



**Asia-Pacific
Economic Cooperation**

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

APEC Regional Trends Analysis

Reducing Trade Costs in the Asia-Pacific

APEC Policy Support Unit
May 2016

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Produced for:

Ministers Responsible for Trade Meeting

Asia-Pacific Economic Cooperation

APEC#216-SE-01.6



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TABLE OF CONTENTS

KEY MESSAGES	ii
I. Reducing Trade Costs in the Asia-Pacific.....	ii
II. Boosting Growth Amid External Weaknesses	iii
REDUCING TRADE COSTS IN THE ASIA-PACIFIC: POLICY AND PROGRESS	1
I. Measuring Trade Costs	2
II. Trade Costs in the Asia-Pacific	3
III. Importance of Reducing Trade Costs.....	6
IV. Implications and Way Forward	7
BOOSTING GROWTH AMID EXTERNAL WEAKNESSES.....	8
I. APEC GDP Growth	8
II. Trade Performance.....	15
III. Investment Trends.....	19
IV. Trade and Investment Measures	20
V. Conclusion.....	22
REFERENCES.....	24
APPENDIX.....	25

KEY MESSAGES

I. REDUCING TRADE COSTS IN THE ASIA-PACIFIC

- APEC has been at the forefront of trade facilitation efforts with many initiatives aiming to reduce trade costs. For example, the APEC Supply-Chain Connectivity Framework Action Plan (SCFAP), initiated in 2010, identifies eight chokepoints that need to be untangled to improve supply-chain connectivity in the region and calls for an improvement of supply chain performance in time, costs, and uncertainty.
- Figures from World Bank's *Doing Business* database show progress in terms of reducing time and costs to trade in APEC. While progress is promising based on these indicators, they only measure two aspects of trade costs.
- An alternative is to compute ad-valorem equivalent bilateral trade costs, which cover all costs involved in conducting transactions across borders, including direct and indirect costs of fulfilling regulatory import and export requirements; differences in currencies, languages, and culture; geographical distance; and shipping and logistics costs.
- Based on this measure, it is estimated that APEC economies have achieved a reduction in bilateral trade costs with their 10 largest trading partners by 6 percent to 12 percent between 2010 and 2014. If a simple average is used, ad-valorem trade costs have fallen from 96.4 percent of the value of goods traded in 2010 to 90.7 percent in 2014. If a trade-weighted average is used, trade costs have fallen from 74.4 percent in 2010 to 65.8 percent in 2014.
- Trade costs for agricultural products are almost double that for manufacturing products, pointing to the many barriers (e.g., tariffs and non-tariff barriers) that still constrain trade in agricultural products. These differences in trade costs could be distorting firms' decisions on product specialisation and investment.
- Flourishing global value chains have been made possible by lower trade costs. Hence, lower trade costs is an enabling factor for a more efficient global production network, increasing productivity as well as influencing firms' investment location decisions.
- Key efforts to reduce trade costs have been consistently implemented within APEC, including initiatives for customs reform, harmonizing standards, and business mobility. APEC economies need to further strengthen regional cooperation on new areas such as upgrading transport and network infrastructure, improving the regulatory environment for services, strengthening connectivity, and enhancing value chain resilience. An end-to-end supply chain framework to view trade facilitation is necessary to enhance these efforts.

II. BOOSTING GROWTH AMID EXTERNAL WEAKNESSES

- The APEC region continued along the growth trajectory amid persistent challenges in the external and domestic fronts as GDP grew by 2.7 percent in 2015, higher than world GDP of 2.5 percent, but lower than the 2014 APEC growth of 2.9 percent.
- Resilient private consumption and strong government spending together with generally positive contribution from gross fixed capital formation, underpinned by low commodity prices and fiscal expansionary measures, boosted economic activity in the APEC region throughout 2015.
- The APEC region has been affected by the downward trend in commodity prices since some APEC economies are major exporters of oil and energy products, metals and minerals, as well as agriculture products. The all-commodity price index declined by 35.3 percent year-on-year in 2015, with crude oil prices significantly down by 47.2 percent due to a combination of a glut in supply and a slowdown in demand.
- A downturn in trade was seen in the APEC region in 2015, reflecting the impact of a confluence of cyclical and structural factors. The value of exports of merchandise trade contracted by 8.7 percent in 2015 across APEC economies, a reversal from the 1.9 percent modest expansion in 2014. Imports also contracted by 11.5 percent from 0.3 percent growth during the same comparative period.
- Preliminary estimates show that APEC economies were the top three largest recipients of FDI inflows in 2015: the United States at around USD 384 billion; Hong Kong, China with a new record of USD 163 billion; and China at USD 136 billion. Cross-border mergers and acquisitions (M&A) accounted for the bulk in FDI inflows, supported in turn, by an environment of low interest rates and strong cash positions.
- APEC implemented 68 trade-related measures in mid-May to mid-October 2015, of which 28 measures were trade-facilitating and 40 measures had the effect of discouraging trade. During the period May 2015 to February 2016, APEC implemented more measures to ease the entry of FDI rather than restrict it.
- Calculations by the APEC Policy Support Unit (PSU) based on the IMF growth projections indicated that the APEC region will maintain a 2.7 percent growth in 2016, inching up to 2.8 percent in 2017-2018. Growth prospects will continue to be affected by the direction of commodity prices, the economic rebalancing in China, the strength of the Japanese economy, together with the level of trade competitiveness in the region as determined by such factors as trade policies, exchange rates and product quality, among others.

REDUCING TRADE COSTS IN THE ASIA-PACIFIC: POLICY AND PROGRESS¹

APEC has been at the forefront of trade facilitation efforts with many initiatives aiming to reduce trade costs. The first and second APEC Trade Facilitation Action Plan (TFAP I and II) from 2001-2010 attempted to reduce trade costs through a menu of actions and measures that simplify administrative and procedural requirements in four key areas: Customs Procedures; Standards and Conformance; Business Mobility; and E-Commerce. Using data from World Bank’s Trading Across Borders indicators, the APEC Policy Support Unit (PSU) (2011) found that there has been a 5 percent reduction in total trade transaction costs across the APEC region over the period of TFAP II, which resulted in total savings of USD 58.7 billion.²

The APEC Supply-Chain Connectivity Framework Action Plan (SCFAP), which was initiated in 2010, identifies eight chokepoints—ranging from the lack of transparency in logistics regulatory issues to inefficient clearance of goods at Customs—that need to be untangled to improve supply-chain connectivity in the region (Table 1.1). SCFAP called for an improvement of supply chain performance in time, costs, and uncertainty through the implementation of relevant actions in addressing these chokepoints to benefit traders. The initiative also identified essential factors for improved regional connectivity of supply chains, such as transportation infrastructure, logistics, clearance, and cross-border standards.

Table 1.1. Eight Chokepoints under the SCFAP, 2010-2015

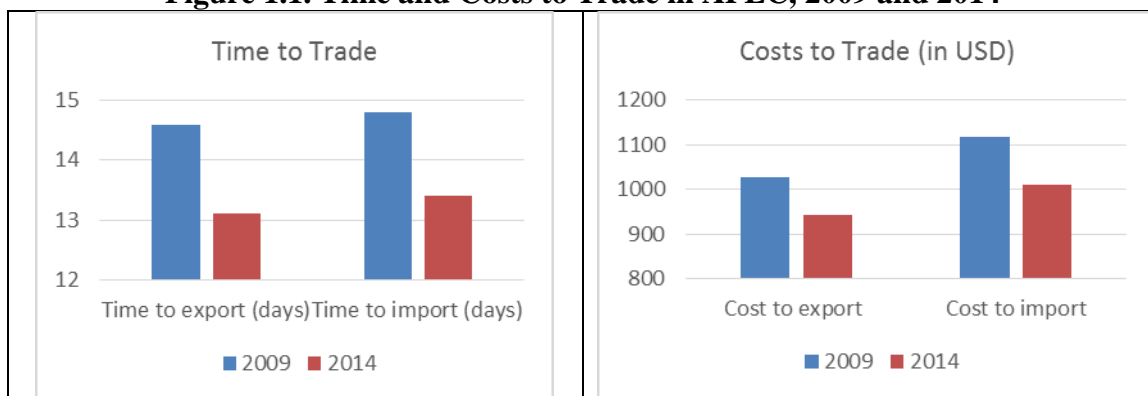
1	Transparency	Lack of transparency/awareness of full scope of regulatory issues affecting logistics; lack of awareness and coordination among government agencies on policies affecting logistics sector; absence of single contact point or champion agency on logistics matters.
2	Infrastructure	Inefficient or inadequate transport infrastructure; lack of cross border physical linkages (e.g., roads, bridges).
3	Logistics capacity	Lack of capacity of local/regional logistics sub-providers.
4	Clearance	Inefficient clearance of goods at the border; lack of coordination among border agencies, especially relating to clearance of regulated goods “at the border”.
5	Documentation	Burdensome procedures for customs documentation and other procedures (including for preferential trade).
6	Multi-modal Connectivity	Under-developed multi-modal transport capabilities; inefficient air, land, and multimodal connectivity.
7	Regulations & standards	Variations in cross-border standards and regulations for movements of goods, services and business travelers.
8	Transit	Lack of regional cross-border customs-transit arrangements.

¹ Prepared by Akhmad Bayhaqi, Denise Cheok, Rhea C. Hernando, and Ranelle Jasmin L. Asi. The authors would like to acknowledge excellent research assistance from Liyana Othman.

