, Viet Nam plans to continue reviewing and improving the legal framework needed to minimize burden on services development; incorporate international standards and best practices in services regulations; and adopt global value chain (GVC) perspective in its services reforms.

Viet Nam has conducted a review of barriers to service exports and has engaged in free trade agreements (FTAs) that include services as its components. In addition, it has also implemented policies focused on promoting exports of specific service sub-sectors such as tourism and healthcare. Thus far, it has created a plan to further promote the export of certain potential and competitive services to other economies.

Priority 6 – Improve the quality of human resource

Viet Nam has incorporated the science, technology, engineering and mathematics (STEM) model into the curriculum of various schools at the primary and secondary levels as a pilot program. There has also been an increase in the number of training and textbooks introducing the STEM model to the wider audience in the public and private sector including government agencies, schools, teachers and parents. Viet Nam plans to continue raising awareness about the STEM model and expand its adoption by the wider education system.

Viet Nam has made efforts to enhance women participation in the economy by raising awareness of the importance of women-led businesses through various channels including the media. Policymakers have increasingly considered that policies need to take into account the viewpoints of women-led businesses.

REFERENCES

- Andrews, D. & F. Cingano (2012). Public policy and resource allocation: Evidence from firms in OECD countries. OECD Economics Department Working Papers No. 996. OECD Publishing, Paris.
- Andrews, D., C. Criscuolo and P. Gal (2015). Frontier firms, technology diffusion and public policy: Micro Evidence from OECD Countries. OECD Productivity Working Papers No. 2, OECD Publishing, Paris.
- APEC. (2011). APEC Economic Policy Report. Retrieved from <https://www.apec.org/Publications/2011/05/2011-APEC-Economic-Policy-Report>
- APEC. (2015). 2015 Structural Reform Ministerial Meeting Retrieved from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Structural-Reform/2015_structural.aspx
- APEC. (2015). Assessing the APEC New Strategy for Structural Reform (ANSSR) and Advancing the APEC Structural Reform Agenda Beyond 2015. Retrieved from <https://www.apec.org/Publications/2015/10/Assessing-the-APEC-New-Strategy-for-Structural-Reform-ANSSR-and-Advancing-the-APEC-Structural-Reform>
- APEC. (2016). Annex B. Strategy for Implementation of the Cebu Action Plan. Retrieved from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Finance/2016_finance/annexb
- APEC. (2016). Annex B: APEC Services Competitiveness Roadmap (2016-2025). Retrieved from https://www.apec.org/Meeting-Papers/Leaders-Declarations/2016/2016_aelm/2016_Annex-B
- APEC. (2016). APEC Services Competitiveness Roadmap Implementation Plan (2016 – 2025). Retrieved from http://mddb.apec.org/Documents/2016/MM/AMM/16_amm_012.pdf
- APEC. (2018). Use of Economic Evidence: Experience from APEC Members and Implications to APEC Developing Economies and Viet Nam. Retrieved from <https://www.apec.org/Publications/2018/04/Use-of-Economic-Evidences>.
- Barro, R. J., & Lee, J. W. (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of development economics*, 104, 184-198.
- Bernal-Verdugo, L. E., Furceri, D., & Guillaume, D. (2012). Labor market flexibility and unemployment: new empirical evidence of static and dynamic effects. *Comparative Economic Studies*, 54(2), 251-273.
- Bickerdyke, I., & Lattimore, R. (1997). Reducing the regulatory burden: does firm size matter?. Industry Commission.
- Blatchford, P., Bassett, P., Goldstein, H., & Martin, C. (2003). Are class size differences related to pupils' educational progress and classroom processes? Findings from the institute of education class size study of children aged 5–7 years. *British Educational Research Journal*, 29(5), 709-730.
- Calderón, C., & Servén, L. (2014). Infrastructure, Growth, and Inequality. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/20365/WPS7034.pdf>
- Clark (2005). A policy framework for investment: tax policy [Background information in support of the Global Forum on International Investment "Putting the Policy Framework for Investment into Action"]. Retrieved from <https://www.oecd.org/investment/investmentfordevelopment/35488855.pdf>

