



**Asia-Pacific
Economic Cooperation**

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

APEC Economic Trends Analysis

**Building a dynamic and innovative services economy
as an engine for growth**



APEC Policy Support Unit
6 November 2014

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Produced for:
Asia-Pacific Economic Cooperation
APEC Economic Committee

APEC#214-SE-01.23



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The author wishes to thank Dr Alan Bollard and Dr Denis Hew for their insights. The views expressed in this paper are those of the authors and do not necessarily represent those of APEC Member Economies.

HIGHLIGHTS

APEC recovery is expected to firm up but growth potentials are projected lower

- The APEC region unexpectedly registered slower growth in the first half of 2014. APEC GDP is estimated to have expanded by 3.9% in the first half of this year, down from the 4.3% growth rate seen in the second half of last year. With a few exceptions, this slower growth was seen across both advanced and emerging and developing (EM&Ds) APEC economies.
- Subdued trading activity was one of the factors affecting APEC economic performance. APEC merchandise trade expanded moderately at 1.2% in the first half this year, a marked reduction from the double-digit rate seen in 2007.
- Domestic demand has played a less supportive contribution to growth despite a buoyant financial market. The prolonged period of sub-par economic performance has eroded the profitability of firms and reduced their propensity to spend. Private consumption growth also softened in most APEC economies. In some economies, easing labor conditions and/or falling real wages have affected consumer confidence.
- Activities in the region are expected to firm up but at different rates of momentum. This diverging momentum and the softness at the start of the year has effectively lowered the expected growth for 2014 to 3.9%, a touch lower than the 4.0% achieved last year. APEC output is forecast to accelerate at 4.3% in 2015.
- Information gathered from the latest International Monetary Fund's (IMF) World Economic Outlook indicates that the APEC region is projected to grow at an average annual rate of 4.2% between 2014 and 2018. This represents a marked downward shift in growth forecasts of APEC output expansion. In particular, in early 2013, the IMF had forecast an average annual growth rate of 5.1% for the APEC region from 2014 to 2018.

Building a more innovative and dynamic services sector is important to secure and sustain higher APEC growth

- The risk of persistent economic underperformance underscores the need for coordinated policies to address weaknesses that inhibit growth. APEC labor productivity growth was particularly hard hit following the global financial crisis, decelerating to around 82 percent the expansion rate seen in the previous six years. The slow progress in returning productivity growth to pre-crisis levels is forcing adjustments to wages in many economies, constraining the power of domestic consumption to fuel growth.
- The important factors that enabled APEC's striking growth up to now are still in place. By building on these strengths, which include continuous efforts to raise labor productivity, APEC economies can become even more competitive and thereby resume strong growth.

- Twenty-five years into the remarkable economic transformation of the APEC region, the services sector has become the most important part of the regional economy, accounting for almost 70% of APEC output and 46% of the region's employment.
- There is now more pronounced interaction between the services sectors and other sectors such as manufacturing and primary sectors, to the point where there is no clear line dividing goods and services. Services are increasingly used by firms as an instrument of product differentiation or improving production efficiency. Additionally, services occupy a strong presence in global production chains and its share is increasing.
- The pervasiveness of services in the production chain indicates that the development of the services sector and its productivity will not only be important to enhance the economy-wide level of productivity but it will also deepen the region's capacity to move up the global value chain.
- Since services account for a large proportion of private consumption, developing this sector is critical to strengthening domestic demand, and thereby helping to lift the APEC region out of the legacy of the 2008-09 GFC.
- In many emerging and developing APEC economies the services sector still remains underdeveloped compared with other advanced APEC economies. The wide gap in services labor productivity between the US and many other APEC economies suggests that much remains to be done to transform this sector in the region.
- In many advanced economies labor productivity growth has been higher in services than in industry and it remains positive, implying that there is room to shift outward the global technology frontier for services.
- The services sector as a whole is a heterogeneous conglomerate of industries. Across many developing APEC economies, the overall low level of services productivity stems from the dominance of traditional services – such as wholesale and retail trade, hotels and restaurants and transportation – all which feature lower productivity levels.
- Higher income APEC economies have shifted toward a larger and more productive knowledge-based services sector – which includes information and communications and finance and professional business services, helping to lift up the overall productivity in these economies.

APEC can play an important role in fostering the competitiveness in the services through promoting services innovation

- Given the importance of the services sector and the central role played by innovation in defining competitiveness, boosting innovation in the service industries will contribute in a significant way to economic development.
- Although many aspects of innovation policies – such as building an innovation culture, enhancing technology diffusion throughout the economy, promoting networking and clustering – are overlapping for manufacturing and services sectors, macroeconomic and structural policies may need to take more account of the special characteristics of services innovation.

- A fair share of innovation in services is not represented by new products but is more closely connected to the way products are delivered, i.e. the number of hours during which a service can be delivered or with improvements in the spatial dimension of the services. As no new product is created, a formal intellectual property rights (IPR) regime, such as a patent, is often not appropriate for services innovation.
- The lack of adequate IPR protection in services and the ease of imitating information have been highlighted as a barrier for services innovation. The APEC Intellectual Property Experts Group (IEPG) provides an appropriate platform for APEC policy makers to discuss possible changes to the IPR scheme to reflect the nature of services innovation. Some new initiatives such as software-related and business methods patenting have been utilized in some economies. Services innovation will also benefit from enhancing international co-operation on IPR protection.
- A productive services sector, even more so than other sectors of the economy, depends crucially on the supply of high-skilled workers, such as ICT professionals. Therefore, the shift towards a more modern and productive service economy may also require changes to human resource, training and educational policies.
- APEC can also promote the exchange of skills and knowledge across borders by enhancing greater people-to-people connectivity. Indeed, work on the facilitation of movement of people, which may include tourists, business people, professionals and workers, women and youth, has been discussed in APEC, and will be further explored in the APEC Connectivity Blueprint which will be launched at the APEC Economic Leaders' Meeting in Beijing in November 2014.
- As the modern services sector relies heavily on the successful adaptation of productivity-enhancing technology, it is important to remove impediments that prevent services firms from seizing the benefits of information and communication technology advances. In this regard, policies that promote effective competition in ICT infrastructure, network services and applications, notably for broadband, will be crucial. These priorities fit well with the agenda of the APEC Telecommunications and Information Working Group (TEL) whose aim is to improve telecommunications and information infrastructure in the Asia-Pacific region.

I. APEC economy: Recent trends and outlook

The regional economy has had a soft start in 2014...

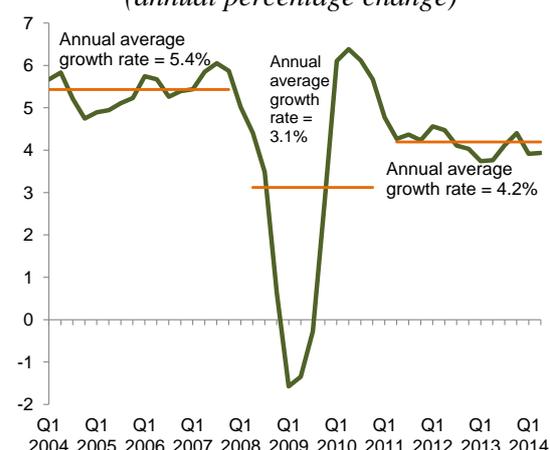
The APEC region unexpectedly registered slower growth in the first half of 2014. APEC GDP is estimated to have expanded by 3.9%¹ in the first half of this year, down from the 4.3% growth rate seen in the second half of last year (Figure 1). With only a few exceptions, this slower growth was seen across both advanced and emerging and developing (EM&Ds) APEC economies². The economies of the four Asian Newly Industrialized Economies (NIEs) maintained the recovery trend in the first quarter but some signs of flattening out have emerged in the second quarter.

The reduced rate of economic expansion earlier this year highlights the unsteadiness of the region's economic recovery since the 2008-09 global financial crisis which had caused APEC GDP contracted in 2009. Since then, the region has continued to be impacted by the legacy of the GFC. APEC GDP growth has reduced to an average rate of 4.2% since 2011, 1.2 percentage points lower than the average growth rate recorded during 2004 and 2007.

¹ APEC growth figures are based on new purchasing power parity (PPP) weights derived from the recently released 2011 International Comparison Program survey and are not comparable to the figures reported in previous APEC Economic Trends Analysis reports. The calculations of quarterly APEC GDP growth exclude Brunei Darussalam; Papua New Guinea and Viet Nam due to data unavailability.