² Shepherd (2015) using the indirect measurement of trade costs in Novy (2013) noted that “APEC’s intra-regional trade costs are consistently lower than world average trade costs, and are much lower than APEC’s trade costs with other world regions...more than one-third of economies for which full data were available greatly exceeded the 10% target under TFAPs 1 and 2” (page 9 and 11).

In measuring the progress of SCFAP, 2015 data from World Bank's *Doing Business*³ showed improvements in the quality and efficiency of regulations affecting the business environment in the APEC region as a whole. In particular, international trading costs have gone down in 2014 relative to 2009 baselines, with reductions in the time and real costs to export and import (Figure 1.1).

Figure 1.1. Time and Costs to Trade in APEC, 2009 and 2014



Note: The 2009 data is taken from World Bank's *Doing Business* (DB) 2010 report, and the 2014 data is from the DB 2015 report. Data was accessed in August 2015. Costs are in real (2015 price) USD per container.

Source: World Bank's DB data and APEC Policy Support Unit calculations.

I. MEASURING TRADE COSTS

In a seminal study, Anderson and Wincoop (2004) calculated direct trade costs as policy costs (i.e. tariffs and quota), environmental costs (transportation, insurance, time costs), and other costs incurred in moving a good from point A to point B. These moving costs include transportation costs (both freight costs and time costs), policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, foreign exchange costs, legal and regulatory costs, and local distribution costs (wholesale and retail). They found that these costs are large, even between highly integrated economies. Anderson and Wincoop roughly estimated that the tax equivalent of "representative" trade costs for industrialized economies is 170 percent, which breaks down as follows: 21 percent transportation costs, 44 percent border-related trade barriers, and 55 percent retail and wholesale distribution costs.

Alternatively, Jacks et al. (2010) define trade cost in broader, more indirect terms and express them in tariff equivalent measures. They found that 40 years prior to World War I average trade costs fell by 33 percent, then rose 13 percent between 1921 to the beginning of World War II, before falling by 16 percent from 1950 onwards.⁴ Their results show that the trade boom experienced during the pre-World War I period was due to declining trade

³ The Trading Across Borders section of DB report records the time and cost of the logistical process of exporting and importing goods.

⁴ Jacks et.al. (2010), pp. 185-201.

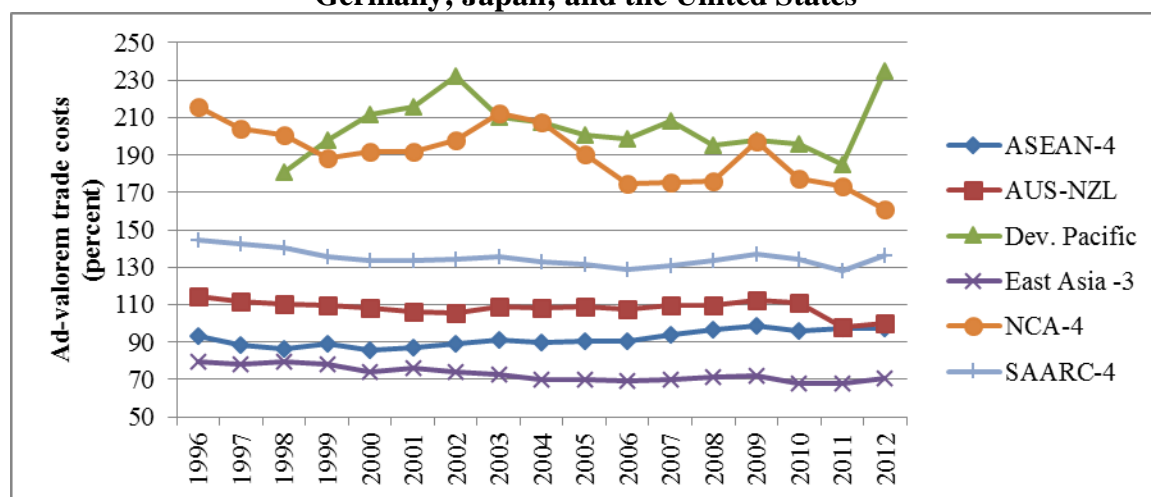
costs; the trade boom during the post-World War II period was due to changes in output; while the inter-war trade bust was attributed to increases in trade costs.

Using a similar method, the ESCAP-World Bank Trade Costs database follows Novy’s (2009) computations of ad-valorem equivalent bilateral trade costs, which cover all costs involved in conducting transactions across borders, including direct and indirect costs associated with fulfilling regulatory import and export requirements; differences in currencies, languages, and culture; as well as geographical distance. Additionally, domestic and international shipping and logistics costs associated with imports and exports are included. In essence, this bilateral measurement of trade costs represents the average of international trade costs between two economies relative to domestic trade costs within each economy. This methodology implies that trade costs are higher when economies trade more domestically than internationally (Arvis et al. 2013).

II. TRADE COSTS IN THE ASIA-PACIFIC

Using the ESCAP-World Bank Trade Costs database, Duval et al. (2015) calculated bilateral trade costs between economy aggregates and three large developed economies; namely, Germany, Japan, and the United States. They found that in the Asia-Pacific region, East Asia had the lowest bilateral trade costs with the three large developed economies, with trade costs around 70 percent of the value of goods traded (Figure 1.2). ASEAN and AUS-NZL follow with trade costs level at around 100 percent. The regions with trade costs above or near 130 percent are SAARC-4, NCA-4 and Developing Pacific.

Figure 1.2. Trade Costs of Asia-Pacific Economy Aggregates with Germany; Japan; and the United States

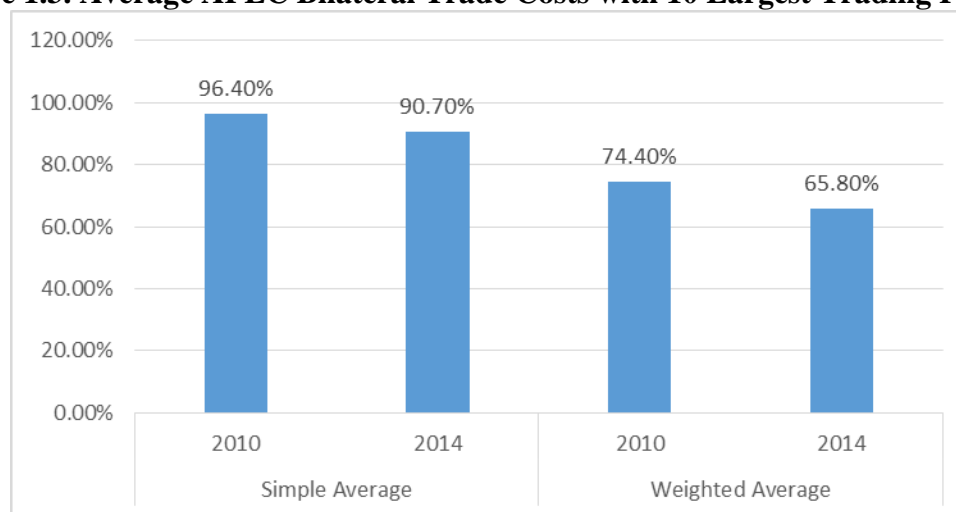


Notes: ASEAN-4 = Indonesia; Malaysia; the Philippines; and Thailand. AUS-NZL = Australia and New Zealand. Dev. Pacific = Fiji and Papua New Guinea. East-Asia-3 = China; Japan; and Korea. NCA-4 = Georgia; Kazakhstan; Kyrgyzstan; and Russia. SAARC-4 = Bangladesh; India; Pakistan; and Sri Lanka.

Source: Duval et al. 2015.

PSU calculated⁵ the average bilateral trade costs in APEC member economies with its ten largest trading partners⁶ to get the figures for 2010 and 2014. Based on the preliminary calculations, APEC trade costs in 2014 have decreased by 6 percent and 12 percent between 2010 and 2014, depending on whether the average is simple or weighted⁷ (Figure 1.3). The trade costs measures include domestic and international shipping and logistics costs, which explains the high trade costs for several economies due to their geographical location.

Figure 1.3. Average APEC Bilateral Trade Costs with 10 Largest Trading Partners



Note: Data for 17 APEC economies.

Source: World Integrated Trade Solution database and APEC Policy Support Unit calculations.

