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### Counting what counts

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**Asia-Pacific  
Economic Cooperation**

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

# **APEC REGIONAL TRENDS ANALYSIS**

## **Counting What Counts**

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November 2019

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

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## **KEY ABBREVIATIONS**

APEC	Asia-Pacific Economic Cooperation
FOMC	Federal Open Market Committee (United States)
FDI	foreign direct investment
GDP	gross domestic product
IMF	International Monetary Fund
NEER	nominal effective exchange rate
OECD	Organisation for Economic Co-operation and Development
PSU	Policy Support Unit (APEC)
SNA	System of National Accounts
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNWTO	United Nations World Tourism Organization
WEO	World Economic Outlook
WTO	World Trade Organization

## KEY MESSAGES

### I. Counting What Counts

- Gross domestic product (GDP) is an estimate of the value of all goods and services produced within an economy. GDP and its related concepts, such as economic growth and productivity, dominate policy discussions and are often used as a proxy of a government's performance.
- Like any source of data, GDP has its blind spots and limitations. It is an incomplete measure of the economy, and falls short on many aspects of economic production and interaction. It does not tell us anything about the quality of goods and services produced, the distribution of economic benefits, the environmental costs of economic activity, or the increasing importance of data in the digital economy. GDP does not provide much insight into human wellbeing.
- GDP represents one important aspect of economic success, but it is not the only one. Reducing all economic policy discussions to their impact on GDP growth is an oversimplification of complex economic interactions and impacts. It renders all other attributes of the economy – such as distribution, inclusion and sustainability – as secondary considerations to maximising output.
- Alternatives to GDP have been proposed, and some are in use by economy and sub-economy jurisdictions. However, none of them approach the importance given to GDP in shaping economic decisions and policy discussions.
- APEC Leaders have been calling for balanced, inclusive, sustainable, innovative and secure growth since 2010, and alternative measurements are needed to track progress and inform policy. Discussions on improving current data and developing new ones are already happening in various APEC fora.
- Regional cooperation was crucial in turning GDP from a research institution's concept to the global standard of empirical economics today. As an incubator of ideas, APEC can contribute to this conversation on developing measures of wellbeing beyond GDP and in line with Leaders' priorities beyond 2020.

### II. Slower Growth, Bigger Challenges

- Tensions in trade and technology along with Brexit-related issues have fuelled uncertainty, which in turn, has dampened confidence resulting in a pullback in investment and consumption spending, thereby slowing down global economic activity.
- In APEC, the uncertainty on the external front has translated into a general moderation in growth, with the region expanding at a slower pace of 3.6 percent in

January–June 2019 from a 4.3 percent GDP growth in January–June 2018. APEC GDP growth has been on a decelerating path since the second half of 2017.

- APEC economies continued to rely on household spending as the main driver of growth, but this slowed down in the first half of 2019, while investment growth was flat and most APEC economies recorded negative net exports.
- Given conditions of elevated uncertainty, the APEC region is expected to continue to grow but at a moderated pace in the period 2019–2021, in tandem with the global economy. Risks of a further escalation in trade and technology tensions remain, which could further weaken the global economy.
- Downside risks could also come from a build-up in financial vulnerabilities as investors increase their risk-taking activities amid prolonged low levels of interest rates. Other contributing factors include the possible deterioration in business and consumer sentiments, the continued downward trend in inflation, and concerns about the medium- to long-term repercussions of climate change.
- For too long, economies have depended on domestic consumption and trade to propel growth. These past few years, APEC and the global economy have learned that these sources of growth could prove unreliable amid a situation of heightened uncertainty.
- Policymakers need to balance between supporting economic growth on the one hand and managing financial conditions on the other amid the prevailing environment of uncertainty. In the short term, addressing uncertainty means resolving trade and technology disputes by going back to the negotiating table to find immediate solutions. In the medium to long term, economies should look at other sources of growth beyond domestic consumption and global trade.
- If there is one lesson to be learned from the current global economic situation, it is that economies need to channel their efforts toward structural reform measures that improve individual lives by facilitating access to economic opportunities for a wider segment of society, including women and vulnerable groups, so that economic growth benefits all in the long term.



# 1 COUNTING WHAT COUNTS<sup>1</sup>

*The welfare of a nation can, therefore, scarcely be inferred  
from a measurement of national income*

– Simon Kuznets, 1934

## 1.1 INTRODUCTION

An oft-heard economist joke goes like this: One evening, an economist lost some keys and was looking for them by the glow of a streetlight. A kind passerby wanted to help and asked the economist, ‘Did you lose your keys somewhere around here?’

‘No,’ said the economist, ‘I dropped my keys a block away.’

‘So why are you looking for your keys here?’

‘This is where the light is.’

The light of economic data is very important for economists and policymakers alike, as it enables trends to be monitored and makes rigorous analysis of issues possible, which inform economic policy. While there are many sources and types of economic data, none is more influential in driving discussion and policy than gross domestic product (GDP). GDP is an estimate of the value of all goods and services produced within an economy. GDP and its related concepts, such as economic growth and productivity, dominate policy discussions. Within economies, GDP performance is often used as a proxy of a government’s performance, and reams of policies are developed to ensure continued GDP growth and avoid a recession, often defined as two successive quarters of GDP decline. In international fora such as APEC, GDP and its related concepts are reliable and comparable measures of economic performance and frequently figure in joint declarations.<sup>2</sup> Indeed, GDP as an index of macroeconomic output has been a very useful measurement, shining a strong light on many economic issues and helping focus minds toward solutions and regional cooperation.

However, like any source of data, GDP has its blind spots and limitations. It is an incomplete measure of the economy and falls short on many aspects of economic growth and development. It does not tell us anything about the quality of goods and services produced, the distribution of economic benefits, the environmental costs of economic activity, or the increasing importance of data in the digital economy. Without an appreciation of its limitations and nuances, the strong light of GDP can blind researchers

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<sup>1</sup> Prepared by Emmanuel A. San Andres, Andre Wirjo and Satvinderjit Kaur Singh, APEC Policy Support Unit (PSU). The Organisation for Economic Co-operation and Development (OECD), in particular the Statistics and Data Directorate and the Sherpa Office and Global Governance Unit, contributed Box 1.1. Excellent research support from Liu Jiquan and Jason Carlo O. Carranceja is acknowledged.

<sup>2</sup> For examples, see: APEC Leaders’ Declarations, <https://www.apec.org/Meeting-Papers/Leaders-Declarations>; APEC Ministerial Declarations, <https://www.apec.org/Meeting-Papers/Annual-Ministerial-Meetings>; and APEC Sectoral Statements, <https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings>.

and policymakers to issues that are not illuminated by this measure. Like the hapless economist at the start of this article, an overreliance on GDP – using it for purposes it is not suited for, or not complementing it with other indicators that consider other issues – can make for ill-informed decisions.

## 1.2 LIMITATIONS OF GDP

GDP has a long and storied history, having been conceived in the 1930s in the aftermath of the Great Depression. At the time, the United States government was trying to understand the causes and impacts of the Great Depression but did not have sufficient macroeconomic data, so they turned to the National Bureau of Economic Research (NBER) for advice. Simon Kuznets, then working with the NBER, developed what would be the income approach to measuring national income,<sup>3</sup> which would eventually evolve into the System of National Accounts (SNA) that underpins the concepts, definitions, classifications, and accounting rules governing the measurement of economic activity today. For his pioneering work on measuring economic activity, Kuznets was awarded the Nobel Memorial Prize in Economic Science in 1971 and is widely regarded as the father of GDP.

Today, GDP is a headline statistic monitored by various stakeholders and policymakers as a measure of economic success. Economies aim for GDP growth year after year, and higher GDP per person is used as an indicator of economic affluence and development. GDP is the primary indicator of a government's performance in managing the economy, and policymakers employ various means to avoid a recession. To a certain extent, the use of GDP as a headline guide for economic policy has proven to be beneficial. Higher GDP, and continuous GDP growth, corresponds to greater economic resources and income that can be used to improve standards of living. For example, higher GDP per capita is positively correlated to longer life expectancy (Figure 1.1). Indeed, a simple one-on-one linear regression between GDP and life expectancy<sup>4</sup> shows that every 1 percent increase in per capita GDP is associated with an additional 4.3 years in life expectancy. Moreover, per capita GDP alone explains 68 percent of the international variation in life expectancy.

However, it is important to recognise that as with any economic indicator, GDP has its limitations. Indeed, even as he was presenting his estimates of the United States' economic output for 1929–1932, Kuznets dedicated a section to 'The Uses and Abuses of National Income Measurements' to warn about its shortcomings and potential for misinterpretation.<sup>5</sup> GDP estimates can only measure goods and services transacted through the formal economy – i.e., exchanges that were recorded somewhere and surveyed by statistical authorities – and they use market prices to measure the contribution of those goods and services to total output. This means GDP is blind to economically productive activities that

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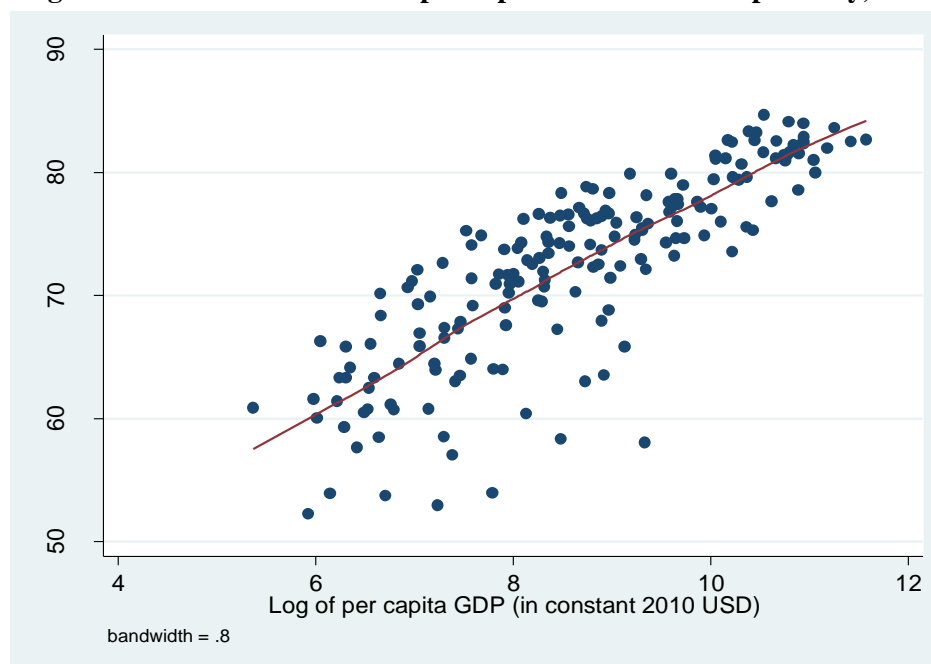
<sup>3</sup> The concept behind Kuznets' income approach is that one economic actor's expenditures – i.e., purchase of goods, utilisation of services, or rental of real property – is another's income. National income is therefore measured as the sum of labour income (wages, salaries and other labour income), property income (interest and dividends) and entrepreneurial income (business profits, rents and royalties).

<sup>4</sup> The model used is  $L_i = a + bY_i + e_i$  where  $L$  = life expectancy,  $Y$  = log of per capita GDP and  $e$  = error term. Subscript  $i$  denotes economies and  $a$  and  $b$  are constant and coefficient, respectively, estimated using Ordinary Least Squares (Huber-White standard errors are applied to correct for heteroscedasticity). Estimated values are  $a = 34.88$  and  $b = 4.34$ , both significant at  $\alpha = 1\%$ ; statistic  $R^2 = 0.6780$ .