² In this report, advanced APEC economies include Australia; Canada; Japan; New Zealand and the United States. Newly Industrialized APEC economies (NIEs) are Hong Kong, China; Korea; Singapore and Chinese Taipei. The rest of APEC economies is classified as emerging and developing economies (EM&Ds).

Figure 1: APEC Gross Domestic Product (annual percentage change)



Source: APEC Policy Support Unit calculations based on data from Thomson Reuters and the International Monetary Fund.

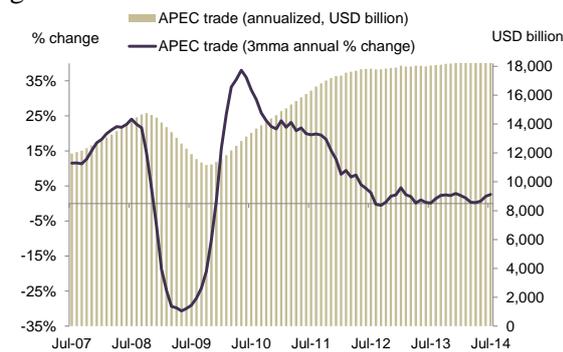
...as trading activities remained subdued

The value of APEC merchandise trade, as measured by the sum of exports and imports, rose marginally at 1.2% in the first half of this year, in comparison to the same period last year, undermining earlier expectations of a return to buoyant growth after a prolonged period of stagnancy (Figure 2). This single-digit growth of merchandise export earnings across both advanced and EM&Ds seen since 2012 is a marked reduction from the double-digit rate seen in 2007 (Figure 3).

In the year to date, the performance of APEC merchandise exports have been weighed down by slowing intra-APEC trading activities, which together accounted for 68% of total APEC shipments (Figure 4). Intra-APEC trade growth during January to May this year decelerated to less than one-third the average pace recorded in 2013. Exports of APEC goods to external trading partners also showed mixed performance. One encouraging sign was the turnaround of European demand for APEC goods. APEC merchandise exports to Europe, which account for 15% of total APEC exports, have steadily picked up in the first few months of this year, ending the

contracting trend that persisted in the past two years. Despite this gain, the values of APEC shipments to Europe are still more than 3% lower than the peak value registered in 2011. The marginal improvement of European imports of APEC goods was being offset somewhat by flat demand from other APEC trading partners, which rose only 0.1% in the first 5 months of this year.

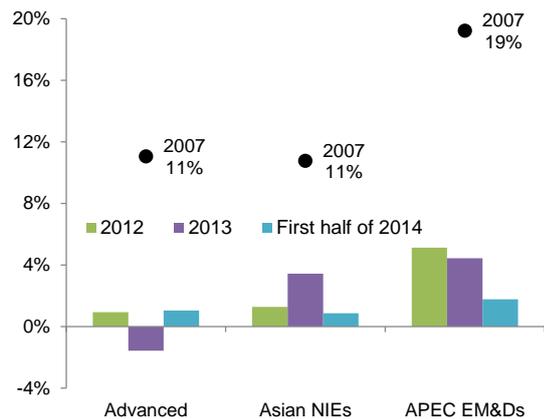
Figure 2: APEC trade³ has recorded marginal gains for more than 30 months



Source: APEC Policy Support Unit calculations based on data from World Trade Organization.

Figure 3: Export earnings across all APEC economic groupings have been rising at a slower pace than the double-digit rates recorded in 2007

(merchandise export values, annual % change)

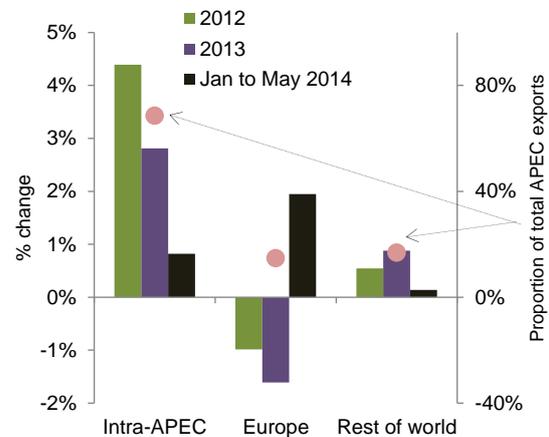


Source: APEC Policy Support Unit calculations based on data from World Trade Organization.

³ The calculation of APEC trade figures exclude Brunei Darussalam and Papua New Guinea due to data unavailability

Figure 4: While the demand for APEC merchandise goods from Europe has recovered, intra-APEC trading activities moderated

(values of APEC exports to different trading partners, annual % change)

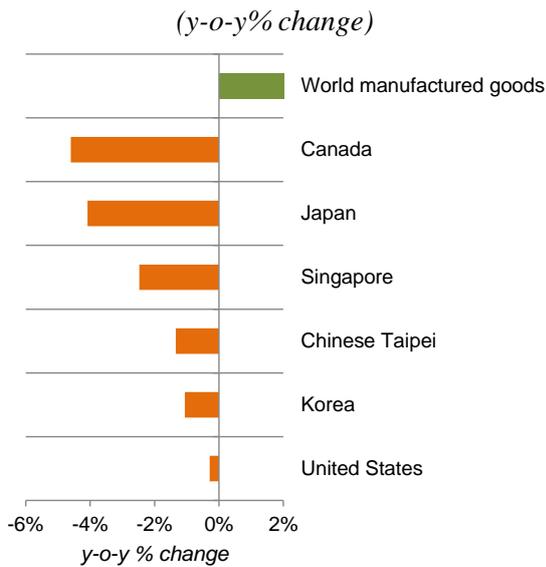


Source: APEC Policy Support Unit calculations based on the International Monetary Fund's Direction of Trade Database

Soft global demand for electronic products, such as disk drives and semi-conductors caused the exporting sector in APEC NIEs to underperform. Weak demand has also exerted downward pressure on prices of APEC exporting goods. Data from the World Trade Organization showed that all reporting APEC economies experienced sharp declines in prices for manufactured exporting goods in the first half of this year (Figure 5). The falling prices for APEC goods contrast sharply with the world trend in which prices increased by 2.0% in the first half of this year in comparison to the same period last year.

Global prices for primary commodity prices, excluding fuels, have generally edged lower earlier this year, thereby negatively affecting the exporting sector in Australia; Chile; Indonesia and Peru. Aside from the reduced demand and prices, other temporary factors were at play in some APEC economies. In the United States for example, the severe winter affected supply chains and contributed to the fall in the export volume in the first quarter of this year.

Figure 5: Manufactured goods export prices in the first half of 2014



Source: APEC Policy Support Unit calculations based on data from the World Trade Organization.

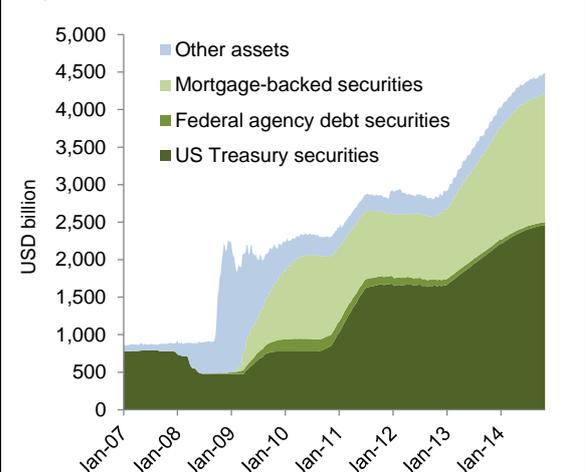
Domestic demand has played a less supportive to growth despite a buoyant financial market

Domestic demand has eased across many APEC markets in the first half of this year, despite broadly accommodative monetary policy conditions globally. In the United States, although the Federal Reserve has gradually reduced its monthly asset purchases (Box 1), its policy rate range remains at a record low of between zero and 0.25%.

Box 1: A summary of the monetary quantitative easing program in the United States

The US quantitative easing program was first launched in 2008 and has evolved into three separate rounds. In the first round in November 2008, the Federal Reserve started buying USD 600 billion in mortgage-backed securities. The second round of USD 600 billion purchase of US Treasury securities was announced in November 2010. The third round of quantitative easing started in September 2012 when the Federal Reserve initiated a USD 85 billion per month purchase of US Treasury and mortgage-backed securities.