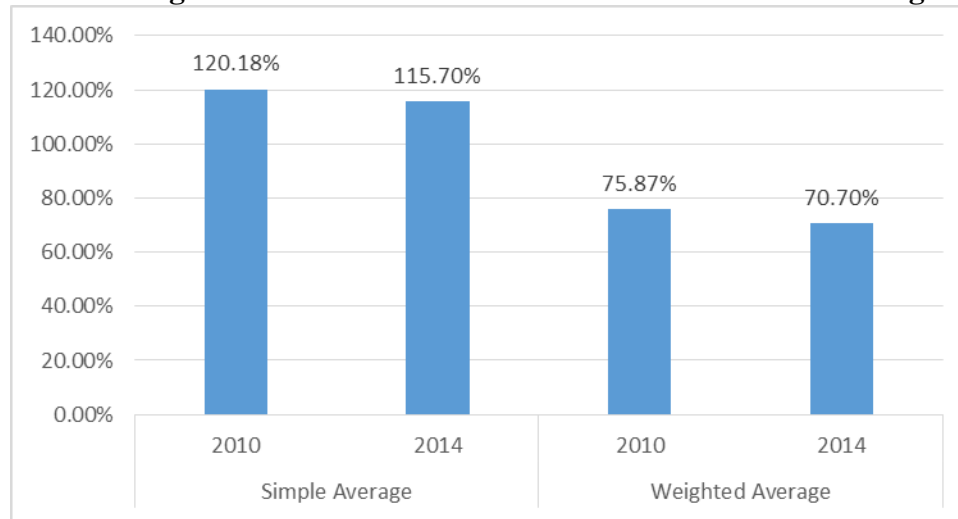
Following Arvis et. al. (2012), PSU also calculated average bilateral trade costs between APEC economies and selected trading partners: Canada; China; France; Germany; Italy Japan; Korea; Mexico; the United Kingdom; and the United States. These economies represent a broad geographical and economic cross-section of the global trading economy. Results in Figure 1.4 show that there has also been a decrease in average bilateral trade costs between APEC economies and these 10 global trading partners by 4 percent to 7 percent.

⁵ See Appendix.

⁶ In their paper, Duval et. al. (2015) use the top five key trading partners in calculating single-economy aggregates for the bilateral trade costs measures.

⁷ The available literatures have used both simple and weighted average methods. Novy (2011) uses both simple and trade-weighted average methods in his paper. Duval et. al. (2015) use trade-weighted average while Arvis et. al. (2013) use both simple-average of ten (fixed) world trading partners as well as ten largest importers. The weighted average method can be seen to provide more reasonable figures intuitively, as it focuses on (ex-post) costs with key trading partner(s). For instance, Canada trades around 77% of their total exports with the US with a bilateral trade cost of 47%. Using a weighted average for ten largest trading partners, Canada's (average) trade cost will be 57%; whereas a simple average method will yield a trade cost figure of 105%. However, trade-weighted figures is seen to underweigh high levels of trade costs (Arvis et. al., 2015).

Figure 1.4. Average APEC Bilateral Trade Costs with 10 Global Trading Partners

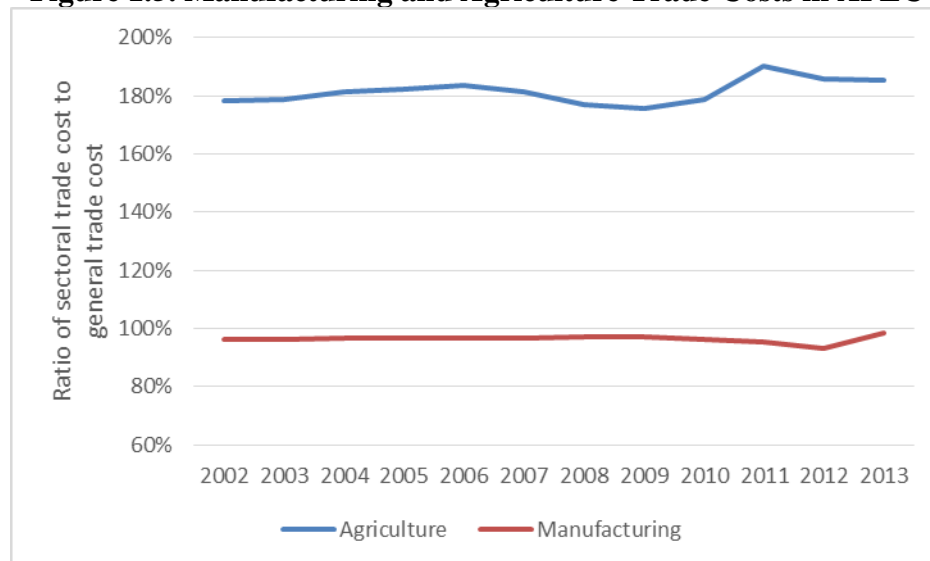


Note: Data for 17 APEC economies.

Source: World Integrated Trade Solution database and APEC Policy Support Unit calculations.

At the sectoral level, trade costs in manufacturing are relatively lower than agricultural trade costs (Figure 1.5). The World Bank (2015) emphasises that sectoral trade costs can affect the balance between sectors as trade costs could affect specialisation decisions of an economy; there seems to be an association between lower trade costs in manufacturing relative to agriculture, and specialisation in manufacturing exports. In this sense, higher trade costs in agriculture could also affect manufacturing exports performance. High trade costs in agriculture could be due to high tariff rates but also because of product standards that act as barriers for certain agriculture exporters.

Figure 1.5. Manufacturing and Agriculture Trade Costs in APEC



Source: ESCAP-World Bank Trade Costs database and APEC Policy Support Unit calculations (simple average). Figures are calculated for 17 APEC economies.

III. IMPORTANCE OF REDUCING TRADE COSTS

Flourishing global value chains have been made possible by lower trade costs. The ability of a lead firm to separate their different stages of production across the globe in search of efficient locations for manufacturing or assembly is affected by the trade costs of their business partner. Hence, lower trade costs is an enabling factor for a more efficient global production network, which affects the investment location decisions of firms. A recent paper by Duval and Utoktham (2014) reported that a reduction of bilateral trade costs by 12 percent to 14 percent will increase bilateral foreign direct investment (FDI) flows by 16 percent to 20 percent. In fact, the impact of trade costs on FDI is even higher than the reduction in bilateral tariff which only affected bilateral FDI flows by 1 percent.

UNESCAP (2012) provided the following illustrative components of bilateral trade costs in Asia and the Pacific:

- Tariff trade costs: 0-10%
- Other policy-related trade costs (i.e., non-tariff in nature): 60-90%
 - direct behind- and at-the-border trade costs (1%)
 - availability/use of ICT services (6-7%)
 - business/regulatory environment (6-7%)
 - maritime connectivity/services (16-18%)
 - and other costs such as indirect cost of trade procedure, currency fluctuation and other non-tariff barriers/NTBs (52-57%).
- Natural trade costs, including geographical and cultural factors: 10-30%.

Bearing in mind that the above are illustrative figures, the significant components of policy-related trade costs are linked with indirect costs of trade procedure, NTBs, and connectivity services as well as business environment and the use of ICT services.

Korinek (2009) noted that a 10 percent increase in maritime transport costs is associated with a 6 to 8 percent decrease in trade. Likewise, Sadikov (2007), using gravity equations estimation for bilateral exports, found that each additional signature exporters have to collect before a shipment leaves reduces aggregate exports by 4.2 percent, which is equivalent to raising an importer's tariff by 5 percentage points. UNCTAD (2013), using the overall trade restrictiveness index (OTRI), found that non-tariff measures add about 4 percentage points to the average tariff of about 2 percent. Meanwhile, the World Economic Forum (2015) noted that the implementation of reforms in Korea's Single Window has allowed savings of \$2.1 billion per year in costs of freight, inventory, labor and other aspects.

For agriculture, Pomfret (2014) mentioned that reducing agriculture trade costs may require improvements in both hard and soft infrastructure such as rural roads and reducing lengthy border delays.⁸

⁸ Additionally Pomfret argued that higher agriculture trade costs could prevent economies from diversifying their agricultural production.

Continued efforts and reforms are needed in tackling the above issues in order to maintain a favorable trade costs environment for business and traders.

IV. IMPLICATIONS AND WAY FORWARD

Measurements of trade costs in APEC economies show that trade costs in the region have significantly gone down between 2010 and 2014. These measurements of trade costs include all costs involved in trading goods internationally relative to those involved in trading goods domestically.⁹ Further understanding of realities at the ground level is needed to get a complete picture of the nature of these trade costs and why they have been falling.

The recent WTO Trade Facilitation Agreement (TFA) highlighted specific measures that promise to bring substantial cost reductions for traders and improve customs and border management efficiency. The TFA focuses on improving the process of movement, release, and clearance of merchandise goods. High trade costs from inefficient border procedures and delays could hurt consumers, lower productivity, and discourage innovation.

The OECD-WTO monitoring exercise in 2015 noted the following impacts from reducing trade costs: higher revenues for exporters, diversification in export markets and products, increase in FDI, and entry into new global value chains. Implementation of policies that facilitate trade has the potential to enable local firms to participate in global value chains as well as expand their own market.

Certain key efforts to reduce trade costs have been consistently implemented within APEC. These include initiatives for customs reform, harmonizing standards, and business mobility. APEC economies need to further strengthen their regional cooperation on new areas such as upgrading transport and network infrastructure, improving the regulatory environment for services, strengthening connectivity, and enhancing value chain resilience.

To enhance these efforts, an end-to-end supply chain framework to view trade facilitation is necessary. This means focusing on the common “at the border” trade facilitation efforts and facilitating efforts on improving logistics efficiency and connectivity both within and across the borders. This also means focusing on the flows and security of finance and information in addition to the flows of goods.

⁹ World Bank in OECD-WTO (2015) noted that high trade costs from the above measures could actually mean two things: global trade is becoming more costly or domestic trade costs are becoming lower; or both are happening simultaneously.