<sup>5</sup> A facsimile of the document submitted by the National Bureau of Economic Research (NBER) to the US Senate can be found at: Simon Kuznets, 'National Income, 1929–1932' (NBER, 1934), 5–8, [https://fraser.stlouisfed.org/files/docs/publications/natincome\\_1934/19340104\\_nationalinc.pdf](https://fraser.stlouisfed.org/files/docs/publications/natincome_1934/19340104_nationalinc.pdf).

are provided for free – such as parental care, use of owned real estate, or volunteer work – as well as exchanges of goods and services in the informal economy. This also means GDP is blind to the costs of economic activity that are not mediated in the market, such as the impacts of pollution or environmental degradation. Likewise, the non-private benefits of socially beneficial economic activity, such as education or health, are not given any value in GDP estimates.

**Figure 1.1 Correlation between per capita GDP and life expectancy, 2017**



Note: Data cover 185 economies around the world. Trendline is generated using nonparametric locally weighted scatterplot smoothing.

Source: World Bank's World Development Indicators; Directorate General for Budget, Accounting and Statistics (Chinese Taipei); APEC Policy Support Unit calculations.

On prices, Kuznets observes that 'market valuation of commodities and especially of direct services depends upon the personal distribution of income', so the same good or service can have varying contributions to GDP depending on the income distribution. Kuznets also notes the inability of national income estimates to account for human welfare and job quality: while wages and earnings are recorded in GDP, 'the intensity and unpleasantness of effort going into the earning of income' is not. In other words, GDP cannot adequately inform on economic welfare as it is blind to the distribution of the benefits of economic growth – across gender, geography or socioeconomic class – or the impact of this growth on people's wellbeing.<sup>6</sup> As an illustration, a report by the APEC Policy Support Unit (PSU) shows that even as the APEC region has consistently outperformed the rest of the world in terms of per capita GDP, inequality has been growing as well.<sup>7</sup>

<sup>6</sup> Stephanie Thomson, 'GDP a Poor Measure of Progress, Say Davos Economists', World Economic Forum, 23 January 2016, <https://www.weforum.org/agenda/2016/01/gdp>; 'Beyond GDP: Measuring What Counts for Economic and Social Performance', OECD, 27 November 2018, <http://www.oecd.org/social/beyond-gdp-9789264307292-en.htm>.

<sup>7</sup> APEC Policy Support Unit (PSU), 'Key Trends and Developments Relating to Trade and Investment Measures and Their Impact on the APEC Region: Trade, Inclusive Growth, and the Role of Policy'

A blind spot in SNA that Kuznets probably did not anticipate is rapid technological change and the digital economy. Digital technologies are significantly changing the nature of economic production and exchange. Instead of using printed paper maps to find directions, consumers now use applications such as Google Maps and Waze. While movies, music and software were previously stored in physical media such as cassettes, CDs and DVDs, firms such as Netflix and Spotify offer subscribers access to licensed content and digitally deliver them. E-commerce has created an additional channel for firms to market their products, while digital point-of-sale systems allow retailers to monitor revenue and inventory in near real time. Meanwhile, important communications services such as email, file-sharing and videoconferencing are provided to users for free by firms such as Gmail, Dropbox and Skype. Data analytics have enabled businesses to better target goods and services based on the needs and preferences of customers.

GDP, however, is unable to measure the economic welfare of improved goods and services brought about by technological innovations.<sup>8</sup> When improved technologies produce higher quality yet cheaper goods, their benefit to consumers tends to be higher than the price paid at retail.<sup>9</sup> But because GDP is calculated using the market price, it omits the significant improvement in consumer surplus generated by these goods. While statisticians have accounted for quality changes driven by technology in some products such as computers, rapid technological shift affecting a broad range of goods and services means that such improvements are likely not to be captured in a timely manner.<sup>10</sup> In fact, this measurement issue had been pointed as one of the reasons for the current digital productivity paradox observed by many researchers.<sup>11</sup>

Moreover, the benefits of many digital services are poorly captured by the SNA, and the resulting GDP estimates, because the medium of exchange is not always measured in dollars but in bytes.<sup>12</sup> While GDP can record the monetisation of data, such as revenue from targeted advertisements, it does not fully capture the economic benefits of this data and the services they enable (or the privacy and security costs of gathering this data). Moreover, an assumption in SNA – that monetary transactions happen when and where value is generated – is increasingly challenged in a digital economy. As mentioned above, many digital services are provided for free to users, while monetary transactions need not happen where value was created; for example, an online advertising service provided in one economy may be paid for in another economy. This also enables firms to shift reported revenues from one economy to another in order to minimise tax liabilities, in the process

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(Singapore: APEC, November 2015), <http://publications.apec.org/Publications/2015/11/Key-Trends-and-Developments-Relating-to-Trade-and-Investment-Measures-and-their-Impact-on-the-APEC-R>.

<sup>8</sup> Ilkka Ylhäinen, ‘Challenges of Measuring the Digital Economy’, Sitra, 12 June 2017, <https://www.sitra.fi/en/articles/challenges-measuring-digital-economy/>.

<sup>9</sup> For example, a Motorola DynaTAC cost nearly USD 4,000 in 1983 while the highest-end Apple iPhone 11 costs less than USD 900 today. However, the iPhone 11 is more functional, has longer battery life and weighs significantly less than the DynaTAC.

<sup>10</sup> Credit Suisse Research Institute, ‘The Future of GDP’ (Zurich: Credit Suisse, May 2018), <https://www.credit-suisse.com/media/assets/private-banking/docs/mx/the-future-of-gdp-en.pdf>.

<sup>11</sup> APEC PSU, ‘APEC Regional Trends Analysis: The Digital Productivity Paradox’ (Singapore: APEC, November 2018), <https://www.apec.org/Publications/2018/11/APEC-Regional-Trends-Analysis---The-Digital-Productivity-Paradox>.

<sup>12</sup> For examples, see International Monetary Fund (IMF), ‘Measuring the Digital Economy’ (Washington, DC: IMF, 2018), <https://www.imf.org/~media/Files/Publications/PP/2018/022818MeasuringDigitalEconomy.ashx>.

skewing GDP as well.<sup>13</sup> Indeed, the very concept of GDP – i.e., total value of goods and services produced within the borders of an economy – is increasingly challenged by the cross-border nature of the digital economy.

### 1.3 ALTERNATIVE MEASURES

The limitations of SNA have been known since the 1930s and alternatives to GDP have been discussed and studied for decades, with ideas explored ranging from making minor methodological tweaks to generating completely new indicators. In fact, researchers and policymakers already have a wide range of complementary metrics for the health of the economy apart from GDP and SNA. Labour force surveys<sup>14</sup> provide regular updates on participation in the workforce and unemployment rates, often disaggregated by sex. Many economies periodically conduct household and expenditure surveys to monitor poverty incidence and analyse income distribution.<sup>15</sup> Meanwhile, cross-economy and time-series calculations of carbon dioxide emissions from fossil fuel consumption and cement manufacturing can estimate the environmental impact of economic activities.<sup>16</sup>

Furthermore, efforts have been made to create an updated version of GDP that preserves the original structure but also accounts for missing sectors through satellite accounts. Satellite accounts act as proxy measures for contributions from cross-industry or new economic activities that are difficult to capture in GDP. One application of satellite accounts is the Tourism Satellite Account, which was approved by the United Nations (UN) in 2000. While tourism does not fall under one industry, economies can still estimate the size of the sector's contribution to the economy by amalgamating selected transactions in various sectors such as transportation, accommodation, food and beverage services, and travel agencies.<sup>17</sup>

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<sup>13</sup> Nadim Ahmad and Peter van de Ven, 'Measuring GDP in a Globalized World' (presentation for the *ESCoE Conference on Economic Measurement 2018*, London, UK, 16 May 2018), <https://www.escoe.ac.uk/wp-content/uploads/2018/06/EM2018-Ahmad-and-van-de-Ven.pdf>.

<sup>14</sup> For example, see 'Labour Force Surveys', International Labour Organization, updated 25 July 2017, [https://www.ilo.org/dyn/lfsurvey/lfsurvey.list?p\\_lang=en](https://www.ilo.org/dyn/lfsurvey/lfsurvey.list?p_lang=en).

<sup>15</sup> For comparable data, see World Bank's PovcalNet at <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>.

<sup>16</sup> Carbon Dioxide Information Analysis Center (CDIAC) data at [https://cdiac.ess-dive.lbl.gov/trends/emis/meth\\_reg.html](https://cdiac.ess-dive.lbl.gov/trends/emis/meth_reg.html).

<sup>17</sup> United Nations World Tourism Organization (UNWTO), 'Basic Concepts of the Tourism Satellite Account (TSA)' (UNWTO, n.d.), <http://statistics.unwto.org/sites/all/files/docpdf/concepts.pdf>.

Economies have also been working to adopt a satellite account to measure the digital economy. However, the process of designing one for the digital economy is not as straightforward as it was for tourism. First, economies have varying descriptions of the digital economy.<sup>18</sup> For example, some assume that the digital economy is restricted to digital goods and services, while others include the manufacture of electronics and computer parts.<sup>19</sup> Second, several digital goods and services, such as email and social media networking, have no established measure of economic value.<sup>20</sup> Nonetheless, working toward a satellite account for the digital economy will yield some crucial insights to refine GDP measures. As some transactions in the digital economy do not fall into traditional industries, creating a digital economy satellite account could help identify and address current gaps and omissions in the present GDP accounting methods.

Hulten and Nakamura have introduced a form of satellite account to assess the impact of the digital revolution.<sup>21</sup> This indicator, termed the expanded GDP (EGDP), maintains the original structure of GDP but adds an additional component to include benefits from the digital economy. It does so by correcting for utility that is not reflected in the GDP due to the absence of a monetary transaction. EGDP captures the value of a free service by measuring the consumers' willingness-to-pay for the service. They propose thinking of the added component to the GDP as the quaternary sector of the economy. While primary, secondary and tertiary sectors<sup>22</sup> measure the value of goods and paid services, the quaternary sector serves as a proxy for unpaid services. This sector would enable a more complete measure of the economy by including welfare gains derived from economic activity and innovation.

GDP has also been tweaked to take account of environmental damage in pursuing economic growth. The Green GDP maintains the original GDP calculation but includes another component which accounts for depletion of natural resources and degradation of the environment. The cost to the environment, measured by this additional component, is deducted from the GDP value. The idea of a Green GDP can be traced back to a 1987 UN report.<sup>23</sup> While no longer in use, the concept inspired numerous discussions that paved way for the first international framework for environmental accounting.<sup>24</sup> However, the implementation of Green GDP has been challenging due to difficulties in measuring environmental capital. Stjepanović, Tomić and Škare have evaluated the difference in GDP

<sup>18</sup> IMF, 'Measuring the Digital Economy'.

<sup>19</sup> Jennifer Ribarsky, 'Summary of Responses of the Advisory Group: Survey on Digital Economy Typology' (STD/CSSP/WPNA(2017)1, OECD, 22 September 2017), [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=STD/CSSP/WPNA\(2017\)1&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=STD/CSSP/WPNA(2017)1&docLanguage=En).