Figure 6: US Federal Reserve's balance sheet



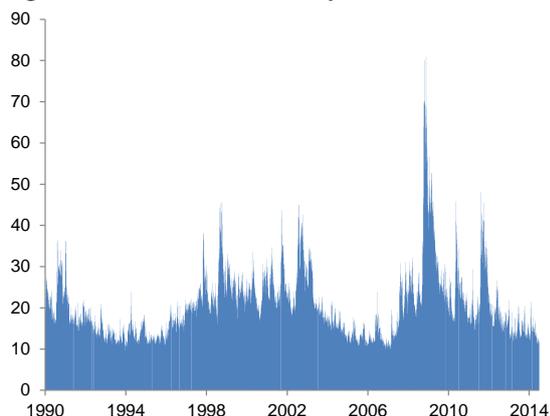
Source: US Federal Reserve

As a result of the three rounds of quantitative easing, the US Federal Reserve's balance sheet rose to USD 4.5 trillion (Figure 6). In comparison, prior the 2008 Global Financial Crisis, its balance sheet was under USD 1 trillion. In late 2013, the Federal Reserve has been cutting its purchase and its final tranche of USD 15 billion was concluded in October 2014.

In the first six months of this year, financial markets have enjoyed a good period of stabilization. The Chicago Board Options Exchange Market Volatility Index (VIX)⁴ – also known as the ‘fear index’ – fell to a near record low in June 2014 (Figure 7). Improving financial markets have also been reflected in declining long-term interest rates in many economies. Meanwhile, asset prices grew strongly (Figure 8). Equity prices in advanced APEC economies have made steadfast improvements throughout this year, reaching record highs in some markets. Investors have also regained their appetite for riskier assets. Although the momentum has dampened since late August, equity prices in many emerging and developing APEC economies staged a rebound since the sell-off late last year.

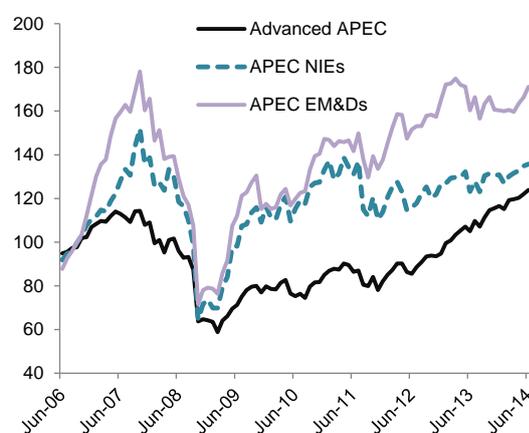
⁴ The VIX index represents one measure of the market's expectation of stock market volatility over the next 30 day period

Figure 7: S&P 500 Volatility Index



Source: Yahoo Finance

Figure 8: Equity prices
(Index, 2006=100)



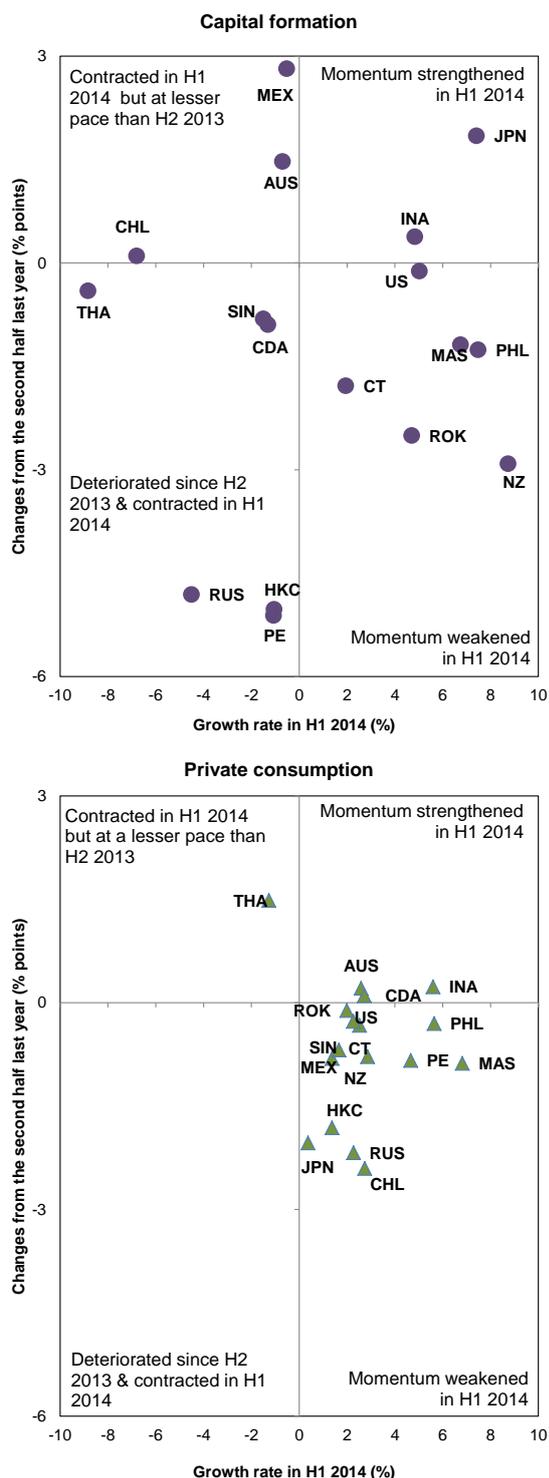
Source: APEC Policy Support Unit calculations based on data obtained from Thomson Reuters.

Improved wealth effects brought about from rising financial asset prices and accommodative monetary conditions however have not yet been translated into more solid private consumption and investment in the first half of this year (Figure 9). The prolonged period of sub-par economic performance has eroded the profitability of firms and reduced their propensity to spend. Even in the case of high corporate profits, uncertainty about the economic outlook has incentivized companies to hold more cash on their balance sheet rather than investing in new factories and machinery. According to data from the US Federal Reserve, the non-financial business sector in the United States held USD 2.58 trillion in cash and

money market funds, 12% more than the USD 2.3 trillion of cash holding at the end of 2009. As a result, investment has been slow to recover in the wake of the recession with non-residential fixed investment being just 5% higher than it was in 2007.

Private consumption growth also softened in most APEC economies while increasing only marginally in Australia; Canada and Indonesia. Consumer spending in different APEC economies was influenced by an array of factors. Geopolitical conflicts and political uncertainty both within and outside the APEC region weighed down consumer and business confidence. At the same time, easing labor conditions in some emerging and developing APEC economies, such as Chile and Hong Kong, China, kept a lid on household spending. Falling real wages were another factor. In Japan, the rise in consumption tax in April this year, from 5% to 8%, drove up inflation but at the same time resulted in a fall in real wages. In Mexico, real wages in the commerce sector have been on a downward trend over the past few years and edged 0.6% (y-o-y) lower in January to June this year in comparison the level of the same period last year.

Figure 9: Capital formation in selected APEC economies: first half of 2014 versus the second half of last year



Note: Abbreviations used for APEC's members' names are as follows: Australia (AUS); Canada (CDA); Chile (CHL); Hong Kong, China (HKC); Indonesia (INA); Japan (JPN); Korea (ROK); Malaysia (MAS); Mexico (MEX); New Zealand (NZ); Peru (PE); the Philippines (PHL); Russia (RUS);

Singapore (SIN); Chinese Taipei (CT); Thailand (THA) and United States (USA). Data for Brunei Darussalam; China; Papua New Guinea and Vietnam were not available at the time of writing this report.

Source: APEC Policy Support Unit calculations based on data from the World Trade Organization.