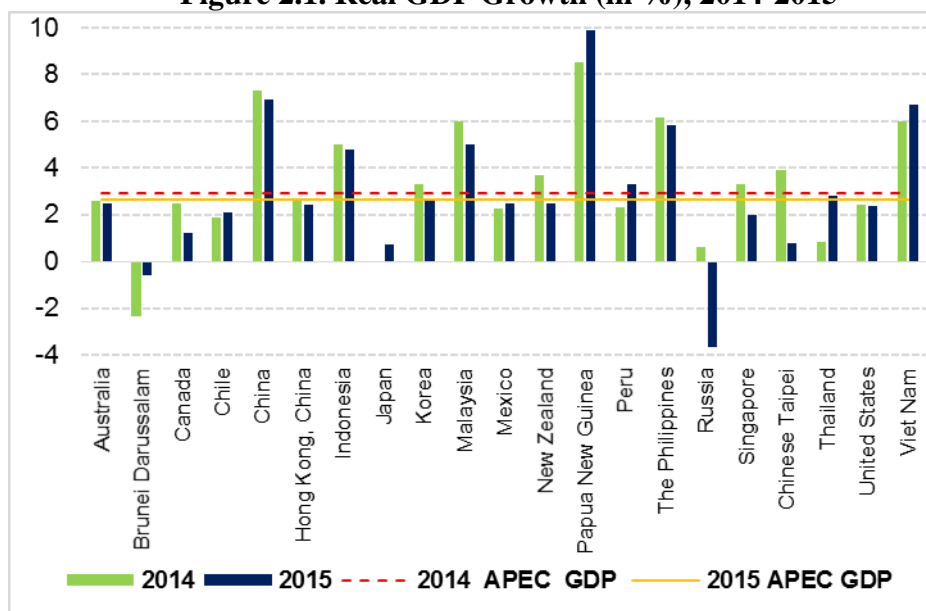
BOOSTING GROWTH AMID EXTERNAL WEAKNESSES¹⁰

I. APEC GDP GROWTH

GDP grew by 2.7% in 2015, lower than the 2.9% expansion in 2014.

The APEC region continued along the growth trajectory amid persistent challenges in the external and domestic fronts as gross domestic product (GDP) grew by 2.7 percent in 2015, although lower than the 2014 growth of 2.9 percent.¹¹ Of the 21 members, output levels decreased in 13 economies while the rest grew higher (Figure 2.1).

Figure 2.1. Real GDP Growth (in %), 2014-2015



Note: Japan posted zero GDP growth in 2014.

Source: StatsAPEC, Asian Development Bank (ADB), International Financial Statistics (IFS), the World Bank (WB), The Economist Economic and Financial Indicators; economy sources; and APEC Policy Support Unit calculations.

Drivers of Growth

As the global economy remained beset by challenges brought about by uncertain growth prospects, episodes of financial market volatility, and a new normal with the downward trend in commodity prices and trade, APEC economies leaned towards domestic factors to fuel economic activity.

Private and government consumption boosted growth.

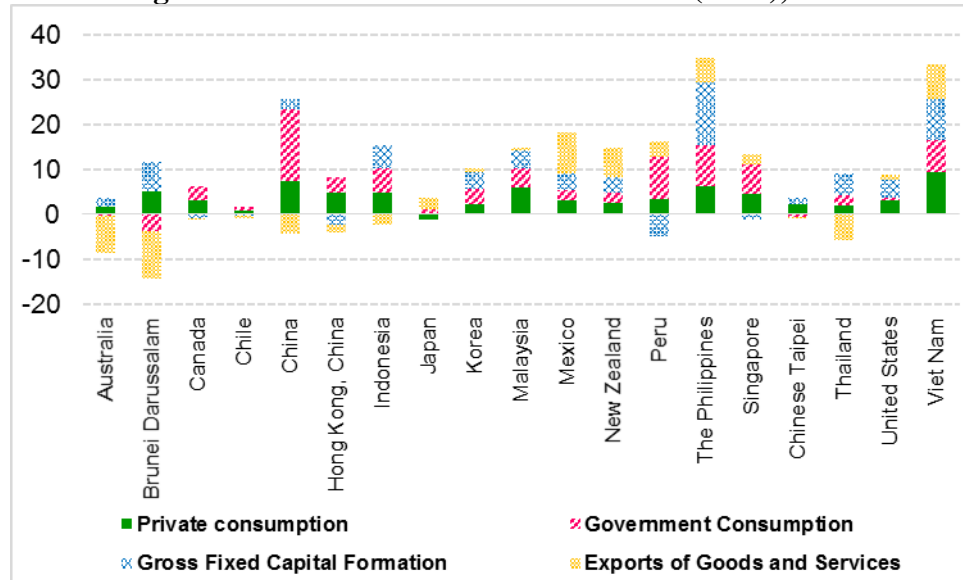
The combination of steady private consumption and strong government spending, underpinned by low inflation and improved employment conditions as well as fiscal expansionary measures, boosted economic activity in the APEC

¹⁰ Prepared by Rhea C. Hernando. This report takes into account all available information on GDP growth, trade and investments, as of 15 April 2016.

¹¹ The GDP growth rate for the APEC region is a weighted average of the growth rates of all 21 member-economies.

region throughout 2015 (Figure 2.2). Growth in private consumption in APEC ranged from 1.7 percent to 9.3 percent while government spending grew between 1.0 percent-15.9 percent.

Figure 2.2. Contributors to GDP Growth (in %), 2015



Note: Data not available for Papua New Guinea and Russia.

Source: ADB, economy sources and APEC Policy Support Unit calculations.

Private consumption among APEC economies was buoyed by significantly low prices of oil and other commodities; soft borrowing costs due to generally accommodative financial conditions; and increased disposable incomes from the combined effects of low commodity prices and improved employment conditions. In other parts of the APEC region, overseas remittances, subsidies for energy-efficient products and transport services, and easing of restrictions on real estate purchases powered household spending.

Government consumption activity also picked up in the APEC region, outpacing private consumption in some economies. Fiscal stimulus measures were implemented as part of the conduct of a counter-cyclical macroeconomic policy that is geared primarily towards supporting growth requirements amid the global uncertainty. These fiscal measures ranged from increased government expenditures on welfare programs and public works together with higher wages for civil servants, to the grant of transfers and implementation of tax rationalization programs. These stimulus measures, in turn, translated to more jobs and higher disposable incomes, further boosting consumer confidence and spending.

Gross fixed capital formation (GFCF), which increased from 2 percent-14 percent, was also an important domestic source of growth for most APEC economies in 2015. Although global uncertainties influenced investment spending, some economies poured money into construction and related works as well as transport equipment to help shore up the domestic economy.

GFCF contributed positively amid the downturn in exports and FDI.

The resilience of private consumption along with the pick-up in government spending and the positive contribution coming from higher GFCF allowed APEC economies to stay in the growth path amid the downturn in trade and investments. In particular, exports of goods contracted by 8.7 percent in 2015, reflecting the prevailing lethargy in global external demand, while latest available data showed increased outflows in foreign direct investments (FDI) (Table 2.1).

Table 2.1. GDP, Exports of Goods, and FDI in the APEC Region

Growth rates of GDP and Exports of Goods (year-on-year, in %)							
Net Flows, FDI (in USD billions)							
	GDP		Exports of Goods		Net FDI		
	2014	2015	2014	2015	2013	2014	
Australia	2.6	2.5	-5.0	-21.5	57.3	52.2	
Brunei Darussalam	-2.3	-0.6	-8.2	-43.3	0.9	0.6	
Canada	2.5	1.2	3.6	-14.0	20.0	1.2	
Chile	1.9	2.1	-1.0	-16.3	9.0	10.0	
China	7.3	6.9	6.0	-2.9	22.9	12.5	
Hong Kong, China	2.6	2.4	-2.1	-2.6	-6.5	-39.4	
Indonesia	5.0	4.8	-3.4	-14.8	12.2	15.5	
Japan	0.0	0.4	-3.4	-9.5	-133.4	-111.5	
Korea	3.3	2.6	2.3	-8.0	-15.6	-20.7	
Malaysia	6.0	5.0	2.5	-14.6	-2.0	-5.6	
Mexico	2.2	2.5	4.5	-4.1	31.5	17.6	
New Zealand	3.7	2.5	5.5	-17.5	1.1	3.4	
Papua New Guinea	8.5	9.9	-4.7	-8.5	0.0	0.0	
Peru	2.3	3.3	-7.8	-13.6	9.2	7.5	
The Philippines	6.1	5.8	9.5	-5.6	0.1	-0.8	
Russia	0.6	-3.7	-4.9	-31.6	-17.3	-35.5	
Singapore	3.3	2.0	-0.2	-15.3	36.0	26.9	
Chinese Taipei	3.9	0.8	2.8	-10.8	-10.7	-9.9	
Thailand	0.8	2.8	-0.4	-5.8	1.9	4.9	
United States	2.4	2.4	2.6	-7.1	-97.6	-244.5	
Viet Nam	6.0	6.7	14.0	7.7	6.9	8.1	
APEC (weighted growth)	2.9	2.7	1.9	-8.7			
Net Flows, FDI (in USD billions)					-74.1	-307.7	

Source: For GDP growth: Organizational and economy sources

For exports of goods: World Trade Organization (WTO)

For FDI: United Nations Conference on Trade and Development (UNCTAD)