<sup>20</sup> Nadim Ahmad and Jennifer Ribarsky, 'Towards a Framework for Measuring the Digital Economy' (paper prepared for the 16th Conference of the International Association of Official Statisticians (IAOS), Paris, France, 19–21 September 2018), [http://www.oecd.org/iaos2018/programme/IAOS-OECD2018\\_Ahmad-Ribarsky.pdf](http://www.oecd.org/iaos2018/programme/IAOS-OECD2018_Ahmad-Ribarsky.pdf).

<sup>21</sup> Charles Hulten and Leonard Nakamura, 'Accounting for Growth in the Age of the Internet: The Importance of Output-Saving Technical Change' (Cambridge, MA: NBER, 2017), <https://www.nber.org/papers/w23315.pdf>.

<sup>22</sup> In GDP, the primary, secondary and tertiary sectors are the agricultural, industrial and services sectors, respectively.

<sup>23</sup> Knut H. Alfsen et al., 'International Experiences with "Green GDP"' (Oslo: Statistics Norway, 2006), [https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/International\\_Experiences\\_With\\_Green\\_GDP\\_SN.pdf](https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/International_Experiences_With_Green_GDP_SN.pdf).

<sup>24</sup> Saša Stjepanović, Daniel Tomić and Marinko Škare, 'A New Approach to Measuring Green GDP: A Cross-country Analysis', *Entrepreneurship and Sustainability Issues* 4, no. 4 (2017): 574–90.

and Green GDP for the year 2014 across 44 economies and found significant differences in almost all of them: about 1 percent for developed economies and around 3 percent for developing economies. This shows that while Green GDP is far from developed, it can capture a substantial part of the economy that is left out in traditional GDP calculations. In 2015, China's Ministry of Environmental Protection unveiled the Green GDP 2.0 to promote a transition toward a green economy.<sup>25</sup>

The Index of Sustainable Economic Welfare (ISEW) adjusts traditional GDP to measure economic welfare. Developed in the late 1980s, the index corrects the traditional components of GDP for inequality, removes government defence spending, and includes components such as domestic labour; private spending on divorce, crime or accidents; environmental damage; and depreciation of natural capital.<sup>26</sup> Economies such as Australia; Chile; Germany; and the United Kingdom have attempted to measure an economy-wide ISEW, but have faced difficulties due to lack of data availability and comparability.

The Genuine Progress Indicator (GPI) takes the ISEW a step further by adding inequality (measured by the Gini index) and loss of leisure time in its basket of indicators. Since leisure does not produce goods or services, it reduces GDP but contributes positively to happiness.<sup>27</sup> GPI adjusts GDP using 25 components, allowing it to be considered as a better form of measurement of wellbeing.<sup>28</sup> In 2010, the GPI was officially adopted as an alternative to GDP in the state of Maryland.<sup>29</sup> Since then, many other US states have estimated GPIs and several more are considering adopting it or are conducting studies on it. On a global level, GPI has been calculated in 20 economies and further research is being conducted to develop a GPI measure that is standardised and robust for comparison.<sup>30</sup>

Instead of adding components to GDP to measure true progress, the Human Development Index (HDI) assesses standard of living by considering three crucial aspects of development: health, knowledge, and material conditions. The HDI, introduced in 1990, includes life expectancy at birth, mean and expected years of schooling, and GDP per capita. It is considered especially effective in measuring progress in developing economies, but not very relevant to developed economies.<sup>31</sup> A key drawback of HDI is its reliance on average values, making it blind to distribution. Hence, the inequality-adjusted HDI (IHDI)

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<sup>25</sup> Ministry of Environmental Protection, China, 'MEP Resumes Researches on Green GDP', Ministry of Ecology and Environment, 30 March 2015, [http://english.mee.gov.cn/News\\_service/news\\_release/201504/t20150413\\_298904.shtml](http://english.mee.gov.cn/News_service/news_release/201504/t20150413_298904.shtml).

<sup>26</sup> Francesco Maria Chelli, Mariateresa Cionnmi and Chiara Gigliarano, 'The Index of Sustainable Economic Welfare: A Comparison of Two Italian Regions', *Procedia – Social and Behavioral Sciences* 81 (2013): 443–48.

<sup>27</sup> Jeroen van den Berg and Miklós Antal, 'Evaluating Alternatives to GDP as Measures of Social Welfare/Progress' (Vienna: WWWforEurope, 2014), [https://www.econstor.eu/bitstream/10419/125713/1/WWWforEurope\\_WPS\\_no056\\_MS211.pdf](https://www.econstor.eu/bitstream/10419/125713/1/WWWforEurope_WPS_no056_MS211.pdf).

<sup>28</sup> Ida Kubiszewski et al., 'Beyond GDP: Measuring and Achieving Global Genuine Progress', *Ecological Economics* 93 (2013): 57–68.

<sup>29</sup> Anders Hayden and Jeffrey Wilson, 'Taking the First Steps beyond GDP: Maryland's Experience in Measuring "Genuine Progress"', *Sustainability* 10, no. 2 (2018): 462.

<sup>30</sup> Ida Kubiszewski, 'Beyond GDP: Are There Better Ways to Measure Well-being?' *The Conversation* (Australia), 2 December 2014, <http://theconversation.com/beyond-gdp-are-there-better-ways-to-measure-well-being-33414>.

<sup>31</sup> van den Berg and Antal, 'Evaluating Alternatives to GDP as Measures of Social Welfare/Progress'.

was developed to account for distribution: the IHDI takes the three dimensions of HDI but discounts their values according to their level of inequality.<sup>32</sup>

The Gender Development Index (GDI)<sup>33</sup> takes the HDI one step further by introducing a gender element. Introduced in 1995, it assesses the same indicators – health, education and income – but also accounts for disparities between men and women. The GDI has been measured for 164 economies and has enabled a better understanding of how much women lag behind men and how much catching up is needed in each dimension of human development. In 2010, the UN started publishing the Gender Inequality Index (GII), which departs from the GDI by measuring gender inequalities in three distinct aspects of human development: reproductive health, empowerment, and economic status.<sup>34</sup> The GII has been calculated for 160 economies.

In 2012, the UN introduced a measure called the Inclusive Wealth Index (IWI), which considers sustainability of growth by accounting for human and natural capital in addition to the usual physical capital. The IWI incorporates several factors that are used in HDI to assess wellbeing; however, unlike HDI it measures change across a period of time, enabling better measurement of progress.<sup>35</sup> An evaluation of the IWI in 2012 found that substantial reductions in natural resources have undermined economic growth between 1990 and 2008 and will continue to put future growth at risk.<sup>36</sup> The 2018 Inclusive Wealth Report evaluated the IWI for 140 economies between 1990 and 2014 and found that only 81 of them were on a sustainable growth path.<sup>37</sup> The index hence acts as a tool to help policymakers decide whether a policy is sustainable. Likewise, the OECD's framework for measuring wellbeing considers not only current conditions but also the ability to ensure and sustain wellbeing into the future (see Box 1.1).

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<sup>32</sup> 'Inequality-adjusted Human Development Index (IHDI)', United Nations Development Programme: Human Development Reports, accessed 30 October 2019, <http://www.hdr.undp.org/en/content/inequality-adjusted-human-development-index-ihdi>.

<sup>33</sup> 'Gender Development Index (GDI)', United Nations Development Programme: Human Development Reports, accessed 30 October 2019, <http://hdr.undp.org/en/content/gender-development-index-gdi>.

<sup>34</sup> Indicators for reproductive health are maternal mortality ratio and adolescent birth rates. Indicators for empowerment are proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education. Economic status is measured by the labour force participation rate of female and male populations aged 15 years and older. See 'Gender Inequality Index (GII)', United Nations Development Programme: Human Development Reports, accessed 30 October 2019, <http://hdr.undp.org/en/content/gender-inequality-index-gii>.

<sup>35</sup> Jenny Marusiak, 'New UN Index Seeks to Oust GDP', *Eco-Business*, 18 June 2012, <https://www.eco-business.com/news/new-un-index-seeks-to-oust-gdp/>.

<sup>36</sup> Secretariat of the International Human Dimensions Programme on Global Environmental Change (UNU-IHDP) and United Nations Environment Programme (UNEP), 'Inclusive Wealth Report 2012. Measuring Progress toward Sustainability. Summary for Decision-Makers' (Bonn: UNU-IHDP, 2012), <http://www.ihdp.unu.edu/docs/Publications/Secretariat/Reports/SDMs/IWR%20SDM%20Low%20Resolution.pdf>.

<sup>37</sup> UNEP, 'Inclusive Wealth Report 2018. Executive Summary' (Nairobi: UNEP, 2018), [https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/inclusive\\_wealth\\_report\\_2018\\_executive%20summary%20%281%29.pdf](https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/inclusive_wealth_report_2018_executive%20summary%20%281%29.pdf).



### Box 1.1. The OECD approach to measuring wellbeing

How can we move beyond GDP? The first step is to provide a clear definition of the concepts at stake.

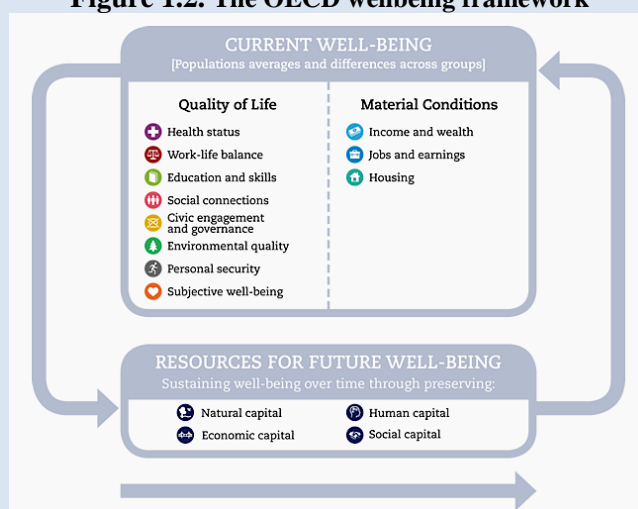
The OECD has done so, building on the recommendations of the Stiglitz, Sen and Fitoussi Commission on the Measurement of Economic Performance and Social Progress, through a conceptual framework that distinguishes between ‘current wellbeing’ (the upper part of Figure 1.2) and its ‘sustainability’ (the lower part).<sup>a</sup>

Current wellbeing is about outcomes that are intrinsically important to people, and which can be described by looking at the two dimensions of ‘material conditions’ (i.e., people’s command over commodities) and ‘quality of life’ (i.e., people’s attributes and non-market activities) and at 11 more detailed dimensions within them. Sustainability is about maintaining those resources that are critical for wellbeing to last over time, which requires considering four types of capital (economic, natural, human and social capital) whose stocks are affected by today’s actions and whose benefits accrue over time.

Distinctive features of the OECD approach are: (1) putting people (individuals and households) at the centre of the assessment; (2) focusing on wellbeing outcomes rather than the inputs and outputs used to deliver those outcomes; (3) considering the distribution of all outcomes across the population, including disparities associated with age, gender, education and income; and (4) featuring both objective and subjective aspects, i.e., how people feel about their lives.

The second step is to operationalise the framework by identifying a set of indicators used to regularly monitor and benchmark the performance of economies in this broad set of dimensions. The selection done by the OECD was based on a set of criteria (on the relevance and statistical quality of indicators), building on the inputs provided by statistical offices represented in the OECD Committee on Statistics and Statistical Policy.

**Figure 1.2. The OECD wellbeing framework**



Source: OECD, *How's Life? 2017: Measuring Well-being* (Paris: OECD Publishing, 2017).