Economic activity in the APEC region is expected to firm up but at a more moderate pace

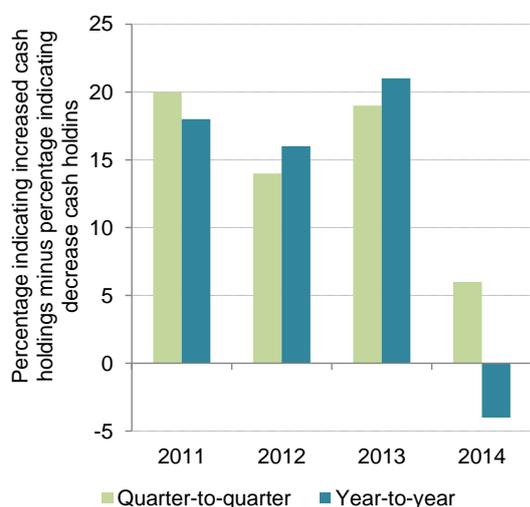
After the soft start of this year, the economic recovery in the APEC region is expected to gain traction in the second half of 2014. The US economy has rebounded strongly after the harsh winter that caused a contraction in growth in the first quarter of this year. GDP grew by an annualized rate of 3.5% in Q3 2014. The strong Q3 growth figure, on the back of a 4.6% annualized gain in the previous quarter, marks the strongest back-to-back GDP readings since late 2003. This better-than-expected Q3 GDP growth figure stems from strong contributions from net exports and government spending.

Business investment grew only moderately but is expected to improve going forward. While corporate cash holdings in the United States have remained high, a survey compiled by the US Association for Financial Professionals showed that this trend has started to reverse in the third quarter as corporate optimism strengthened (Figure 10)⁵. Respondents to the survey indicated that lower cash balances are being used for capital expenditure, mergers and acquisitions and share repurchases. The slowdown in cash accumulation is not expected to be a one-time event as the forward-looking indicator measuring the expected change of cash holdings during the third quarter dropped 13 points to a

⁵ Association for Financial Professional. "EconWatch: Weekly Economic Newsletter for Treasury and Finance". October 27, 2014.

reading of -3, indicating growing confidence in business conditions.

Figure 10: AFP Corporate Cash Indicator
(Net of the percentage of respondents indicating increased cash holding and the percentage of respondents indicating decreased cash holdings)



Source: Association for Financial Professionals, October 2014

The confidence in the continuing US economic recovery is reflected in the US Federal Reserve's announcement to conclude its quantitative monetary easing program in late October 2014. Private consumption – which is the cornerstone of the US economy – is expected to improve further as households are in a better position financially as a result of reduced debt levels, higher asset valuations for homes and personal finances. The substantial improvement in the outlook for the labor market should provide more support to private consumption. Based on these recent developments, the outlook of output growth for the United States can be significantly revised upwards. In the October 2014 IMF World Economic Outlook, US GDP growth is projected to reach 2.2% in 2014 before accelerating to 3.1% in 2015, outperforming other advanced economies in which the growth projections for the whole group average at 1.8% for 2014 and 2.3% in 2015.

Table 1: APEC economic growth projections
(percent change)

	Projections				Difference from April 2014 WEO	
	2012	2013	2014	2015	2014	2015
Australia	3.6	2.3	2.8	2.9	0.2	0.2
Brunei Darussalam	0.9	-1.8	5.3	3.0	-0.1	0.0
Canada	1.7	2.0	2.3	2.4	0.0	0.1
Chile	5.5	4.2	2.0	3.3	-1.6	-0.7
China	7.7	7.7	7.4	7.1	-0.2	-0.2
Hong Kong, China	1.6	2.9	3.0	3.3	-0.7	-0.6
Indonesia	6.3	5.8	5.2	5.5	-0.2	-0.3
Japan	1.5	1.5	0.9	0.8	-0.5	-0.1
Korea	2.3	3.0	3.7	4.0	0.0	0.2
Malaysia	5.6	4.7	5.9	5.2	0.7	0.2
Mexico	4.0	1.1	2.4	3.5	-0.6	0.0
New Zealand	2.5	2.8	3.6	2.8	0.3	-0.2
Papua New Guinea	8.1	5.5	5.8	19.6	-0.2	-2.0
Peru	6.0	5.8	3.6	5.1	-1.9	-0.7
Philippines	6.8	7.2	6.2	6.3	-0.2	-0.2
Russia	3.4	1.3	0.2	0.5	-1.1	-1.8
Singapore	2.5	3.9	3.0	3.0	-0.7	-0.6
Chinese Taipei	1.5	2.1	3.5	3.8	0.3	-0.1
Thailand	6.5	2.9	1.0	4.6	-1.5	0.8
United States	2.3	2.2	2.2	3.1	-0.6	0.1
Viet Nam	5.2	5.4	5.5	5.6	-0.1	-0.1
APEC	4.3	4.0	3.9	4.3	-0.4	-0.1

Source: APEC Policy Support Unit (PSU) calculation based on the October 2014 IMF World Economic Outlook report

However, the diverging growth momentum seen in the first half of this year across APEC members is expected to continue into the second half. This diverging momentum and the softness at the start of the year has effectively lowered the expected growth for 2014 to 3.9%, a touch lower than the 4.0% achieved last year. APEC output is forecast to accelerate at 4.3% in 2015 (Table 1).

Some APEC members have implemented new policy measures to boost growth. In late October, the Bank of Japan announced that it would expand its quantitative and qualitative monetary easing which included increasing its asset buying program to JPY 80 trillion a year, up from the previous rate of JPY 60-70 trillion. The combination of slower household consumption and private investment has prompted central banks in Chile; Korea;

Mexico and Peru to lower their policy rates recently. China also unveiled mini-stimulus measures that included extra spending on infrastructure and additional liquidity to the banking system. Following an unexpectedly narrow fiscal 2013-14 deficit, Canada has announced two tax cuts and sizable relief for families with young children, with a portion of the tax reduction being effective for 2014 taxation year.

The growth rate of China GDP however decelerated in Q3 2014 to 7.3% (y-o-y), from 7.5% recorded in the previous quarter. The downturn in the property sector, which directly accounts for 15% of China's GDP, intensified in the third quarter. In the first half of this year, inventories at listed developers rose by 25% to reach 65% of their assets, an all-time high. A rise in the number of unsold homes, which reflected the shrinking of residential floor space sold, also weighed on the market. In September 2014, 69 out of 70 cities in China that are tracked by official data reported a contraction in new home prices. In comparison, only six cities reported declines in house prices back in January. China GDP is forecast to ease slightly to 7.4% this year and 7.1% for 2015 as the economy is currently going through structural reforms to put growth on a more sustainable path with policies implemented to address financial vulnerabilities and other structural constraints.

In Japan, the sharp economic contraction in the second quarter caused its growth projections to be revised sharply downwards. Output is expected to increase by 0.9% in 2014, 0.7 percentage point lower than the forecast reported the April 2014 IMF World Economic Outlook. The growth projection for 2015 is also slightly lower at 0.8%. In the second half of 2014, some of the effects of the tax increases on consumption are expected to wane off.

Other APEC economies should benefit from an expected strengthening in large APEC economies. In addition, in some APEC economies which have cut government spending in the drive to reduce the underlying fiscal deficit, the declining fiscal drag will add another cause for cautious optimism. In Mexico where investment was a big drag on growth in the first half of this year, its outlook has improved. Major investments linked to reforms in energy, telecommunications and utility sectors are expected to take effect during the first half of 2015.

The lowering prices across a broad range of commodities will form opposite forces shaping the economy of the APEC region. By October 2014, the price of crude oil (WTI) plunged into USD 80-85 per barrel, a rough 25% reduction since mid-year price, marking the lowest level in four years. The forecasts for oil and other non-fuel commodity prices in 2014 and 2015 have been downgraded sharply. On the one hand, lower commodity prices have the potential to lift households and businesses' spending power. On the other hand, profitability of firms in a number of resource sectors where prices are falling will be affected, restraining the growth potential in APEC economies that are predominantly based on mineral exports.