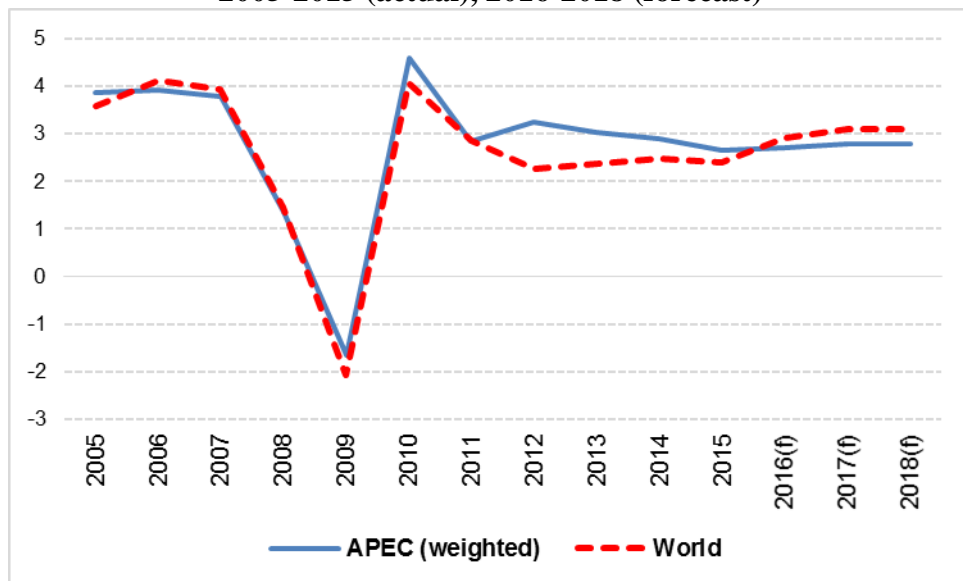
APEC Growth vis-à-vis World Growth

In general, APEC grew higher at 2.8% than world GDP of 2.5% for the period 2005-2015.

Preliminary estimates showed that the APEC region’s GDP growth of 2.7 percent in 2015 was higher than the global growth of 2.4 percent (Figure 2.3).¹² During the period 2005-2015, APEC as a whole grew at an average of 2.8 percent, higher than the average world GDP of 2.5 percent.

Near-term GDP projections point to a steady 2.7 percent growth in GDP in 2016 for the whole of APEC, inching higher to 2.8 percent in 2017-2018. This means, however, that the APEC region is expected to grow below world growth, which is forecasted to expand by 2.9 percent in 2016, climbing up to 3.1 percent in 2017-2018.

Figure 2.3. Real GDP Growth of the APEC Region and the World (in %) 2005-2015 (actual), 2016-2018 (forecast)



Source: International Monetary Fund (IMF), WB, economy sources and APEC Policy Support Unit calculations.

A closer look at the annual growth rates would reveal that, after growing above world GDP in 2005, supported by trade and investments due to buoyant global conditions and China’s expansion, APEC grew slower than the world in the years 2006-2008. The said period was marked by financial turbulence due to the collapse of US sub-prime mortgages, which spilled over to the real economy as uncertainty and tight credit conditions adversely affected consumer and business confidence. In 2009, heightened concerns brought about by continued asset deleveraging combined with weakened global economic activity were reflected in the 1.7 percent contraction posted by the APEC region, although not as severe as the world contraction of 2.1 percent.

¹² The global GDP growth was based on the World Bank’s publication called “Global Economic Prospects: Spillovers amid Weak Growth”, (January 2016).

Following this period of financial instability and economic recession, economies all over the world countered with coordinated policy responses, leaning heavily on unconventional monetary policies such as quantitative easing and near-zero interest rates. The conduct of non-traditional easing measures was intended to fuel economic activity and get back on the growth path. The recovery was particularly evident for emerging and developing economies in Asia as global financial repercussions were minimal. It should also be taken into consideration that Asia has benefited from the buffers and reforms put in place following the 1997 Asian financial crisis, which strengthened their resilience against macroeconomic shocks. Meanwhile, economic recovery for advanced economies was deemed fragile as consumer confidence remained low amid reduced incomes and uncertain financial conditions. As a result, the APEC region expanded more than the world in 2010.

Continued sluggish demand from advanced economies, underpinned by the Euro crisis and significant concerns over fiscal consolidation in the US, along with the twin natural disasters of earthquake and tsunami in Japan, had an impact on the export performance of emerging and developing economies. This contributed largely to the moderation in APEC's GDP in 2011, although the region grew at the same rate as the world.

During the succeeding years, from 2012 onwards, the APEC region would record GDP levels that are above world GDP. The easing of global financial conditions and recovering confidence in response to the coordinated policy measures implemented by authorities around the world complemented the rebound in industrial production in Asia as supply chains restarted following the floods in Thailand in late 2011 while demand from Japan strengthened. This allowed the APEC region to grow at a higher rate compared to world GDP growth, sustaining this trend until 2015, albeit at a decelerating pace.

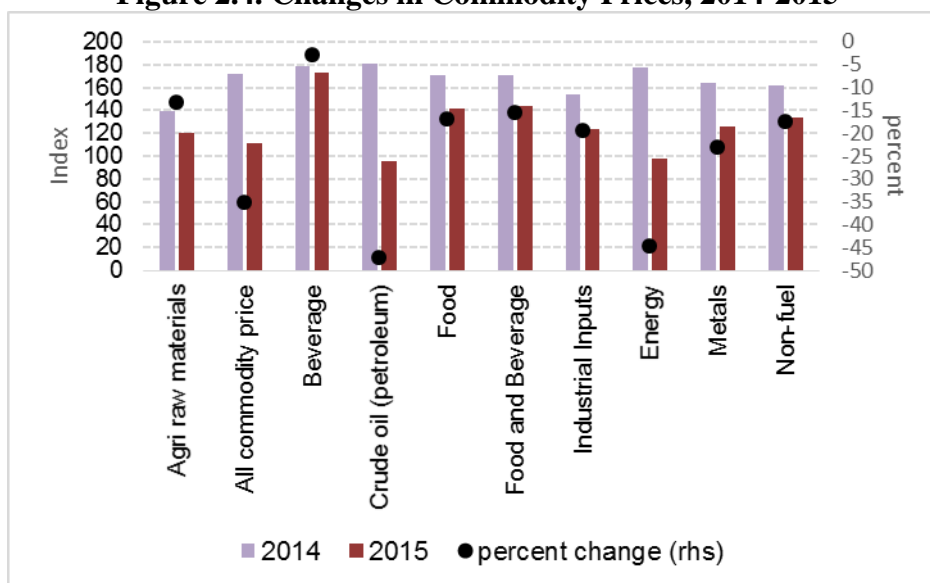
Crisis legacies including vulnerabilities in financial markets and lacklustre external demand coupled with infrastructure bottlenecks hounded APEC economies so that overall output moderated in 2013 from the previous year's level. The moderation in growth would continue in 2014, as commodity prices, particularly oil prices, dropped significantly and as uncertainties increased over the timing and magnitude of the US monetary policy adjustment.

The commodity price shock persisted in 2015, with the all-commodity price index declining by 35.3 percent year-on-year, and crude oil prices down by 47.2 percent (Figure 2.4).

APEC economies continue to be affected by the downward trend in commodity prices. Of the 21 members of APEC, a little more than one-third are net exporters of oil; some economies are producers of energy products besides crude oil, such as natural gas and coal; others are major exporters of metals and minerals; while there are also economies which rely on agriculture exports.

Prices remain low, affecting APEC economies that are commodity exporters.

Figure 2.4. Changes in Commodity Prices, 2014-2015



Source: IMF External Data on Commodity Price Indices.

As of end-2015, energy prices were markedly reduced by 44.8 percent, compared to the year-ago level, metal prices also declined by 23.1 percent, food and beverage prices were lower by 15.7 percent, while prices of agricultural raw materials were down by 13.4 percent.

In its April 2016 Commodity Markets Outlook,¹³ the World Bank projected a 19-percent drop in energy prices in 2016, while metal prices are also likely to decrease by 8 percent, along with an expected 4-percent decline in agriculture prices.

Although the El Niño weather phenomenon has affected agricultural production in some parts of the APEC region, particularly rice harvests in Australia; Thailand; and the Philippines, it is expected to gradually dissipate in 2016 from its peak in November-December 2015. In fact, the Food and Agriculture Organization of the United Nations (FAO) projected a 1-percent increase in global rice production in 2016 to 495.2 million tonnes of milled rice from the estimated 490.3 million tonnes of milled rice produced in 2015. Among the economies that the FAO expected to contribute to the growth in the overall rice production level are Thailand; the Philippines; and China.¹⁴ The FAO's positive production outlook is consistent with the World Bank's expectation of a favourable crop year for most grain and oilseed products.

Positive production outlook supports low prices.

¹³ World Bank Commodity Markets Outlook (April 2016). Full report available here:

<http://pubdocs.worldbank.org/pubdocs/publicdoc/2016/4/677121461693540498/CMO-April-2016-Full-Report.pdf>

¹⁴ FAO Rice Market Monitor (April 2016). Full report available here:

http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Rice/Images/RMM/RMM_APR16.pdf

As of March 2016, the FAO food price index was lower by 12%, year-on-year.

Latest price indices are in line with the positive outlook for production, with the FAO Food Price Index (FPI) recording a 12-percent reduction in its March 2016 level compared to a year ago, due to significant drops in the dairy price index (29.5 percent); cereal price index (13.1 percent); and meat index (14.1 percent).¹⁵

For the APEC region, the economic impact of a continued and significant decline in commodity prices could linger up to the medium-term. In particular, investments in exploration and extraction operations as well as production activities will have to be reduced, if not put on hold altogether, to mitigate losses. Cutbacks in investments, in turn, imply tighter labour conditions, further introducing uncertainty in household income expectations. Uncertainty affects consumption levels, slowing down domestic economic activity and thus, overall growth, both in the short-term and medium-term periods.