The dashboard used by the OECD (which is currently being revised) includes around 25 indicators pertaining to: (1) average levels of current wellbeing; (2) inequalities in wellbeing outcomes (both vertical and horizontal/group inequalities, as well as outcomes at the lower end of the distribution); and (3) resources for the future (described through measures of the stocks, flows and risks pertaining to the four types of capital mentioned earlier). To aid in communicating these indicators, a ‘well-being wheel’ is produced to enable an at-a-glance interpretation of these indicators.<sup>b</sup>

While reporting on member economies’ performances is a critical feature of the OECD flagship report *How's Life?*, other OECD activities aim at: (1) using these wellbeing metrics in OECD policy analysis (e.g., in economy reviews); (2) developing better metrics for aspects of people’s life that currently lack an adequate foundation within the statistical system (through a series of methodological guidelines);

(3) adapting the framework to new uses and context (e.g., subnational analysis); (4) communicating with the public (e.g., the OECD Better Life Index); and (5) building on economies' experiences (such as the New Zealand 2019 Wellbeing Budget) to identify best approaches to anchor these metrics in the policy machinery and institutional structure of individual economies and regions.

*Contributed by: Statistics and Data Directorate and the Sherpa Office and Global Governance Unit, OECD.*

Notes:

<sup>a</sup> Joseph E. Stiglitz, Amartya Sen and Jean-Paul Fitoussi, 'Report by the Commission on the Measurement of Economic Performance and Social Progress' (2009), <https://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report>.

<sup>b</sup> Wellbeing wheels can be found in OECD, *How's Life? 2017: Measuring Well-being* (Paris: OECD Publishing, 2017).

However, despite the existence of alternatives to GDP, there is no consensus yet on which to use. Several economies have adopted some of the indicators discussed above to complement their measure of GDP, but most of these indicators are not being consistently measured across time or economies. The BRAINPOoL project,<sup>38</sup> a European Union-funded study conducted between 2011 and 2014, explored why some beyond-GDP indicators were successful while others were not. The project identified barriers to implementing alternatives to GDP, which could be organised into five categories:

1. **Resource constraints.** Budget constraints for statistical services pose a barrier to identification of new statistical tools that can measure wellbeing. Data are also often limited to a particular timeframe or geographical region, preventing complete and accurate analysis of an indicator. Inadequate time-series data pose a challenge in modelling econometric relationships.
2. **Resistance.** Existing traditional models are well-established and robust, hence perceived norms, risk aversion and habit prevent acceptance of new measures. The belief that economic growth will automatically bring shared prosperity also prevents people from accepting an alternative to GDP. Some actors also perceive GDP growth to be the most important objective, surpassing all other concerns.
3. **Communication.** There is a lot of confusion regarding the concepts and terminology used by different actors since most of the alternative indicators are not well-established. Furthermore, lack of clear communication on the different competing indicators causes more confusion, and most alternative indicators lack a strong narrative to excite stakeholders.
4. **Complexity.** Some of the alternative indicators are more complex than GDP and may be difficult to convey as clearly. Since some of the indicators are composite indices, they may also be difficult to interpret due to their complex methodology and unclear weighting systems. Even among those who favour measurements of wellbeing, there is no clear consensus on the factors to be included.
5. **Disorganisation.** The complexities of wellbeing require a more dynamic approach, which involves working across organisations and departments. An innovative policymaking process is needed which is usually difficult to achieve in

<sup>38</sup> BRAINPOoL stands for BRinging Alternative Indicators into POLicy. See European Commission, 'BRinging Alternative Indicators into POLicy', CORDIS, updated 6 February 2015, <https://cordis.europa.eu/project/rcn/100577/reporting/en>.

bureaucracies. Most importantly, identifying potential user organisations is necessary when developing new indicators. Indicators are unlikely to be used if they are developed in isolation from the agenda-setting or policymaking process. There is a need for more ‘indicator entrepreneurs’ to recognise opportunities to develop new indicators, tweak old ones and/or communicate them to the people who will benefit from them.

## 1.4 GOING BEYOND GDP

There is a clear research and policy need to regularly and accurately measure GDP. Data on the total value of market exchanges are an important barometer of an economy’s health and provide researchers and policymakers with important empirical evidence to guide discussions. Indeed, the next section of this publication reports on GDP, trade and investment trends in the APEC region, and it will continue to do so in the coming issues. Risks to economic and trade growth need to be monitored, and SNA and GDP provide us with the data necessary to monitor those risks.

GDP is not the problem, but overreliance on GDP is. GDP represents one important aspect of economic success, but not the only one. Reducing all economic policy discussions to their impact on GDP growth is an oversimplification of complex economic interactions and impacts. It renders all other attributes of the economy – such as distribution, inclusion and sustainability – as secondary considerations to maximising output. Even Kuznets warned against the ‘Uses and Abuses of National Income Measurements’ in 1934:

With quantitative measurements especially, the definiteness suggests, often misleadingly, a precision and simplicity in the outlines of the object measured. Measurements of national income are subject to this type of illusion and resulting abuse, especially since they deal with matters that are the center of conflict of opposing social groups where the effectiveness of an argument is often contingent upon oversimplification.<sup>39</sup>

Going back to the streetlight analogy from the start of this chapter, the object of the joke is not the streetlight but the economist who is looking around where the keys are not to be found, out of convenience. The remedy is not to turn off the current streetlight, but to find alternative sources of illumination closer to where the keys were dropped. Likewise, the availability, comparability and longevity of GDP data should not drown out alternative measures of economic benefits and costs that could be better suited to inform some policy discussions.

APEC Leaders have been calling for balanced, inclusive, sustainable, innovative and secure growth since 2010;<sup>40</sup> and alternative measurements are needed to track progress and inform policy. Discussions on improving current data and developing new ones are already happening in various APEC fora. For example, discussions are ongoing in the Human Resources Development Working Group on improving the collection, harmonisation and reporting of labour market data that can inform on people-to-people connectivity as well as digital employment. The Group on Services is working on an APEC index measuring the services regulatory environment in member economies. The Economic Committee’s 2019 APEC Economic Policy Report on Structural Reform and the Digital Economy calls

<sup>39</sup> Kuznets, ‘National Income, 1929–1932’, 5–6.

<sup>40</sup> ‘APEC Leaders’ Growth Strategy’, APEC, 14 November 2010, [https://www.apec.org/Meeting-Papers/Leaders-Declarations/2010/2010\\_aelm/growth-strategy.aspx](https://www.apec.org/Meeting-Papers/Leaders-Declarations/2010/2010_aelm/growth-strategy.aspx).

for a multi-pronged approach to enhance digital economy measurements, including accurately measuring digital and digitally facilitated flows, better monitoring of digital transformation, and analysing the implications of existing policies and regulations for the digital economy.<sup>41</sup> Meanwhile, the 2019 Women and the Economy Forum Statement is calling for greater efforts to collect, analyse, disseminate and leverage sex-disaggregated data.<sup>42</sup>

Regional cooperation is crucial in this endeavour. GDP did not go from an NBER concept to a global standard overnight. It took regional cooperation – first at the League of Nations then the UN – to nail down the concepts, definitions and methodologies for SNA and GDP. As an incubator of ideas, APEC can contribute to the conversation on developing measures of wellbeing beyond GDP and in line with Leaders’ priorities beyond 2020.

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<sup>41</sup> APEC, ‘APEC Economic Policy Report 2019: Structural Reform and the Digital Economy’ (Singapore: APEC, 2019), <https://www.apec.org/Publications/2019/11/2019-APEC-Economic-Policy-Report>.

<sup>42</sup> ‘2019 Women and Economy Forum’, APEC, 4 October 2019, [https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Women/2019\\_women](https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Women/2019_women).

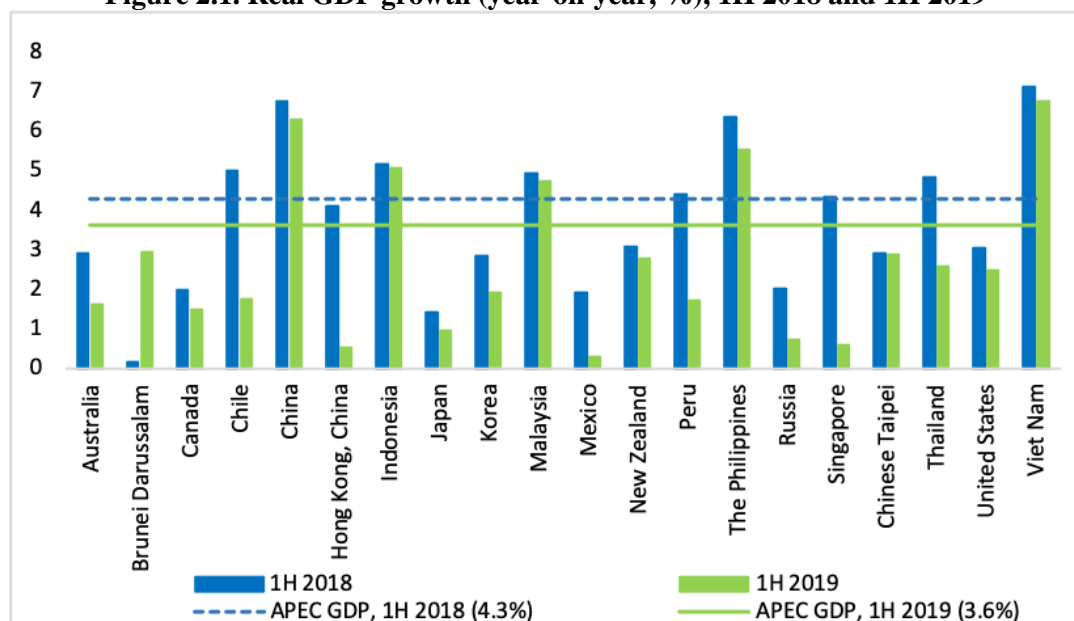
## 2 SLOWER GROWTH, BIGGER CHALLENGES<sup>43</sup>

### 2.1 APEC GDP GROWTH

Uncertainty is slowing down global economic activity. A combination of factors, particularly the more pronounced and prolonged trade tensions, aggravated by technology-related differences and Brexit-related disagreements, have fuelled this uncertainty. Inability to resolve these issues has dampened investment and consumer demand as businesses and households alike hold back on spending, reflecting weakened confidence in the global economy.

Within the APEC region, uncertainty on the external front has translated into a general moderation in growth, with most economies recording lower GDP growth in the first half of 2019 compared to the year-ago level. As a whole, the APEC region expanded at a slower pace of 3.6 percent in January–June 2019 from a 4.3 percent GDP growth in January–June 2018 (Figure 2.1).