Apart from a lowering of commodity prices, the push from external demand is also expected to be weaker than earlier envisaged. Demand for APEC goods from Europe may be weighed down by sub-par growth and low inflation. Real interest rates in Europe are rising although nominal interest rates are close to zero, as inflation remains low. The high rate of real interest may hinder the return to full employment and the increase in capacity utilization, hampering the appetite for import goods. The World Trade Organization recently revised downwards its forecasts for world

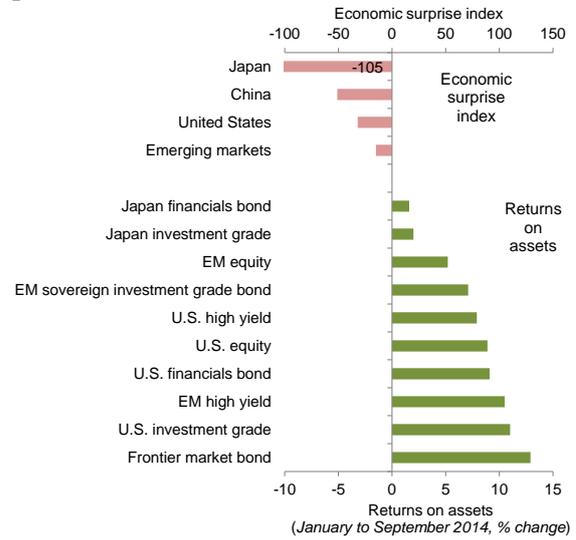
trade growth in 2014 to 3.1%, down from the 4.7% forecast in April. Estimates for global trade for 2015 were also cut to 4.0% from 5.4% previously. Most of the acceleration in global export momentum in 2014 is expected to be concentrated in the advanced economies. This group of economies is expected to have export volume increasing to 2.5% and 3.8% in 2014 and 2015 respectively. Exports from developing economies improved only marginally from the 3.9% pace in 2013 to 4.0% in 2014 and to 4.5% in 2015.

Downside risks to APEC economic outlook have intensified

Geopolitical risks, such as turmoil in the Middle East and Eastern Europe could cause disruptions in commodity markets and thereby disrupt world trade. On the backdrop of slower economic growth, the buoyancy of the financial markets (Figure 11) has become a cause for concern. Indeed, the divergence in the performance of financial markets from the strength of the underlying real economy signals a potential trend that investors are overly complacent. The search for yields and profitability in the environment of low global interest rates are inducing investors to take excessive risks and these risks are underpriced. Investors’ complacency is driving up asset prices across a broad range of financial assets. Concerns are raised that the rise in prices does not fully internalize the risks and the uncertainties surrounding the global economic outlook. In many advanced economies, both within and outside the APEC region, sovereign bonds and term premiums are unusually low against growth expectations and inflation. If left unaddressed, this build-up of risk in credit markets could compromise financial stability. More specifically, if international interest rates were to rise faster-than-expected or the global economy were to underperform unexpectedly, risk premiums and volatility compression could be suddenly reversed.

The larger the degree of asset price mispricing, the sharper the potential correction effects on equity prices, exchange rates and capital flows.

Figure 11: The divergence between economic performance and financial markets



Source: International Monetary Fund, “Global Financial Stability Report”, October 2014.

II. A sustainable and higher APEC growth: the role of enhanced competitiveness

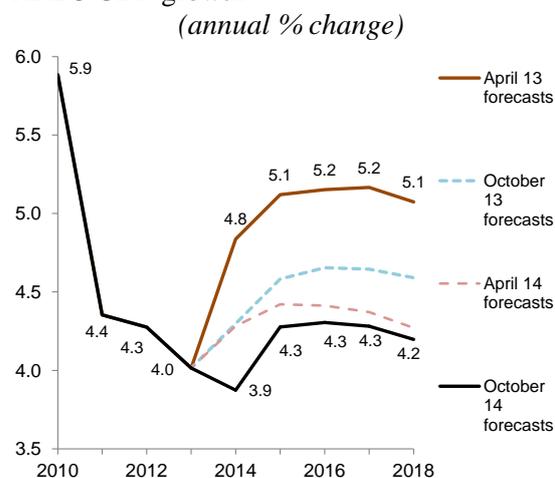
APEC growth potentials are projected lower

The recent pattern of serial downward revisions with regard to the global and APEC region economic outlook and the increased downside risks reflects the underlying structural imbalances in the global economy that were built up before the crisis and have not been fully addressed. The expansion of the world economy prior to the 2008-09 global financial crisis was built on unsustainable global demand and financial patterns. In recent years, debt-related strains have constrained consumers in advanced economies to rapidly increase their consumption to support global trade to the degree seen prior to the crisis. Through trade and technology diffusion linkages, sluggish domestic demand in advanced economies is spilling over to emerging and developing economies. Much of the expectation of the recovery relies on the ability of emerging and developing economies to boost domestic consumption and provide more support for global trade. After more than six year since the GFC, imports from emerging and developing economies however are still below 2007 trends.

These unresolved structural imbalances have lowered APEC medium-term growth potentials. Information gathered from the latest International Monetary Fund's (IMF) World Economic Outlook indicates that the APEC region is projected to grow at an average annual rate of 4.2% between 2014 and 2018 (Figure 12). This represents a marked downward shift in the growth forecasts of APEC output expansion. In particular, in early 2013, the IMF had forecast an average annual growth rate of

5.1% for the APEC region from 2014 to 2018.

Figure 12: Evolution of the IMF forecasts for APEC GDP growth



Note: Figures for 2010 through 2013 are actual growth rates; figures for 2014 through 2018 are projected growth rates. GDP growth for the APEC region is a weighted average based on purchasing power parity at constant 1980 prices.

Source: International Monetary Fund (IMF), World Economic Outlook and APEC Policy Support Unit (PSU) calculations.

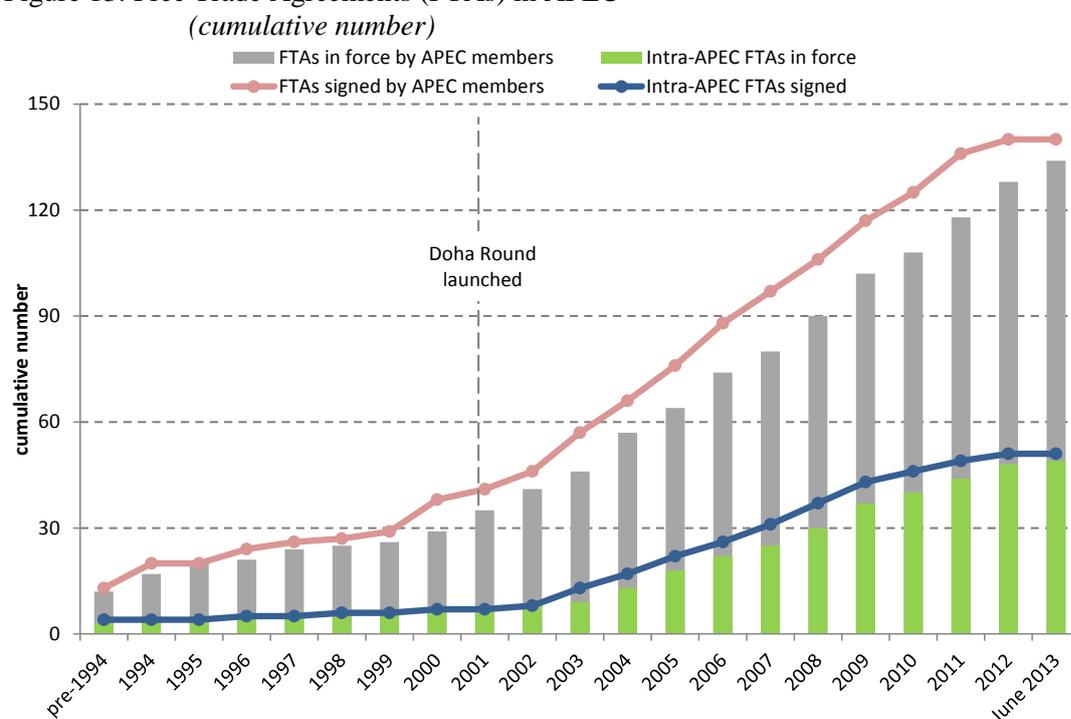
Raising competitiveness is central to APEC's achievement of sustainable growth with high quality

The risk of persistent economic underperformance underscores the need for coordinated policy actions to address weaknesses that inhibit growth. Over the past 25 years, APEC has seen impressive achievements in economic growth that is built on a remarkable enhancement of the region's competitiveness (Box 2). Some of the factors that enabled striking growth of APEC, i.e. enhanced trade and investment liberalization and facilitation and greater regional integration to improve competitiveness, are still in place. By building on these strengths APEC economies can become even more competitive and thereby resume strong growth.