Meanwhile, the sustained and significant drop in oil prices starting in July 2014 prompted the IMF to decompose the factors behind the oil price decline.¹⁶ The said study finds that the positive supply shock captured about 50 percent of the reduction in oil prices. The remainder is accounted for by weak global demand and improved energy efficiency.

The same IMF study notes further that the weakening global demand for oil accounted for a negligible share in the oil price decline in 2015. However, this share is expected to increase in 2016 onwards. The same is true for energy efficiency, which also explained a small part of the oil price decline in 2015, but is anticipated to rise starting in 2016. Improved energy efficiency means less demand for oil, resulting in lower prices.

The impact of low commodity prices is contrasting for exporters and importers. Commodity exporters face declining revenues from oil and other products, thus exerting pressure on fiscal positions and weighing on economic prospects. Moreover, risk premiums could rise among oil exporters with lower net external assets as cushions are not adequate against shocks. On the other side, the substantial cut in oil prices acts like a tax cut for importers, reducing business costs and increasing household incomes, thereby stimulating consumption spending.

Balance is tilted towards the dampening effects of the sustained and significant decline of oil and non-oil prices on global demand.

The significant decline in prices across commodities should boost global demand, since lower prices stimulate household spending and also reduce business energy costs among importers. However, the balance is tilted towards the dampening effects of the drop in oil and non-oil prices. First, the strain on commodity exporters has markedly reduced revenues and thus, their capacity to smooth out the effects of the price shock. To ensure macroeconomic stability amid shrinking revenues and financial strains, a parallel reduction in consumption and investment is necessary.

¹⁵ The FPI is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices (cereal, vegetable oil, dairy, meat, and sugar), weighted with the average export shares of each groups for 2002-2004.

¹⁶ World Economic Outlook (WEO). "Too Slow for Too Long", International Monetary Fund (IMF). (April 2016).

Second, the price shock has translated into significant cuts in investments in oil, gas and mining extractions and in the number of jobs available. These cuts have lowered incomes and introduced uncertainty in households, making them spend less. The third and equally compelling factor relates to the observation that, even with the substantial decline in prices, the pick-up in consumption among commodity importers has not been considerable. This development may reflect continued deleveraging; a limited pass-through effect of oil price declines to consumers; or concerns about the uneven global growth which could have cascaded into consumer confidence.

II. TRADE PERFORMANCE

Factors Affecting Trade

The APEC region's external sector performance in 2015 reflected the impact of a confluence of cyclical and structural factors.

Trade is affected by cyclical factors and structural shifts.

These cyclical factors relate to the significant slowdown in global demand in tandem with output growth, China's ongoing economic adjustment towards a consumption- and services-driven growth, and the sizeable decrease in commodity prices along with its repercussions.

The demand for primary intermediate goods among advanced economies has dropped in recent years, from 16 percent in 2012 to 13.6 percent in 2014, owed in part to the increase in the domestic production of oil by the US. Moreover, these economies have also started to stimulate domestic sources of growth, bolstering private consumption and services, so that the share of import-intensive manufactured products in advanced economies has started to shrink.

The economic transformation of China away from manufacturing could mean significantly lower demand for intermediate goods such as parts and accessories going forward. In 2014 alone, other intermediate goods comprised the bulk of Chinese imports at 76 percent. This was not matched by the 5 percent share of consumer goods in China's imports, even if the economy's shift towards consumption should translate into increased demand for such products.

The considerable and sustained decline in commodity prices in the last two years has prompted commodity exporters to implement retrenchments in the energy and mining sectors. Low prices and less jobs mean reduced incomes, which has translated into lower demand for capital goods, such as equipment and machinery.

Structural factors also contribute to the trade slowdown. In their research study, Constantinescu, et.al. (2015) find evidence that the slowdown in trade is attributed not only to the moderation in global growth, but also to the decelerating pace of

expansion of global supply chains.¹⁷ Moreover, changes that impact on global supply chains could also have some consequences on trade. For example, the transfer of basic manufacturing operations to economies with lower wages, the shift from vertical trade to horizontal trade, especially with the current trend of bilateral trade agreements,¹⁸ and the shortening of the supply chain to minimize risks of disruptions, modify the global supply chain so that trade is affected not only by cyclical issues but also by structural shifts.

The shortened supply chain, largely aimed at reducing production risks generated by disruptions from natural disasters or civil unrest, is particularly relevant for economies involved in intra-regional trade. Truncated supply chains redound to diminished trade participation and less demand for intermediate goods, affecting overall trade performance.

Product diversification and differentiation could help push trade growth towards positive territory and in a more sustainable path. Innovation and technology are key factors that could turn around trade for the APEC region. For example, innovative and energy-efficient products for household and business use could energize markets, increasing demand from its current lethargic state. Government and private sector support, through incentives and easy financing access, among others, could go a long way in encouraging innovators, entrepreneurs, and market participants to boost trade transactions and growth.

It is thus worthwhile to note that trade and trade-related policies will continue to have a significant impact on trade performance. The ongoing sluggishness in global activity, low commodity prices, and uncertainty in the direction of interest and exchange rates, require that APEC economies adopt measures that facilitate trade in order to grow.

Trade Growth in APEC

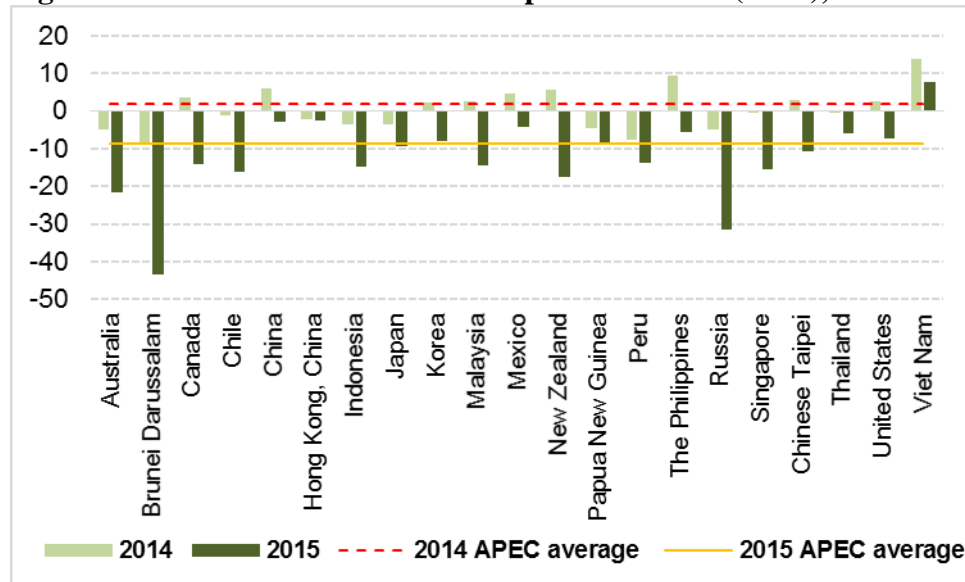
In the APEC region, the value of exports of merchandise trade contracted by an average of 8.7 percent in 2015 across APEC economies, a reversal from the 1.9 percent modest expansion in 2014 (Figure 2.5). Viet Nam bucked the downward trend as the economy posted continued export growth in 2014 up to 2015. The sustained strength in Viet Nam's exports is attributed to the economy's diversification towards electronics and garment manufacturing amid cheap energy costs as well as low labor and operating costs.

Goods exports contracted by 8.7% in 2015 from a 1.9% growth in 2014.

¹⁷ Cristina Constantinescu, Aaditya Mattoo, and Michele Ruta. "The Global Trade Slowdown: Cyclical or Structural?", IMF Working Paper. (2015).

¹⁸ Vertical trade constitutes the handling of simpler manufacturing operations in low-wage economies and then selling the resulting goods in developed economies; while horizontal trade involves the trade of similar goods between two economies of identical firm-level excellence at the same wage levels.

Figure 2.5. Growth in the Value of Exports of Goods (in %), 2014-2015

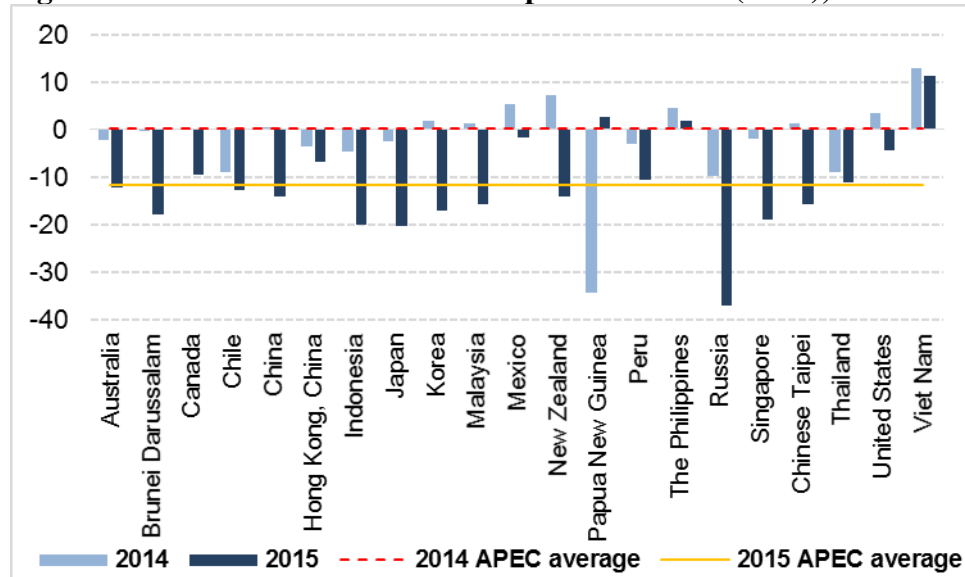


Source: WTO and APEC Policy Support Unit calculations.