**Figure 2.1. Real GDP growth (year-on-year, %), 1H 2018 and 1H 2019**

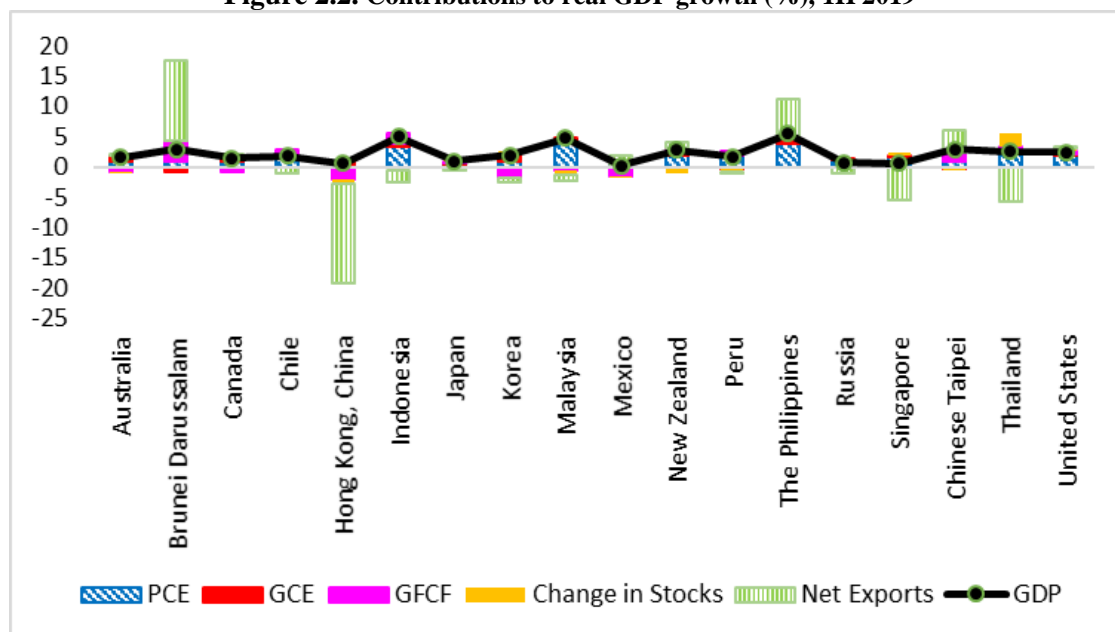


Note: Semi-annual GDP growth rates are not available for Papua New Guinea.

Source: Economy sources; IMF World Economic Outlook (WEO) database (October 2019); APEC Policy Support Unit staff calculations.

As with past periods, APEC economies continued to rely on household spending as the main driver of growth, with some contribution from government consumption. However, there is an observed slowdown in overall domestic consumption, while investment growth was flat during the first half of 2019. The challenging external environment, marked by heightened uncertainty, has negatively affected investor and consumer sentiment, resulting in a pullback in investments and consumption. These factors combined with trade barriers affected trade performance, with most APEC economies recording negative net exports in the first six months of 2019 following consecutive periods of growth (Figure 2.2).

<sup>43</sup> Prepared by Rhea C. Hernando, APEC Policy Support Unit (PSU).

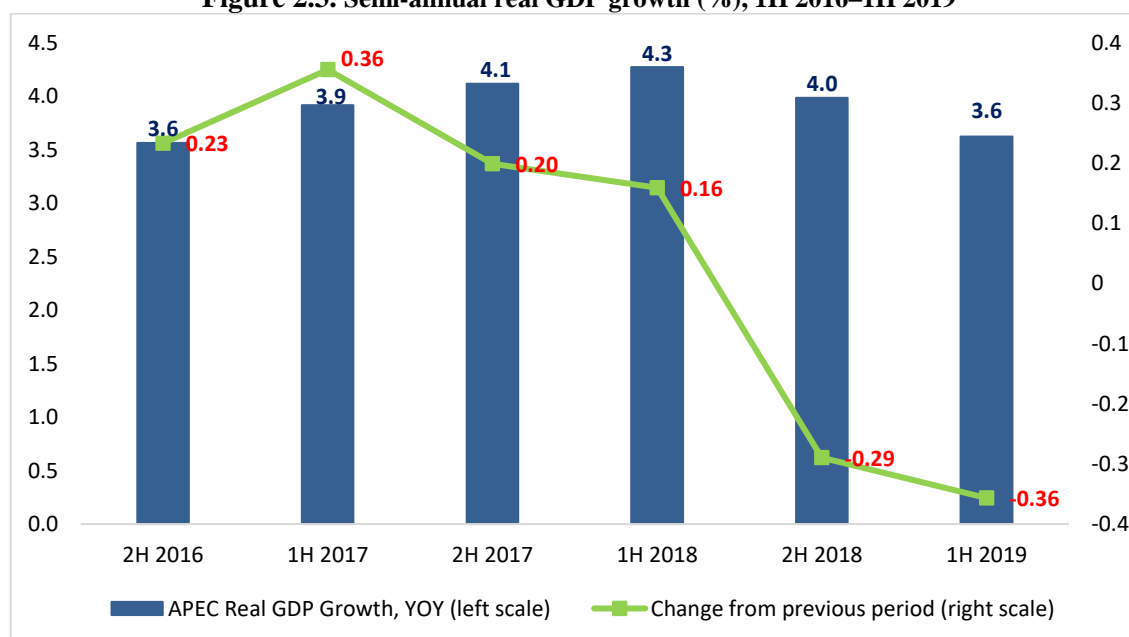
**Figure 2.2. Contributions to real GDP growth (%), 1H 2019**

PCE=private consumption expenditure; GCE=government consumption expenditure; GFCF=gross fixed capital formation.

Note: Data on GDP by expenditure not available for China; Papua New Guinea; and Viet Nam.

Source: Economy sources; APEC Policy Support Unit staff calculations.

The APEC GDP growth rate continued to decelerate from the second half of 2017, entering negative territory in the recent two semesters (Figure 2.3). The moderating pace of APEC growth mirrored the escalating trade tensions in the region, from the onset of trade disputes toward the end of 2017, to the imposition of tariffs and countermeasures that covered a wider set of products in 2018, and extending into technology-related tensions this year.

**Figure 2.3. Semi-annual real GDP growth (%), 1H 2016–1H 2019**

Note: The semi-annual weighted GDP growth rate does not include Papua New Guinea due to unavailability of semi-annual data.

Source: Economy sources; APEC Policy Support Unit staff calculations.

The impact of adverse global conditions on the pace of domestic economic activity suggests that growth stands to be precarious if economies continue to depend heavily on domestic consumption to fuel growth. Ongoing challenges on the external front necessitate that APEC economies consider new sources of growth beyond household spending to steer the region toward a path of sustainable and inclusive growth.

Mindful of the level of economic development and given monetary and fiscal spaces, APEC economies could implement policies that support growth requirements while keeping risks at bay. Transformative policies need not be disruptive if designed in a manner that includes consultation with key stakeholders and the general public and if implemented with proper sequencing, keeping in mind their impact and relevance. For example, economies that have sufficient digital infrastructure could harness digital opportunities, including integrating technology with financial services towards greater financial inclusion. Other economies with adequate fiscal policy space could launch measures that would create jobs and augment household incomes.

APEC economies will have different priorities based on what is appropriate given their economic and development circumstances, but it is imperative that members continue to implement and adopt initiatives that support the region's inclusive growth agenda.

One important initiative that has been consistently emphasised in the APEC agenda is women's economic empowerment. Research has shown that there are significant macroeconomic gains and positive development externalities from increased women's participation in the economy. Gender equality leads to higher economic growth, enhances overall productivity, improves corporate profitability, boosts economic resilience and contributes to better development outcomes, including in health conditions for both women and children.<sup>44</sup> Therefore, it will serve APEC and the global economy well to exert intensified and consistent efforts to address regulatory barriers and change cultural mindsets, including gender stereotypes, while increasing opportunities that will allow more women to engage in economic undertakings (Box 2.1).

**Box 2.1. Fostering inclusive growth through  
women's economic participation: The APEC way**

Women's economic empowerment and social inclusion have remained at the forefront of APEC's agenda for almost a decade now. The creation of new economic opportunities for women constituted one of the priorities under the inclusive growth attribute of the APEC Growth Strategy 2010. APEC strengthened its commitment to promote women's economic engagement with the establishment of the Policy Partnership on Women and the Economy (PPWE) in May 2011. The PPWE is the main fora tasked with incorporating gender perspectives into policy discussions, and coordinating gender activities across APEC economies and within APEC working groups.

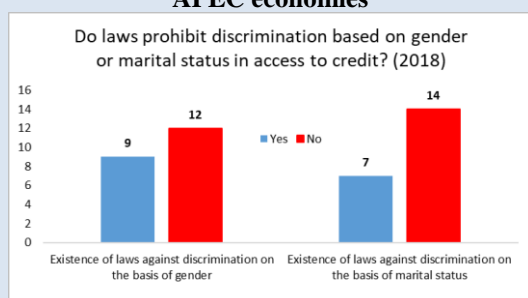
The APEC Women and the Economy Dashboard is one of the main tools that the PPWE uses to inform its policy discussions. The Dashboard, published biennially by the APEC Policy Support Unit (PSU) starting in 2015, seeks to provide a snapshot of the status of women's economic participation and social inclusion in the APEC region by tracking progress in a set of indicators. The Dashboard currently includes 95 indicators which are grouped according to the five priority pillars identified by the PPWE: (1) access to capital and assets; (2) access to markets; (3) skills, capacity building, and health; (4) leadership, voice and agency; and (5) innovation and technology. The 2019 Dashboard shows remarkable improvements in women's economic participation and social inclusion as well as prevailing gaps and barriers.

<sup>44</sup> International Monetary Fund (IMF), 'Pursuing Women's Economic Empowerment' (Washington, DC: IMF, May 2018).



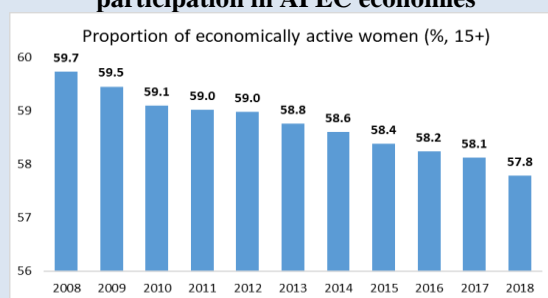
In terms of access to capital and assets, laws have consistently protected women's rights to property and inheritance in the majority of APEC economies. This is important because ownership of property provides women with income and security that could influence decisions affecting their present and future socioeconomic conditions. For example, women could use these assets as collateral when applying for loans to start a business. However, women still face double constraints in terms of access to credit, with less than half of APEC economies mandating non-discrimination by creditors based on gender or marital status (Figure 2.4).

**Figure 2.4. Access to credit in APEC economies**



Source: World Bank – Women, Business and the Law.

**Figure 2.5. Women's labour force participation in APEC economies**



Source: World Bank – World Development Indicators.

Women's financial inclusion is a necessary prerequisite of the inclusive growth agenda. This means access to financial services, via both traditional formal institutions and digital financial services. In APEC, the percentage of women who saved at a financial institution has remained low over the years, from 31.3 percent in 2011 to 33.9 percent as of 2017. The lack or absence of financial records makes it difficult to assess financial capability or responsibility, impeding women's access to credit, with important implications for their ability to set up a small business or earn income.

Moreover, women's labour force participation rate in APEC has declined steadily during the period 2008–2018 (Figure 2.5), and women's participation in the workforce is lower than men's in all APEC economies.<sup>a</sup> A possible contributing factor is that women continue to face legal restrictions and discriminatory practices that hinder their entry to and hasten their exit from the labour market. For example, not all APEC economies allow women to work in the same jobs as men; some have laws prohibiting women from working in non-traditional sectors such as mining and construction, and in jobs with physical requirements.