Box 2: APEC's competitiveness and economic growth

2014 marks the 25th anniversary of APEC's establishment. Over the past 25 years, APEC economies have worked together to enhance trade and investment liberalization and facilitation in the Asia-Pacific region and to promote greater regional integration. When APEC was first established, there were only three free trade agreements (FTAs) in the region. By mid-2013, APEC members had signed up to 140 FTAs as well as 800 bilateral investment treaties (Figure 13). In addition, industrial tariffs have become progressively lower, from an average rate of 16.9% in 1989 to 5.1% in 2011. APEC has also brought about significant changes to global policy and the economic landscape. It has upheld the multilateral trading system and played an important role in concluding the Uruguay Round negotiations, the WTO's Trade in Information Technology Products Agreement (ITA), and early harvest talks of the Doha Round negotiations held in Bali, Indonesia at the end of 2013. Increased economic integration has facilitated cross-border technology and knowledge transfer which have helped to boost the region's competitiveness.

Figure 13: Free Trade Agreements (FTAs) in APEC

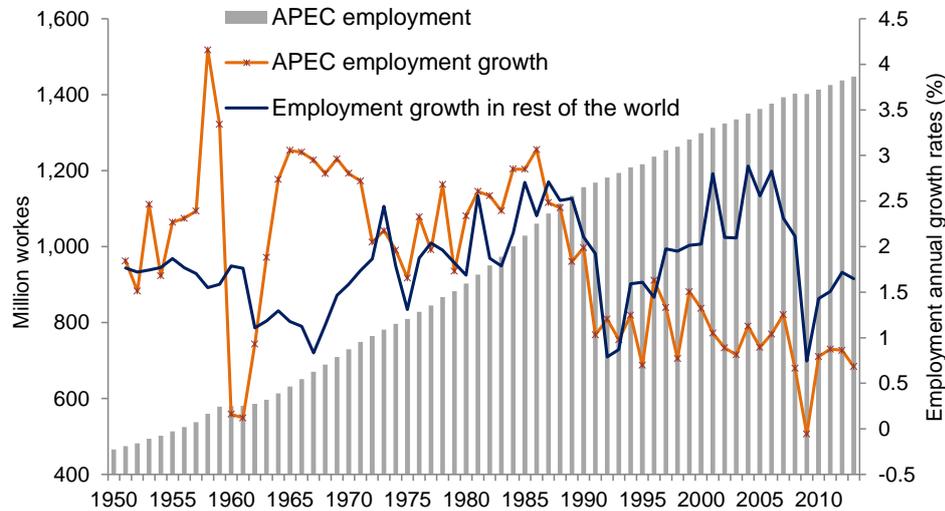


Source: APEC Policy Support Unit (PSU)

Enhanced APEC competitiveness is the most critical source of economic gains in the region in recent years. In the four decades from the 1950s through the 1980s, APEC economies enjoyed rapid expansion in the labor force, brought about from the baby boom following World War II. APEC employment grew strongly at a compound annual growth rate (CAGR) of 2.3% over this period, much higher than the CAGR of 1.8% seen in the rest of the world (Figure 14). This demographic development provided an important boost for APEC growth during this period, especially during the 1970s when the region's growth was badly affected by two major oil price shocks in 1973 and 1979. On average over the period between 1973 and 1989, the rapid growth of employment accounted for almost 65% of APEC GDP expansion (Figure 15). Since 1990, there has been a sharp drop in the rate of APEC's labor quantity expansion, reflecting the steady decline in APEC's population growth rate since 1970. On average, APEC's employment in the 1990s was growing at half the pace seen in the

previous four decades. Additionally, many APEC economies were affected by the 1997-1998 Asian Financial Crisis which scaled down gains in labor productivity. As a result, the pace of output expansion in the 1990s was, on average, only three-quarters the rate achieved during the four previous decades.

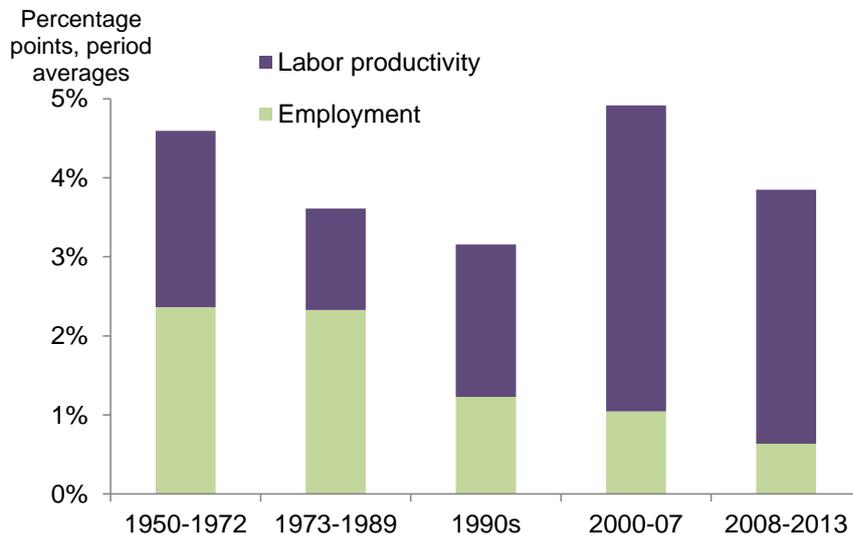
Figure 14: Employment from 1950 to 2013



Note: Data for Brunei Darussalam and Papua New Guinea are not available.

Source: The Conference Board, Total Economy Database and APEC Policy Support Unit (PSU) calculations.

Figure 15: Evolution of APEC GDP growth and the contributions from employment and labor productivity



Note: Labor productivity is defined as output per worker. Data for Brunei Darussalam and Papua New Guinea are not available. Aggregate data for the APEC region prior to 1973 also excludes Russia due to data unavailability.

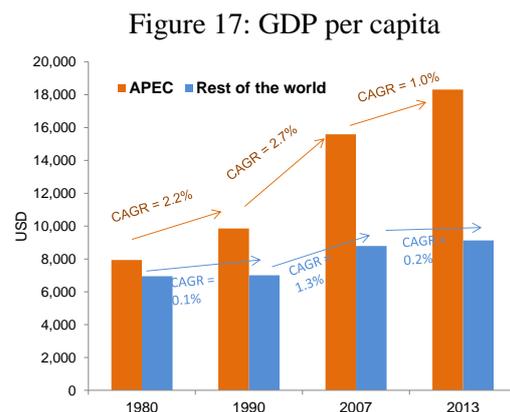
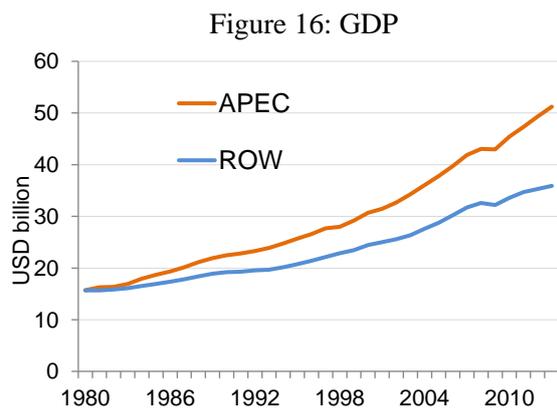
Source: The Conference Board, Total Economy Database and APEC Policy Support Unit (PSU) calculations.

The wide-ranging structural reforms and increased economic integration that gradually took place in the early 1990s brought about beneficial results to the APEC region in the 2000s. In some economies, there has been a gradual shift from land-intensive commodities to higher value-added goods. APEC's trade rose from 28% of GDP in 1992 to a peak of 50% of GDP

in 2008. More exposure to global competition and global technology appears to have had an advantageous impact on APEC’s competitiveness. From 2000 to 2007, APEC’s output per worker rose by more than 31%, from USD 15,325 per worker/per annum to USD 20,103 per worker/ per annum. In comparison, over the 10-year period between 1990 and 2000, APEC’s output per worker improved by only 25%. This improved labor productivity contributed to 80% of GDP growth in the APEC region between 2000 and 2007.

The impressive progress in advancing APEC’s competitiveness has made APEC’s performance clearly stand out from the rest of the world. Despite the fact that APEC’s employment has been growing at a much slower rate than that of the rest of the world, larger gains in labor productivity have resulted in GDP growth in the region to consistently outperform the rest of the world (Figure 16). APEC GDP recorded a compound annual growth rate (CAGR) of 3.7% between 1980 and 2007, more than a full percentage point higher than the CAGR for the rest of the world over the same period. As a result, APEC’s share of global GDP rose from under 48% in 1980 to 55% in 2007. Strong economic growth has also dramatically improved the region’s economic welfare (Figure 17). APEC GDP per capita, in constant 2013 purchasing power parity (PPP) terms, doubled while that of the rest of the world improved by less than 30%.