Goods imports contracted by 11.5% in 2015 from a 0.3% growth in 2014.

The value of imports of goods also declined anew and at a greater magnitude for most APEC economies (Figure 2.6), due largely to falling demand. Imports turned negative in 2015 with an 11.5 percent contraction from the 0.3 percent growth registered in 2014. As with exports, Viet Nam is the only APEC economy that recorded sustained growth in imports of goods during the period 2014-2015.

Figure 2.6. Growth in the Value of Imports of Goods (in %), 2014-2015



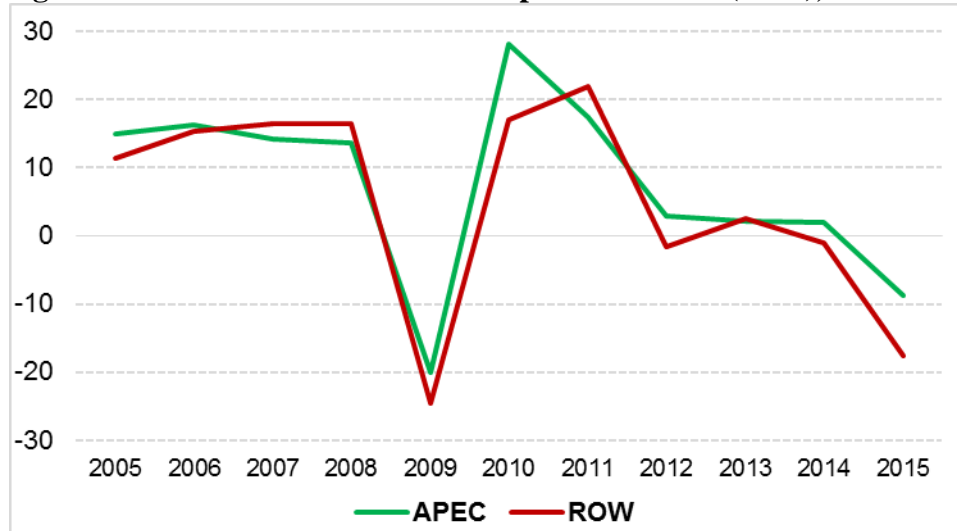
Source: WTO and APEC Policy Support Unit calculations.

A closer look at export growth over the period 2005-2015 would show that export performance of the APEC region compared favorably with the rest of the world (ROW) (Figure 2.7).

Trade growth in the APEC region started to decline to single-digit levels in 2012.

Beginning in 2012, however, the value of exports of goods would grow at substantially lower levels as the global economy grappled with the lingering effects of the 2008 global financial crisis. The global recovery suffered setbacks with the Euro crisis and US fiscal concerns while natural disasters struck Thailand and Japan. Taken together, these headwinds affected overall external demand even as financial conditions remained accommodative with zero-bound interest rates. In turn, trade growth remained low for both the APEC region and the ROW from 2012 onwards, entering negative territory once again in 2015.

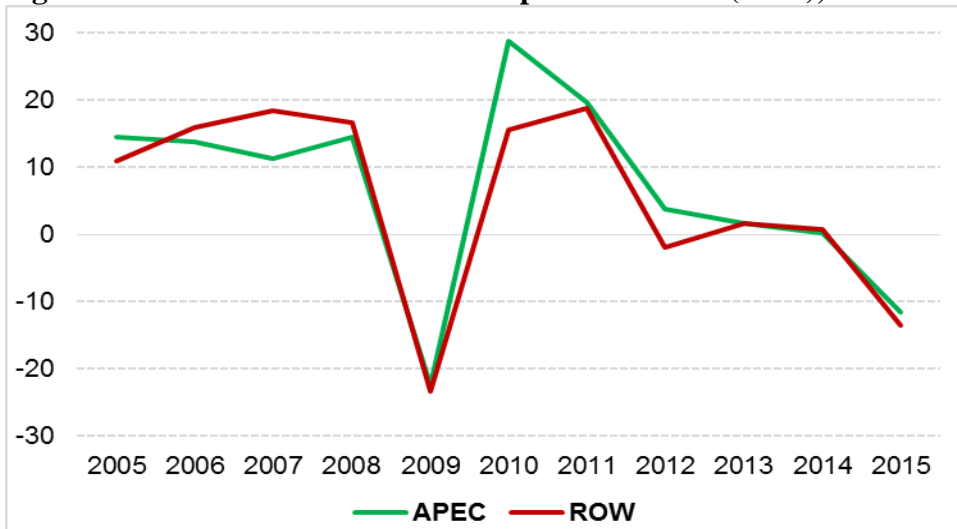
Figure 2.7. Growth in the Value of Exports of Goods (in %), 2005-2015



Source: WTO and APEC Policy Support Unit calculations.

A similar trend is observed when comparing the growth in the value of imports of goods between the APEC region and the ROW (Figure 2.8).

Figure 2.8. Growth in the Value of Imports of Goods (in %), 2005-2015



Source: WTO and APEC Policy Support Unit calculations.

Imports would grow at double-digit levels in the pre-crisis period of 2005-2008, dipping into contractionary zone in 2009, recovering strongly in 2010-2011, only to decline abruptly to single-digit levels in 2012 and go downward steadily towards another contraction in 2015.

III. INVESTMENT TRENDS

Preliminary estimates point to a 36-percent increase in global FDI in 2015 to USD 1.7 trillion, the highest level recorded since the global financial crisis in 2008. The surge was owed in large part to the growth in cross-border mergers and acquisitions (M&A), supported in turn, by an environment of low interest rates and strong cash positions.¹⁹

The US; Hong Kong, China; and China were the top 3 recipients of FDI in 2015.

Among the top 10 host economies of FDI flows in 2015, APEC economies occupied the top three largest recipient of inflows, including the United States at around USD 384 billion; Hong Kong, China with a new record of USD 163 billion; and China at USD 136 billion. Other APEC members who were in the top 10 FDI recipient economies in 2015 were Singapore (USD 65 billion); and Canada (USD 45 billion).²⁰

FDI inflows to the United States was characterized by significant acquisitions of assets in manufacturing and services, with total M&A sales at USD 228 billion, the biggest volume of cross-border acquisitions since 2000. In Hong Kong, China, corporate reconfigurations partly drove its FDI inflows, while inward investments to the services sector formed a considerable chunk of China's FDI.²¹

Available FDI data covering all of the 21 APEC member-economies are only up to 2014. In that year, FDI net outflows from the APEC region quadrupled compared to the net outflows in 2013 as investor sentiment was influenced by fragile economic conditions generated by an uneven global growth and uncertainty surrounding the trajectory of oil prices and timing of US monetary policy normalization.

After recording net FDI inflows in the prior years, APEC posted sustained net FDI outflows in 2009-2014.

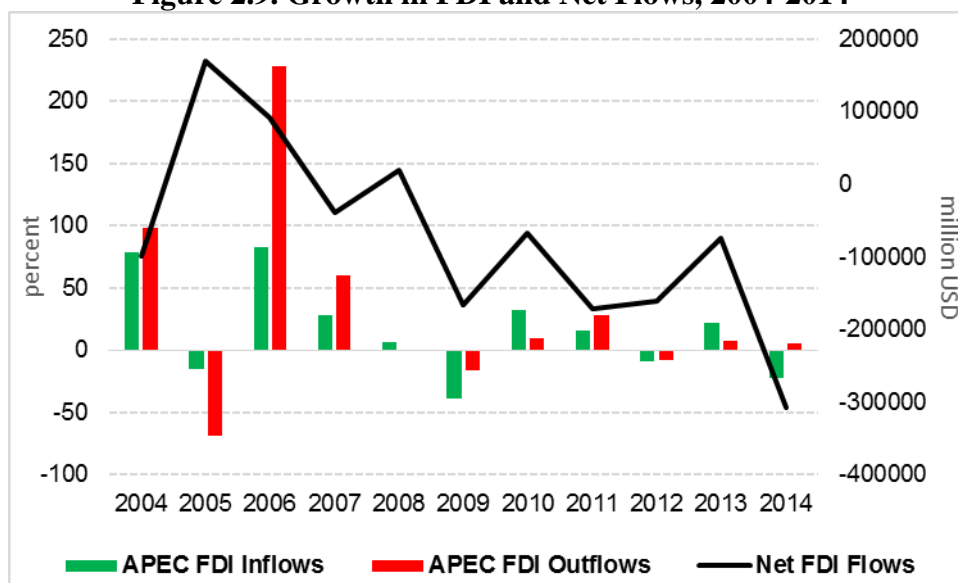
A longer time frame covering the years 2004-2014 showed sustained net outflows of FDI from the APEC region starting in 2009 onwards, after recording net inflows in the pre-crisis years of 2005-2006, and even in 2008 (Figure 2.9). The combination of higher outflows and weaker inflows resulted in sustained net outflows since 2009, with a sizeable increase in magnitude in 2014.