Compounding these regulatory challenges that hinder entry to the labour market are the inadequate support coupled with inconsistent laws that discourage women from staying economically active. Although 18 APEC economies have laws against gender discrimination in hiring, 19 out of the 21 APEC economies do not have laws that prohibit prospective employers from asking about a candidate's family status during job interviews. This is a discriminatory hiring practice since family status is irrelevant in assessing an applicant's capability vis-à-vis the job requirement, and it puts female candidates at a disadvantage even at the initial recruitment stage.

In addition, while it is notable that most APEC economies have enacted laws that penalise or prevent the dismissal of pregnant women from work along with legislation that mandates maternity leave, only 11 out of the 21 members guarantee an employee's return to an equivalent position after maternity leave. Moreover, only 10 out of the 21 APEC economies mandate parental leave and grant tax deductions for payment for childcare services. These inadequacies in the law could discourage women from returning to the workforce after giving birth. The disadvantages faced by women in staying employed and returning to work during their reproductive years have contributed to a significant wage gap between men and women.<sup>b</sup>

It is also conspicuous that, as of 2018, only eight APEC economies mandate equal pay for men and women doing work of equal value; and this number has moved only marginally in a decade, from six economies in 2008. The wage gap is a persistent issue that worsens women's conditions in the labour markets. On top of not having the same level of access and range of economic opportunities as men, when women do participate in the labour market, they do not receive the same remuneration as men for doing equal work.



The consequences of these inadequacies extend to women's role in political leadership. Although the participation of women in political decision-making has increased, it remains low, peaking at around 20–22 percent share of women in parliament in the last ten years.

There are other important factors that impact on women's economic participation, including opportunities for education and skills development; access to healthcare and social protection; environmental conditions; as well as safety in the home, workplace and public spaces. Certain sociocultural attitudes and gender stereotypes can also hinder women's economic participation. These factors have significant implications for the equitability of access and opportunities available to women, and need to be addressed if women are to achieve economic empowerment.

APEC has taken definitive strides toward advancing women's economic empowerment and social inclusion by pursuing legal reforms that pave the way for women to participate in the economy. A recent PSU report found that structural reforms to improve women's access to labour markets, finance and capital are transformative if they are informed by data.<sup>c</sup> Making policies work for women requires sex-disaggregated data and consultation with relevant stakeholders to ensure that structural reforms target barriers to women's economic participation. Equally critical is government commitment to the reform, including forming a coordinating body to ensure that key stakeholders from the public and private sectors together with the general population are moving in the same direction.

The next game-changer is the implementation and enforcement of such laws so that these translate into improved women's access to capital and labour markets and increased opportunities for economic involvement and leadership roles. Finally, regular monitoring of progress and prevailing gaps will help in ensuring that laws are mutually reinforcing and remain focused on the objective of women's economic participation.

Work on structural reforms to change women's status in the economy should begin now if economies have not started yet. There is no one way toward inclusive growth, but advancing women's economic empowerment is one important pathway that APEC has taken and which the rest of the world could learn from.

*The above is based on the results of the APEC Women and the Economy Dashboard 2019, available at <https://www.apec.org/Publications/2019/10/The-APEC-Women-and-the-Economy-Dashboard-2019>.*

Notes:

<sup>a</sup> APEC, 'APEC Economic Policy Report 2017: Structural Reform and Human Capital Development' (Singapore: APEC, 2017), <https://www.apec.org/Publications/2017/11/2017-APEC-Economic-Policy-Report>.

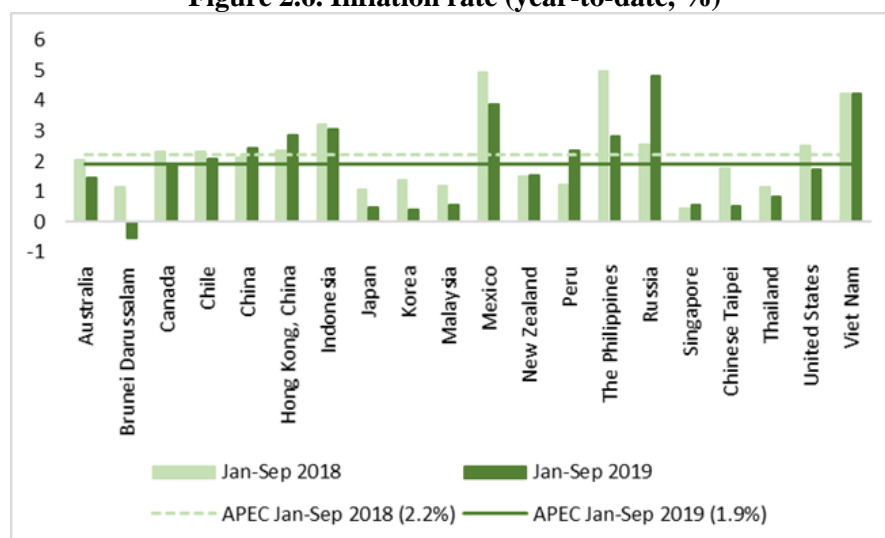
<sup>b</sup> Australian Council of Trade Unions (ACTU), 'The Gender Pay Gap over the Life Cycle' (Melbourne: ACTU, 2016), <https://www.actu.org.au/media/886499/the-gender-pay-gap-over-the-life-cycle-h2.pdf>; Monica Costa Dias, Robert Joyce and Francesca Parodi, 'Wage Progression and the Gender Wage Gap: The Causal Impact of Hours of Work' (Institute for Fiscal Studies, 2018), <https://www.ifs.org.uk/uploads/publications/bns/BN223.pdf>.

<sup>c</sup> The report is available at: APEC, 'Structural Reform Measures to Improve Women's Access to Labor Markets, Finance and Capital' (Singapore: APEC, 2019), <https://www.apec.org/Publications/2019/10/Structural-Reform-Measures-to-Improve-Womens-Access-to-Labor-Markets-Finance-and-Capital>.

## 2.2 INFLATION AND MONETARY POLICY

Inflation in the APEC region averaged lower during January–September 2019 at 1.9 percent compared to 2.2 percent in January–September 2018, reflecting a significant reduction in the prices of global commodities, led by a 26.9 percent decline in coal prices while energy prices were also lower by 17.6 percent (Figure 2.6).<sup>45</sup>

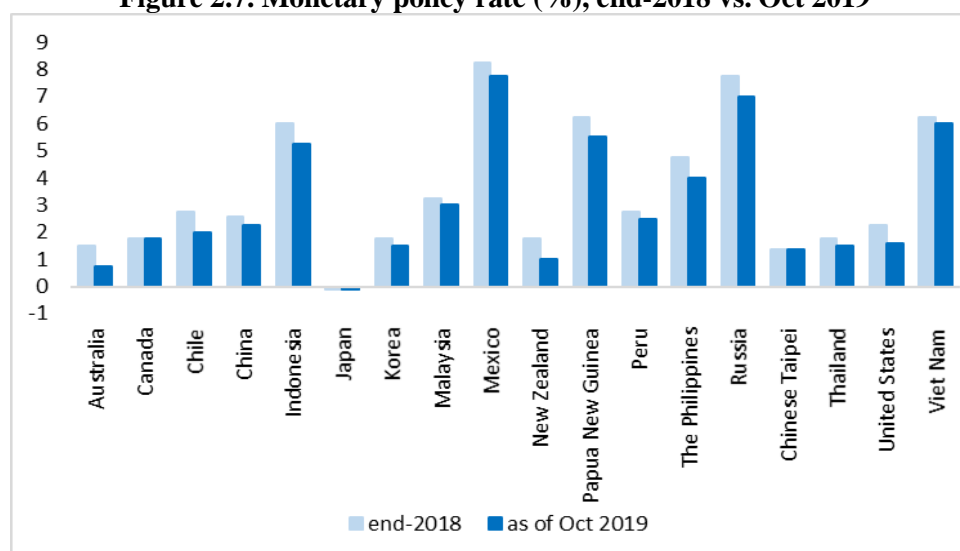
**Figure 2.6. Inflation rate (year-to-date, %)**



Note: Data for Brunei Darussalam covered January–August 2019. Data not available for Papua New Guinea.

Source: Economy sources; APEC Policy Support Unit staff calculations.

**Figure 2.7. Monetary policy rate (%), end-2018 vs. Oct 2019**



Note: The monetary policy framework in Brunei Darussalam is based on a currency board system, with the Brunei dollar anchored to the Singapore dollar at par. Hong Kong, China maintains a currency board system pegged against the US dollar. For Singapore, monetary policy is conducted through the trade-weighted exchange rate, which is allowed to fluctuate within a policy band. The operating targets for the S\$NEER are expressed in the level, slope and width of the policy band which determines the direction of monetary policy.

Source: Economy sources.

<sup>45</sup> Commodity prices are sourced from the IMF Primary Commodity Prices.

Muted inflation coupled with sluggish demand prompted APEC economies to reduce their benchmark monetary policy rates in order to support economic activity, while Japan maintained a negative interest rate policy (Figure 2.7). The same conditions were cited by the Monetary Authority of Singapore when it decided, in its 14 October 2019 meeting, to reduce slightly the rate of appreciation of the S\$NEER policy band while maintaining the width and the level at which it is centred.

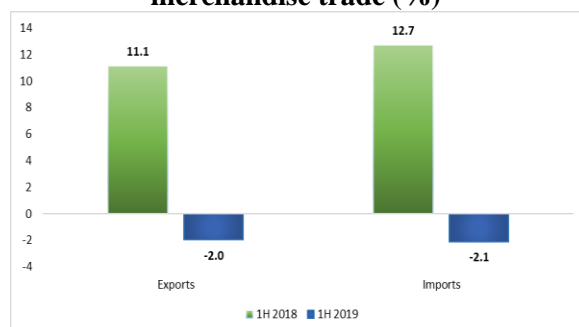
So far, in 2019, the US Federal Open Market Committee (FOMC) has moved to cut interest rates thrice by a quarter of a percentage point each on 31 July, 18 September, and 30 October to 1.50-1.75 percent. The FOMC last reduced its target range for the federal funds rate in 2008. Aside from taking into account continued economic growth and strong labour market conditions amid benign inflation conditions, the FOMC's policy decisions constitute precautionary moves to counter the impact of uncertainty on economic prospects. As of its 29-30 October 2019 meeting, the US FOMC signalled that it will continue to monitor information critical to assessing whether monetary policy settings remain supportive of inflation and growth objectives.<sup>46</sup>

### 2.3 TRADE PERFORMANCE

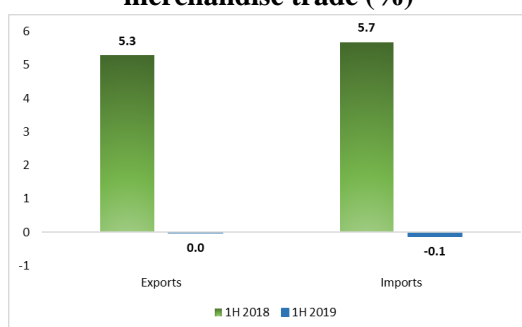
Ongoing trade actions by economies, characterised by the imposition of trade-restricting and retaliatory measures, have taken a toll on trade growth, significantly diminishing past gains, with the value and volume of merchandise trade posting contractions during the first six months of 2019 compared to the same period in 2018 (Figures 2.8 and 2.9).

Growth in the volume of merchandise exports in the first half of 2019 was flat after a relatively strong performance of 5.3 percent in the first half of 2018, while the value of merchandise exports contracted by 2.0 percent from 11.1 percent during the same period. Growth in the value and volume of merchandise imports also moved downwards.