GDP in APEC and rest of world since 1980 (in 2013 purchasing power parity prices)

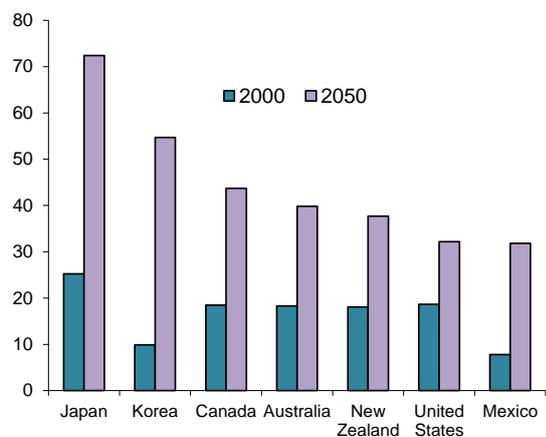


Note: Data for Brunei Darussalam and Papua New Guinea are not available.

Source: The Conference Board, Total Economy Database and APEC Policy Support Unit (PSU) calculations.

As part of re-examining existing economic strategies, APEC policy makers should include the continuous efforts to raise labor productivity so that APEC economies can become globally more competitive and sustain strong economic growth. APEC labor productivity growth was particularly hard hit following the global financial crisis, decelerating to around 82 percent the expansion rate seen in the previous six years. While productivity expansion often falls in the initial stages of a recession, persistently weak productivity six years following the crisis has become a damaging factor. This slow progress in returning productivity growth to the pre-crisis level is forcing adjustment to wages in many economies, constraining the power of the domestic consumption to fuel growth.

Figure 18: Population aged 65 and over relative to population aged 15-64 in 2000 and 2050 in selected APEC economies
(ratio)



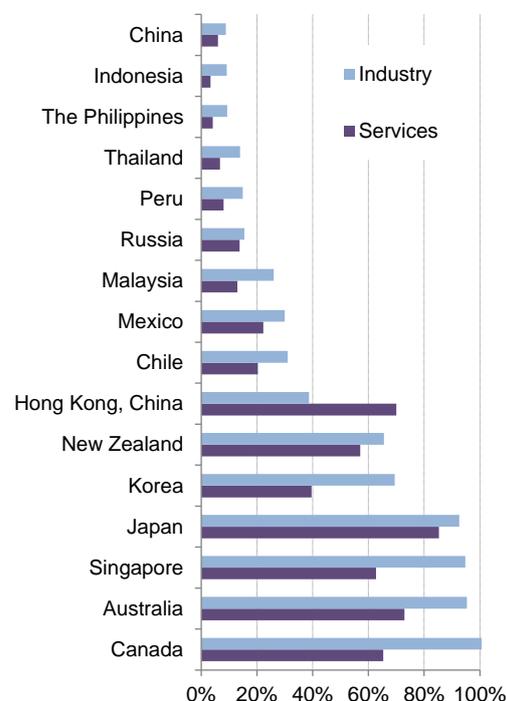
Source: OECD, 2006

Improving labor productivity is not the only impetus for the APEC region to recover from the financial crisis but it is also critical if the region desires to reach a higher level of sustainable economic progress. One of the important lessons of the past two decades has been the pivotal role of productivity gains in the development of APEC economies. Labor productivity gains have and will become even more critical in many APEC

economies, especially as some face challenging demographic issues that are and will continue to constrain the growth of the labor force (Figure 18).

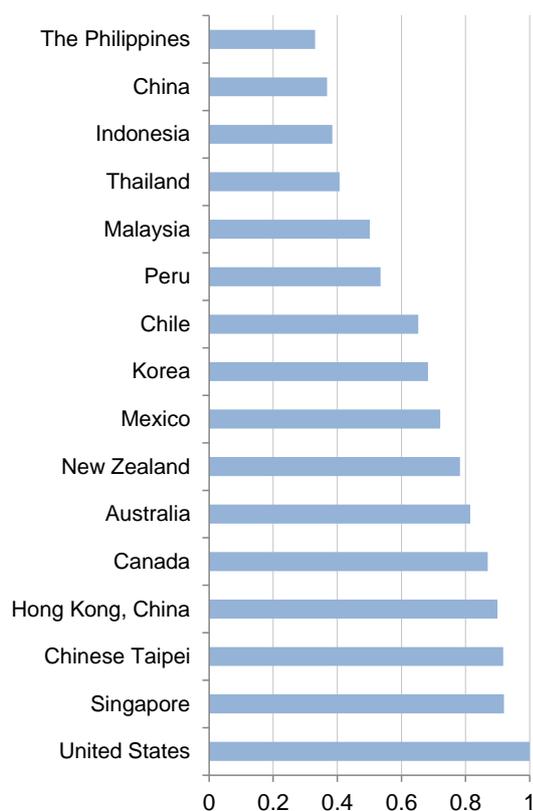
As discussed in Box 2, labor productivity in the APEC region has improved significantly in the past few decades. However, the regional average marks an uneven pace of convergence across APEC economies. In particular, output per worker in more than half of APEC economies is less than 60% of the average amount of output generated by a worker in the United States. With the exception of a few APEC economies, the gaps in labor productivity are larger in the services sector. The wide gap in services labor productivity between the US and many other APEC economies suggests that much remains to be done to transform this sector in the region (Figure 19).

Figure 19: Labor productivity as a percentage of US labor productivity, 2008



Source: APEC Policy Support Unit (PSU) calculation based on data obtained from the World Bank's World Development Indicator Database

Figure 20: Level of Total Factor Productivity (TFP), relative to the US in current purchasing power parity prices, 2011



Source: Penn World Table, Version 8.0.

III. Building a dynamic and innovative services economy as an engine for growth

Twenty five years into APEC's remarkable economic transformation, the services sector has been an important driving force

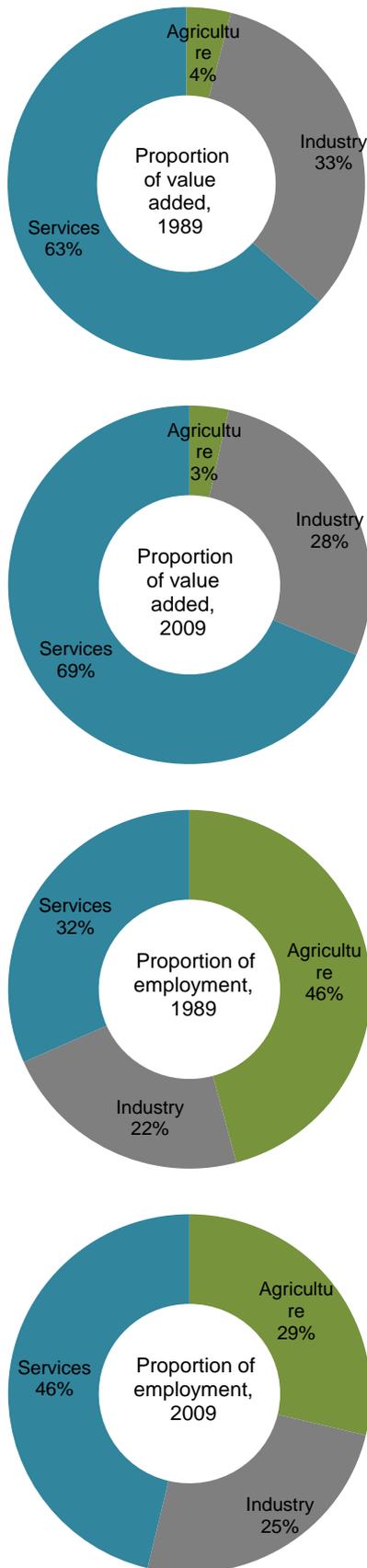
Since the establishment of APEC, the APEC region has been outperforming the rest the world, as indicated in Box 2. Part of this achievement has been the dynamic development seen in the services sector. Of the three sectors, agriculture, industry and services, the services sector recorded the highest average annual growth rate. The faster growth rate of the services sector increased its share in APEC economic pie, from 63% of GDP in 1989 to 69% in 2009. The services sector has

become the most important provider of jobs in the APEC region, accounting for 46% of the region's employment (Figure 21). Not only does the services sector occupy a large part of the regional economy, but it has also been a huge contributor to overall growth. Over the period between 1989 and 2009 for example, APEC output has grown by 83%. Of the 83% output expansion, the services sector contributed to 60 percentage points while 21 percentage points stemmed from growth in the industry sector. Since services account for a large proportion of consumption, developing the services sector is critical to strengthening domestic demand, and thereby helping to lift the APEC region out of the legacy of the 2008-09 GFC.