- Deloitte (2016). The 2016 Deloitte Millennial Survey: winning over the next generation of leaders.
- Fall, F., D. Bloch, J-M Fournier, and P. Hoeller (2015). Prudent debt targets and fiscal frameworks. OECD Economic Policy Papers No. 15, OECD Publishing, Paris.
- Fan, S., Zhang, L., & Zhang, X. (2002). Growth, inequality, and poverty in rural China the role of public investments. Washington, DC: International food policy research institute (IFPRI).
- Farrell, D., Relihan, L., & Ward, M. (2017). Going the Distance: Big Data on Resident Access to Everyday Goods. JP Morgan Chase Institute.
- Fournier, J-M. (2016). The positive effect of public investment on potential growth. OECD Economics Department Working Papers No. 1347, OECD Publishing, Paris.
- Jaumotte, F. (2003), Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries, OECD Economics Department Working Papers, No. 376, OECD Publishing, Paris.
- Krueger et al. (2017). 2017 APEC Economic Policy Report - Structural reform and human capital development. APEC Economic Committee.
- Nordas, H. & Rouzet, D. (2015). The Impact of Services Trade Restrictiveness on Trade Flows: First Estimates, OECD Trade Policy Papers, No. 178, OECD Publishing, Paris.
- OECD (2001), Businesses' Views on Red Tape: Administrative and Regulatory Burdens on Small and Medium-sized Enterprises, OECD Publishing, Paris.
- OECD. (2005). OECD Conference Investment for Development: Making it Happen. Retrieved from <https://www.oecd.org/investment/investmentfordevelopment/35488855.pdf>.
- OECD (2007). Promoting pro-poor growth: infrastructure. OECD Publishing, Paris.
- OECD (2015), The Innovation Imperative: Contributing to Productivity, Growth and Well-Being, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264239814-en>
- OECD. (2015). In It Together: Why Less Inequality Benefits All. Retrieved from https://read.oecd-ilibrary.org/employment/in-it-together-why-less-inequality-benefits-all_9789264235120-en#page1
- Petersson, B., Mariscal, R., & Ishi, K. (2017). Women Are Key for Future Growth: Evidence from Canada. International Monetary Fund.
- Psacharopoulos G. and Patrinos, H.A. (2002). Returns to investment in education: a further update. The World Bank policy research working paper series.
- Samans, R., Blanke, J., Hanouz, M.D. and Corrigan, G. (2017). The Inclusive Growth and Development Report 2017. World Economic Forum, Geneva.
- Scully, G. W. (2003). Optimal Taxation, Economic Growth and Income Inequality. Retrieved from <https://link.springer.com/article/10.1023/A:1024223916710>
- Silim, A., & Stirling, A. (2014). Women and flexible working: Improving female employment outcomes in Europe. IPPR.
- Swift, R. (2011). The relationship between health and GDP in OECD countries in the very long run. *Health economics*, 20(3), 306-322.
- Thomsen, S. (n.d.). OECD FDI Regulatory Restrictiveness Index. A tool for benchmarking countries, measuring reform and assessing its impact [PowerPoint slides]. Retrieved from <https://www.oecd.org/daf/inv/investment-policy/FDIRRIndexPPT.pdf>.

Valkonen, L. (2006). Deregulation as a means to increase competition and productivity: Some Finnish experiences (No. 1014). ETLA Discussion Papers, The Research Institute of the Finnish Economy (ETLA).

WEF. (2017). The Inclusive Growth and Development Report 2017. Retrieved from http://www3.weforum.org/docs/WEF_Forum_IncGrwth_2017.pdf

Well, D. N. (2007). Accounting for the effect of health on economic growth. *The quarterly journal of economics*, 122(3), 1265-1306.

Wirjo, A. (2016). Exploring Quantitative Indicators for Effective Monitoring of APEC-wide Progress on Structural Reform under RAASR 2016-2020. APEC Policy Support Unit, Singapore.

World Bank (2016). *Doing Business 2017 – Equal Opportunity for All*. Washington: The World Bank and the International Finance Corporation.

World Bank (2017). *Doing Business 2018 – Reforming to Create Jobs*. Washington: The World Bank and the International Finance Corporation.

World Bank (2017). *Doing Business 2018 – Reforming to Create Jobs, regional profile of Asia-Pacific Economic Cooperation (APEC)*. Washington: The World Bank and the International Finance Corporation.