**Figure 2.8. Growth in the value of merchandise trade (%)**



**Figure 2.9. Growth in the volume of merchandise trade (%)**



Note: APEC average growth does not include Brunei Darussalam and Papua New Guinea due to data unavailability.

Source: WTO for trade values; UNCTAD Statistics for trade volume; APEC Policy Support Unit staff calculations.

Compared with the trade contraction of 3.4–3.6 percent in the rest of the world (ROW), the decline in APEC's merchandise trade growth is lower at 2.0–2.1 percent. However, it remains a concern that global merchandise trade is tracking a contractionary path (Table 2.1).

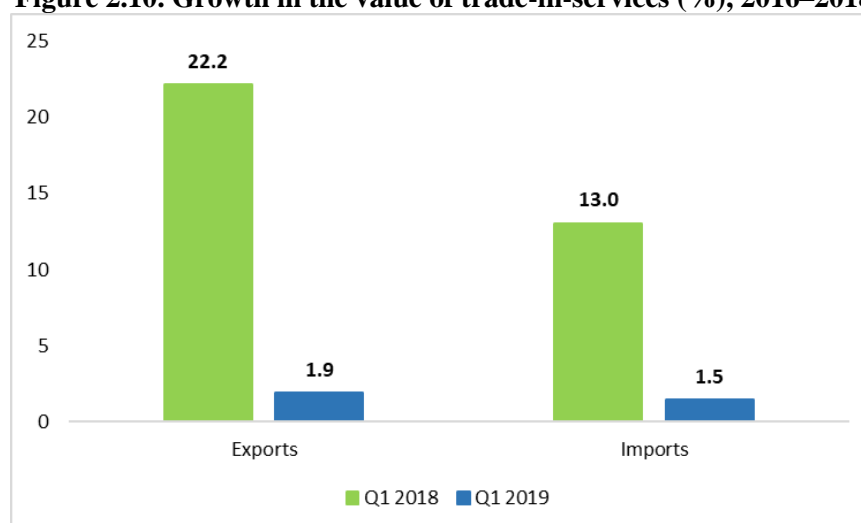
<sup>46</sup> See: US Federal Reserve Press Release, 29-30 October 2019, <https://www.federalreserve.gov/monetarypolicy/files/monetary20191030a1.pdf>

**Table 2.1. Value and growth in merchandise trade, 1H 2017–1H 2019**

	Value (billion USD)			Growth (y-o-y, %)	
	1H 2017	1H 2018	1H 2019	1H 2018	1H 2019
<b>Merchandise Exports</b>					
World	8403	9566	9298	13.8	-2.8
APEC	4191	4657	4565	11.1	-2.0
Rest of the World (ROW)	4212	4909	4733	16.5	-3.6
<b>Merchandise Imports</b>					
World	8609	9791	9521	13.7	-2.8
APEC	4273	4816	4714	12.7	-2.1
ROW	4336	4975	4807	14.7	-3.4
<b>APEC's Share of the World (%)</b>					
Merchandise Exports	49.9	48.7	49.1		
Merchandise Imports	49.6	49.2	49.5		

Source: WTO.

Trade-in-services continued to grow but at a significantly slower pace as of the latest available data in the first quarter of 2019 compared to the same period in 2018. Services exports and imports grew at a markedly slower pace of 1.9 percent and 1.5 percent, respectively, in the first quarter of 2019 compared to 22.2 percent and 13 percent in the same period in 2018 (Figure 2.10).

**Figure 2.10. Growth in the value of trade-in-services (%), 2016–2018**

Source: UNCTAD.

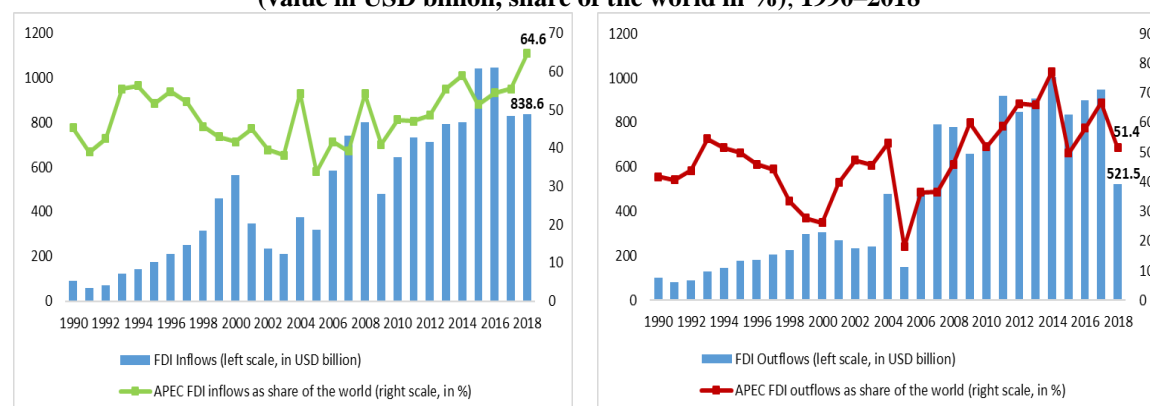
## 2.4 INVESTMENT TRENDS

Preliminary data for the first half of 2019 point to a 24 percent increase in global flows of foreign direct investment (FDI) to USD 640 billion compared to USD 517 billion in the same period in 2018. However, removing the impact of one-off transactions and intra-firm financial flows reveals that the underlying FDI trend went up by only 4 percent. Six of the top 10 FDI recipients for January–June 2019 were APEC economies, including the United States (USD 143 billion); China (USD 73 billion); Singapore (USD 54 billion); Canada (USD 23 billion); Australia (USD 23 billion); and Hong Kong, China (USD 20 billion).<sup>47</sup>

<sup>47</sup> United Nations Conference on Trade and Development (UNCTAD), 'Investment Trends Monitor', no. 32 (UNCTAD, October 2019).

For the whole year 2018, the APEC region attracted a total of USD 838.6 billion of FDI, equivalent to 64.6 percent of the world's FDI; while FDI outflows from APEC as share of the world trended lower (Figure 2.11).

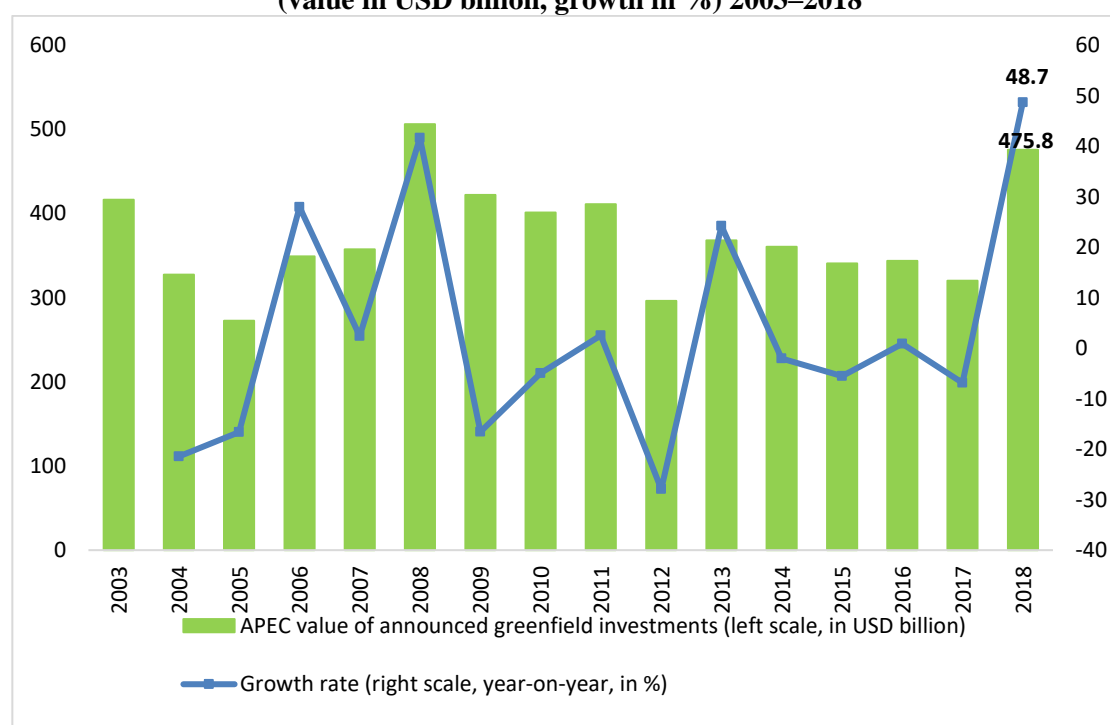
**Figure 2.11. APEC FDI inflows and APEC FDI outflows**  
(value in USD billion, share of the world in %), 1990–2018



Source: UNCTAD World Investment Report 2019.

In terms of growth, inward FDI flows to APEC expanded slightly by 1 percent in 2018. This is in contrast to the 13.4 percent decline in world FDI flows. In addition, outflows of FDI from APEC were significantly lower, by 45.1 percent in 2018. The combination of higher FDI inflows and lower FDI outflows could be attributed mainly to better growth prospects as the APEC region continues to expand, albeit at a moderated pace amid global uncertainty. Continued growth has encouraged foreign companies to reinvest their profits in the region while others have started to consider APEC as a viable investment destination.

**Figure 2.12. Value of announced greenfield investments in APEC**  
(value in USD billion, growth in %) 2003–2018



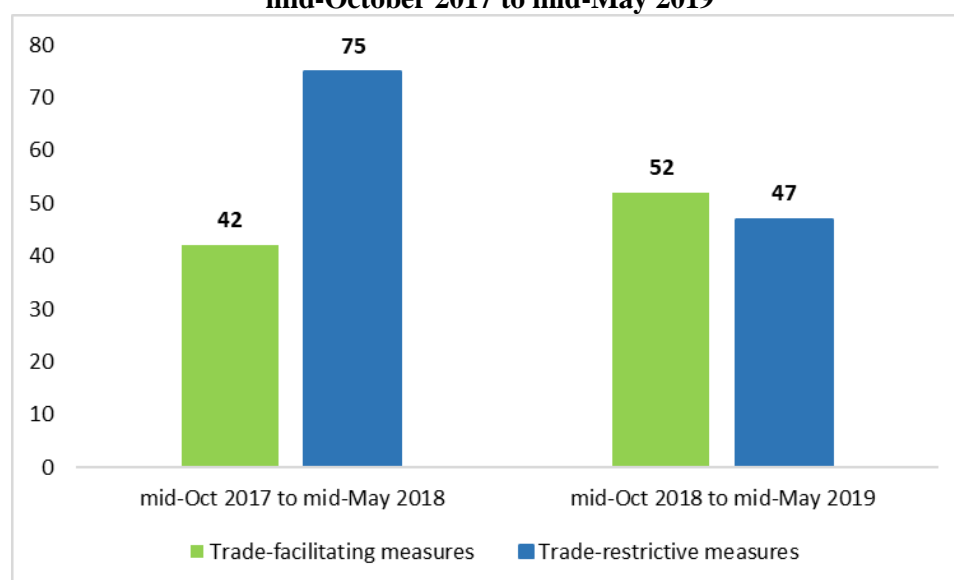
Source: UNCTAD World Investment Report 2019.

Mirroring the increase in FDI inflows, the value of greenfield investments in APEC notably went up to USD 475.8 billion in 2018, corresponding to a growth of 48.7 percent compared to the year-ago level (Figure 2.12). This is a welcome development because economies benefit from greenfield investments since they require the transfer of resources, equipment, technology and skills from the investor to the economy.