¹⁹ UNCTAD Global Investment Trends Monitor (20 January 2016).

²⁰ Ibid.

²¹ Ibid.

Figure 2.9. Growth in FDI and Net Flows, 2004-2014



Source: United Nations Conference on Trade and Development (UNCTAD) and APEC Policy Support Unit calculations.

IV. TRADE AND INVESTMENT MEASURES

APEC implemented 68 trade-related measures in mid-May to mid-October 2015, of which 28 measures were trade-facilitating and 40 measures had the effect of discouraging trade.

APEC economies implemented 68 trade and trade-related measures during the period mid-May 2015 up to mid-October 2015 (Table 2.2 for the summary and Annex 1 for the specific measures²²).

Of this aggregate, 28 measures had the effect of facilitating trade, including the elimination or reduction of tariffs, termination of anti-dumping/countervailing duties, and exemption from or reduction of export duties.

Meanwhile, 40 measures had the effect of discouraging trade through the imposition of import tariffs and import bans, initiation of anti-dumping investigations, imposition of countervailing duties, imposition of export duties on certain products, and imposition of local content requirements.

²² Annex 1 can be accessed here:

http://www.apec.org/~media/Files/AboutUs/PolicySupportUnit/ARTA2016/Annex%201_Trade%20Measures_mid-May%20to%20mid-Oct%202015.docx

Table 2.2. Trade and Trade-Related Measures

Trade and Trade-Related Measures Mid-May 2015 to Mid-October 2015	
<i>Trade-restrictive measures</i>	Number of measures
Initiation of anti-dumping investigation	18
Initiation of countervailing investigation	5
Initiation of safeguard investigation	1
Increase of import tariffs	4
Imposition of export duties	1
Imposition of export/import quotas/restrictions	8
Imposition of local content requirements	1
Imposition/Extension of import/export ban	2
Sub-total: Trade-restrictive measures	40
<i>Trade-facilitating measures</i>	
Termination of anti-dumping investigation/duties	8
Termination of countervailing investigation/duties	4
Streamlining of procedures	2
Reduction/Elimination of import tariffs	10
Reduction/Elimination of export duties	4
Sub-total: Trade-facilitating measures	28
Total: Trade and Trade-related measures	68

Source: WTO's Report on G-20 Trade Measures (30 October 2015).

In terms of investment measures covering the period May 2015 to February 2016, seven APEC members moved to ease restrictions and regulations in order to facilitate the entry of FDIs into their respective economies, while one APEC member opted to regulate FDI inflows by prohibiting ownership or control of over 20 percent of capital shares in media companies (Table 2.3 for the summary and Annex 2 for specific measures²³).

Table 2.3. Investment Measures

Investment Measures May 2015-February 2016	
<i>Promotion of foreign investment</i>	
Relaxing restrictions on foreign investments	11
Streamlining systems and procedures	4
<i>Measures relating to national security</i>	
	1
<i>Tightening of rules on foreign ownership</i>	
	1
Total: Investment policy measures	17

Source: OECD-UNCTAD Report on G-20 Investment Measures (30 October 2015) and UNCTAD Investment Policy Monitor (March 2016).

²³ Annex 2 can be accessed here:

http://www.apec.org/~media/Files/AboutUs/PolicySupportUnit/ARTA2016/Annex%20Investment%20Measures_Oct%202015_Feb%202016.docx

From May 2015 to February 2016, APEC implemented more measures to ease the entry of FDI rather than restrict it.

The measures implemented by economies to facilitate ease of FDI entry include the following: allowing foreign companies to provide bank clearing services, relaxing foreign investment restrictions in the real sector, and simplifying the capital registration system in China; providing stronger enforcement and a better-resourced system with clearer rules for foreign investors in Australia; instituting a one-stop integrated service that facilitates a 3-hour licensing process for investors, permitting foreigners to own houses up to 80 years, and allowing foreign investors to hold 100 percent stakes in 35 business lines in Indonesia; launching an initial public offering (IPO) of three post units in Japan, namely the Japan Post Bank, Japan Post Insurance, and the parent Holdings company; relaxing the rules on mergers and acquisitions as well as corporate restructuring in Korea; easing foreign investment tax on real estate investments in the United States; and allowing foreign investors to team up with resident investors to purchase rights to manage airports and related ground services, exempting foreign investors who buy shares or contribute to economic organizations from investment registration procedures, and allowing foreign traders to establish representative offices and branches in Viet Nam.

V. CONCLUSION

APEC is expected to maintain a 2.7% GDP growth in 2016, increasing to 2.8% in 2017-2018 amid continued external weakness. However, APEC would grow below world growth during the same years.

The *APEC Regional Trends Analysis* (ARTA) points to slowing growth in terms of GDP, trade, and investments, reflecting global conditions. The APEC region's GDP growth moderated to 2.7 percent in 2015 following a 2.9 percent expansion in 2014. Calculations by PSU based on the IMF growth projections indicated that the APEC region will maintain a 2.7 percent growth in 2016, inching up to 2.8 percent in 2017-2018. However, APEC growth will be below world growth in the near-term, from 2016-2018.

The protracted and significant decline in commodity prices, with oil prices expected to decrease by another 10 percent in 2016 and a gradual recovery after, could weigh down on the economic prospects of oil exporters as fiscal and financial pressures adversely affect domestic demand. According to the IMF study,²⁴ the decline in oil prices impacts positively on global GDP by around 1 percent in 2016-2017, tapering down to about 0.75 percent until 2021 when oil prices are expected to recover. The benefits accrue more strongly in advanced economies, which are less reliant on oil exports. Emerging economies would benefit in the near-term only, as the adverse effects of lower oil revenues are expected to offset economic gains in the medium-term. The failure of the Organization of the Petroleum Exporting Countries (OPEC) to reach a deal to freeze oil production levels in their 17 April 2016 meeting in Doha could mean prolonged low level of oil prices in light of excess supply.

The potential ripple effect of China's ongoing economic restructuring via trade, investments, commodity prices, financial markets, and also investor and consumer confidence, continue to be a concern going forward. Recent data show that China grew by 6.7 percent during the first quarter of 2016, lower than both the year-ago

²⁴ IMF WEO April 2016.

and quarter-ago GDP growth rates of 7.0 percent and 6.8 percent, respectively, generating apprehensions about growth sustainability, the strength of domestic demand, and subsequent impact to China's trade and investment partners.

Moreover, weaker output growth in Japan together with a slowdown in its fiscal and structural reform momentum could result in the overburdening of monetary policy, which, in turn, could lead to a weaker yen, posing challenges to trade-oriented economies in the APEC region.

Trade competitiveness will continue to be a major factor in APEC's trade performance. Trade measures that either facilitate or distort trade movements could impact significantly on domestic export growth of APEC economies. Exchange rate movements, which, in turn, are influenced by the direction of policy interest rates, also affect competitiveness. Product differentiation and diversification could also make a difference in an economy's export market. These factors will help determine trade growth and sustainability, particularly amid the continued sluggishness of global demand due to still-weak global economic growth prospects.

Taking into account the persistent challenges in the external front, the APEC region needs to boost its domestic sources of growth, particularly private and government consumption. This would mean a combination of short-term policies that stimulate spending such as maintaining accommodative monetary policies by keeping interest rates low and introducing stimulus packages in economies that have fiscal space to generate jobs and increase household incomes.

Alongside short-term measures to bolster macroeconomic resilience, the implementation of structural reforms, particularly labor market and product market reform, is imperative in the immediate term and at an appropriate pace to boost medium-term trade and growth prospects as well as fortify existing policy buffers so as to remain resilient in the face of external shocks.

Short-term monetary and fiscal accommodative measures and medium-term structural reforms remain the key factors towards improved growth prospects going forward.

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APPENDIX

Trade costs are calculated using the following formula:

$$\tau_{ij} = \left(\frac{t_{ij}t_{ji}}{t_{ii}t_{jj}} \right)^{\frac{1}{2}} - 1 = \left(\frac{x_{ii}x_{jj}}{x_{ij}x_{ji}} \right)^{\frac{1}{2(\sigma-1)}} - 1$$

where τ_{ij} denotes trade costs between economy i and economy j ; t_{ij} denotes international trade costs from economy i to economy j ; t_{ji} denotes international trade costs from economy j to economy i ; t_{ii} denotes intranational trade costs of economy i ; t_{jj} denotes intranational trade costs of economy j ; x_{ij} denotes international trade flows from economy i to economy j ; x_{ji} denotes international trade flows from economy j to economy i ; x_{ii} denotes intranational trade of economy i ; x_{jj} denotes intranational trade of economy j ; and σ denotes elasticity of substitution. The calculations in this paper use export data.

Bilateral trade costs are expressed as a tariff equivalent measure (Jacks 2011; Duval and Uthoktam 2011). In general, several choices of data will affect the results of calculation. Using GDP data will tend to yield higher values compared with using gross outputs statistics, as GDP data contain services components. Different estimates of the elasticity of substitution figure will also affect the results.