## 2.5 TRADE AND INVESTMENT MEASURES

Restrictive trade measures have adversely affected growth, albeit with a lag effect. In particular, the spike in trade-restricting measures during the period mid-October 2017 to mid-May 2018 has contributed to a significant slowdown in trade performance in the first half of 2019. For the period mid-October 2018 to mid-May 2019, the number of measures that restrict trade have gone down while trade-facilitating measures have increased slightly (Figure 2.13).

**Figure 2.13. Trade and trade-related measures in APEC (actual number), mid-October 2017 to mid-May 2019**



Source: WTO.

The initiation of anti-dumping, countervailing and safeguard investigations continued to dominate the measures restricting trade, accounting for the bulk of total trade-restrictive measures implemented during the period mid-October 2018 to mid-May 2019 (Table 2.2).<sup>48</sup>

<sup>48</sup> For a complete and detailed listing of trade and trade-related measures implemented during the period mid-October 2018 to mid-May 2019, see: APEC, 'Annex 1: Trade and Trade-related Measures (mid-October 2018 to mid-May 2019)' (Singapore: APEC, 2019), <https://www.apec.org/-/media/Files/Publications/2019/Annex%201%20Trade%20and%20Traderelated%20MeasuresmidOct%202018%20to%20midMay%202019.docx>.

**Table 2.2. Trade and trade-related measures in APEC,  
mid-October 2018 to mid-May 2019**

	Number of Measures
<b>Trade-restrictive measures</b>	
Initiation/resumption of anti-dumping investigation	21
Initiation of countervailing investigation/duties	10
Initiation of safeguard investigation/duties	9
Increase/imposition of import tariffs, export duties, and taxes	5
Reduction/elimination of tax rebates	1
Imposition of export/import requirements, quotas, bans or restrictions	1
Other trade-restrictive administrative measures	0
<b>Sub-total: Trade-restrictive measures</b>	<b>47</b>
<b>Trade-facilitating measures</b>	
Termination of anti-dumping investigation/duties	24
Termination of countervailing investigation/duties	9
Termination of safeguard investigation/duties	2
Reduction/elimination/suspension of export duties/import tariffs and taxes	12
Increase in tax rebates	1
Elimination of import/export ban and other restrictions	0
Other trade-facilitating administrative measures	4
<b>Sub-total: Trade-facilitating measures</b>	<b>52</b>
<b>Total: Trade and trade-related measures</b>	<b>99</b>

Source: WTO, 'Report of the Trade Policy Review Body from the Director-General on Trade-related Developments, mid-October 2018 to mid-May 2019', 8 July 2019.

Protracted and escalating trade tensions have heightened uncertainty, and together with a slowing global economy, have prompted the World Trade Organization (WTO) to downgrade anew its short-term growth forecasts for world trade volume in September 2019 (Table 2.3). The WTO now expects trade volume to grow at a decelerated pace of 1.2 percent in 2019 from its forecast of 2.6 percent in April 2019 and down from the 3.0 percent actual expansion in 2018. A recovery in the growth of trade volume is projected in 2020, although hinged considerably on the resolution of trade disagreements.

**Table 2.3. World trade volume forecasts (%)**

	Apr-18	Sep-18	Apr-19	Sep-19
2018	4.4*	3.9*	3.0**	3.0**
2019	4.0*	3.7*	2.6*	1.2*
2020			3.0*	2.7*
*Trade forecasts				
**Actual growth				

Source: WTO.

In terms of investment measures, APEC economies who are also G20 members implemented more measures that facilitated the entry of foreign investments compared to policies that hinder foreign investments for the period mid-October 2018 to mid-May 2019 (Table 2.4).<sup>49</sup>

**Table 2.4. Selected investment measures implemented by APEC member economies, mid-October 2018 to mid-May 2019**

	Number of Measures
<b>Facilitating foreign investments</b>	
Increasing transparency in the investment environment	1
Clarifying and simplifying concepts, rules and processes	1
Relaxing rules on foreign exchange quota and settlement	4
Increasing threshold/lifting caps for foreign investments/ownership	0
<b>Restricting foreign investments</b>	
Imposing additional requirements/prohibitions	1
Increasing/imposing taxes/fees/surcharges	1
Introducing foreign ownership ceiling	0
Lowering caps on foreign exchange use and overseas financing	1
<b>Total: Investment measures</b>	<b>9</b>

Note: This report covers the nine APEC economies who are also G20 members: Australia; Canada; China; Indonesia; Japan; Korea; Mexico; Russia; and the United States.

Source: OECD and UNCTAD, 'Twenty-first Report on G20 Investment Measures', 24 June 2019.

## 2.6 NEAR-TERM OUTLOOK, RISKS AND OPPORTUNITIES

The APEC region is expected to continue to grow at a moderated pace in the short-term period covering 2019–2021 in tandem with the global economy. GDP projections in the near term were recalibrated downward by a range of 0.1–0.5 percentage points in view of the prolonged and heightened uncertainty brought about largely by the escalation in trade tensions that have extended to technology-related disputes (Table 2.5 and Figure 2.14).

The significant level of uncertainty has dampened business and consumer sentiments, translating into a pullback in investment and consumption spending. Consequently, trade performance has worsened, so that the global economy seems caught in a negative feedback loop where trade barriers have fuelled uncertainty and this, in turn, has taken a toll on confidence, influencing investment and consumption decisions, and thus slowing down economic activity as a whole.

<sup>49</sup> For a complete and detailed listing of investment measures implemented during the period mid-October 2018 to mid-May 2019, see APEC, 'Annex 2: Investment Measures (mid-October 2018 to mid-May 2019)' (Singapore: APEC, 2019), [https://www.apec.org/-/media/Files/Publications/2019/Annex%20Investment%20Measures\\_mid-October%202018%20to%20mid-May%202019.docx](https://www.apec.org/-/media/Files/Publications/2019/Annex%20Investment%20Measures_mid-October%202018%20to%20mid-May%202019.docx).

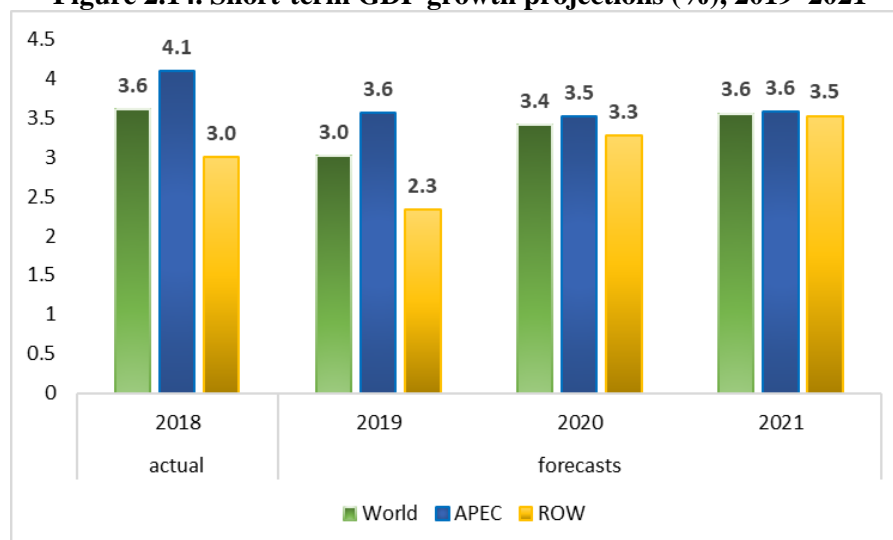


**Table 2.5. GDP projections**

GDP Projections	Apr-19	Oct-19	Difference
<b>2019</b>			
World	3.3	3.0	-0.3
APEC	3.8	3.6	-0.2
Rest of the World (ROW)	2.8	2.3	-0.5
<b>2020</b>			
World	3.6	3.4	-0.2
APEC	3.7	3.5	-0.2
ROW	3.5	3.3	-0.2
<b>2021</b>			
World	3.6	3.6	0.0
APEC	3.7	3.6	-0.1
ROW	3.6	3.5	-0.1

Source: IMF World Economic Outlook (WEO) databases (April 2019 and October 2019); APEC Policy Support Unit staff calculations.

Uncertainty emanating from Brexit combined with a potential build-up in financial risks from continued low interest rates could also weigh down growth. Downside risks could also come from other factors such as a possible deterioration in business and consumer sentiments, risks of disinflation, and concerns about the medium- to long-term repercussions of climate change.

**Figure 2.14. Short-term GDP growth projections (%), 2019–2021**

ROW=Rest of the world.

Source: IMF World Economic Outlook (WEO) database (October 2019); APEC Policy Support Unit staff calculations.

Risks of a further escalation in trade and technology tensions remain, at least in the short-term horizon, which could further weaken the global economy. Expectations of a slowdown in global demand have prompted economies to lower benchmark interest rates to encourage spending. The move toward more accommodative monetary policy settings by all APEC economies has served to lessen the negative impact of trade barriers on financial market sentiment. However, continued accommodative policies could generate increased risk-taking by financial markets in search of higher returns, which could contribute to a build-up in debt and financial vulnerabilities. A sharp reversal in interest

rates could unmask these vulnerabilities and result in a tightening of financial and credit conditions, adversely affecting economies with significant debt and currency exposures.

Meanwhile, opportunities for growth could come from trade-in-services, which continued to grow amid the ongoing trade tensions, albeit at a slower pace compared to previous periods. A quick and orderly resolution of trade and technology disputes remain a much-needed remedy to strengthen economic activity, especially in the short term.

## 2.7 CONCLUSION

The escalation of trade tensions beginning in the second half of 2017, and extending into technology-related issues in 2019 have fuelled uncertainty, adversely affecting investment and spending decisions. The global economy is facing slower growth and bigger challenges that require measures in the short-term and long-term periods.

Policymakers need to balance between supporting economic growth on the one hand and managing financial conditions on the other amid the prevailing environment of uncertainty. In the short term, addressing uncertainty means resolving trade and technology disputes by going back to the negotiating table to find immediate solutions. In the medium to long term, economies should look at diversifying sources of growth to serve as buffers against elevated levels of uncertainty that dampen domestic demand and global trade.

For too long, economies have depended on domestic consumption and trade to propel growth. These past few years, APEC along with the global economy have learned that these sources of growth could prove unreliable amid a situation of heightened uncertainty. In the short term, economies could turn to monetary and/or fiscal policies to cushion the negative impact of uncertainty. However, these policy mechanisms do not provide sustainable support. Monetary policy could only boost growth up to a certain level of interest rates, and then it becomes counter-productive to maintain low policy settings over a protracted period, particularly when financial vulnerabilities build up to unmanageable levels. Moreover, not all economies have adequate room to implement growth-enhancing fiscal policy measures, given their debt levels and other constraints.

The path toward sustainable and inclusive growth requires a decisive move toward structural reform efforts that could create and boost new drivers of growth while being cognisant of an economy's development level. For example, economies could modernise their financial sector by linking with digital technology that would lead to greater financial inclusion. Economies could also prioritise women's economic empowerment by removing structural barriers to facilitate equal access and equal opportunities, allowing women to contribute fully toward growth and development.

If there is one lesson to be learned from the current global economic situation, it is that economies need to channel their efforts toward structural reforms that improve individual lives by facilitating access to economic opportunities for a wider segment of society, including women, the poor, and vulnerable groups, so that economic growth benefits all in the long term.