There are a number of other factors supporting the strengthening of the services sector and its productivity in the APEC region. The shift towards a more dynamic services-based economy is not only essential for APEC economy to achieve higher income status but it has also transformed the structure of the APEC economy. There is now more pronounced interaction between the services sectors and other sectors such as manufacturing and primary sectors, to the point where there is no clear dividing line between goods and services.

Services are increasingly used by firms as an instrument of product differentiation or improving production efficiency. In today's increasingly competitive world, after-sales and delivery services enhance the competitiveness of manufacturing firms and play the crucial role in sustaining their long-term success. An example can be seen in car manufacturers who offer services such as maintenance and repairs, personal instruction and roadside assistance in order to differentiate and customize their products.

Figure 21: Contributions to APEC’s total value added and employment



Source: StatsAPEC

In addition, services occupy a strong presence in global production chains and its share is increasing. In a study by Low (2013)⁶, it is found that 91% of the costs for a suit sold in the US for USD 425, but made in China with imported materials from other Asian economies, can be attributed to the fee for services. This includes intellectual property, design, branding, advertising, marketing and retailing and other ‘invisibles’. Only 9% of the retail prices can be traced back to the manufacturing of the actual suit.

The APEC region is undergoing rapid change and is becoming increasingly integrated into fast-evolving regional and global production and knowledge networks. The pervasiveness of services in the production chain indicates that the development of the services sector will not only be important to enhance the economy-wide level of productivity but it will also deepen the region’s capacity to move up the global value chain.

While substantial progress has been made over the past few decades, in many emerging and developing APEC economies the services sector still remains underdeveloped compared with other advanced APEC economies

The average 69% share of the services sector in APEC output masks wide variations across APEC members. Compared to advanced economies, the services sector has been less dynamic in many developing and developing economies. In 2010, the services sector accounts for less than 50% of GDP in Brunei Darussalam; China; Indonesia and Papua New Guinea.

⁶ Low, Patrick. (2013). “The Role of Services in Global Value Chains”. Fung Global Institute, December 2013

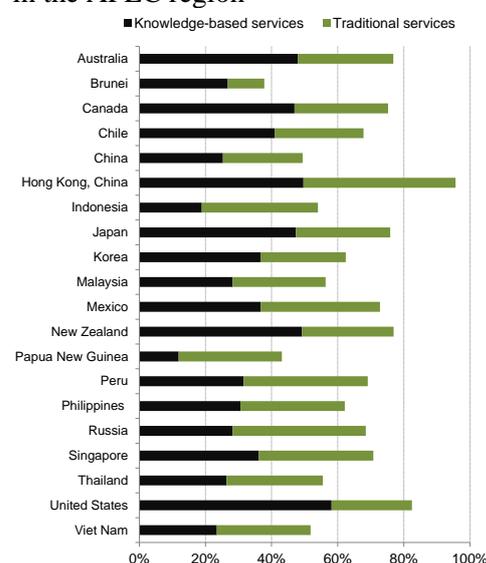
The services sector as a whole is heterogeneous conglomerate of industries⁷. Across many developing APEC economies, the overall low level of services productivity stems from the dominance of traditional services – such as wholesale and retail trade, hotels and restaurants and transportation – all which feature lower productivity levels. The so-called knowledge-based market services, which include information and communications and finance and professional business services, makes up a relatively smaller share of economic activity in many emerging APEC economies, accounting for less than 30% of GDP in Brunei Darussalam; China; Indonesia; Malaysia; Papua New Guinea; Russia and Viet Nam (Figure 22).

Thanks to rapid advances in information communication technology (ICT), services can now be unbundled, disembodied, and splintered in a value chain just like manufactured goods and can be electronically transported through satellite and telecom networks. The number of services that can be transported digitally is constantly on the rise – from call centres to e-learning and to cloud labor matching platforms that efficiently connect employers and employees across borders. Innovations in ICT have made services more tradable and have rendered several previously non-tradable services tradable. A strong knowledge-based services sector, is becoming important for

⁷ The definition and classification of services are subject to substantial variations. This report adopts the International Standard Industrial Classification Rev. 3 (ISIC) prescribed by the United Nation to broadly divide the services sector into different groupings. In particular, traditional services are comprised of the following ISIC categories: F (construction), G-H (wholesale, retail trade, restaurants and hotels), and I (transport, storage and communication). The knowledge-based services include ISIC categories J (financial intermediation), K (real estate, renting and business activities), L (public administration and defense), M (education), N (health and social work) and O-P (other recreational and services activities).

businesses to differentiate products and move up the global value chain. Higher income APEC economies have shifted towards a larger knowledge-based services sector which tends to have higher productivity, helping to lift up the overall productivity in these economies. In many advanced economies output growth has been higher in the knowledge-based services industries than in manufacturing, implying that there is room to shift outward the global technology frontier for services.

Figure 22: Value-added of different industries in the APEC region



Source: United Nations Statistics Division

APEC can play an important role in fostering the competitiveness in the services through promoting services innovation

Internally, structural reforms that promote a rapid shift towards a modern and high-productive sub-services sector are desirable for economies that currently have a high concentration of traditional and low productivity services. However, increasing the share of knowledge-based services is likely to entail a long process and requires significant structural reforms across different industries. There are also welfare implications, particularly for the poor as the services sector should be the

instrument to achieve inclusive growth. Growth is inclusive if it reduces poverty, inequalities in incomes and gender as well as creating jobs. In comparison with the manufacturing sector, the services sector is relatively more labor-intensive and has larger capacity to generate jobs across different skill levels. The services sector has been the key provider of jobs for disadvantaged group, such as woman, as services jobs tend to be less physically demanding than manufacturing jobs. This fact is confirmed in the World Bank's World Development Report which shows that services accounts for a higher proportion of female employment than male employment, across 77 economies being examined⁸. Therefore, the development of traditional services, alongside with the modern services, will hold the key to expand employment opportunities to all.

The benefits to the economy would be greater if more efficiency is achieved across a wide range of service industries. Given the importance of the services sector and the central role played by innovation in defining competitiveness, boosting innovation in service industries will contribute in a significant way to economic development.

Contrary to the industry sector in which innovation is often associated with technological advances, services innovation is less widely understood. A fair share of innovation in services is not represented by new products but more closely connected to the way products are delivered, i.e. the number of hours during which a service can be delivered or with improvements in the spatial dimension of the services (Table 2). As no new product is created, services innovation it is less likely to be captured by traditional

measures of technological performance, such as patenting.

Services have become more research-and-technology-intensive over time with some specialist services firms, associated with the technical knowledge intensive business sector (t-KIBS), being as R&D intensive and as technologically innovative as high-technology manufacturing firms. However, as a whole, innovation in the services sector is less R&D intensive: in the Netherlands, only 23% of total innovative costs in services went for R&D expenditure, compared to 53% for manufacturing⁹. Therefore, reliance on R&D data or patents can give a false impression that the sector is not innovative. This perception has led to services innovation receiving less attention from policy makers in the past.

The landscape has changed. A growing number of studies indicate that services firms in fields such as specialist design and engineering, environment services, software system designers and integrators and research contract companies and other technical services organisations, are taking a more central role (and sometimes leading) in the innovation process.

The different nature and process of services innovation implies that policies need to be fine-tuned in order to succeed in promoting more innovation in services. According to the OECD, innovation policy measures in most of its members are sector-neutral. Although many aspects of innovation policies – such as building an innovation culture, enhancing technology diffusion throughout the economy, promoting networking and clustering – are overlapping for manufacturing and services sectors, macroeconomic and structural policies may need to take more

⁸ World Bank (2012). "World Development Report: Gender Equality and Development". Washington.

⁹ Central Bureau of Statistics of the Netherlands (1998). "Kennis en Economie". The Hague.

account of the special characteristics of services innovation.

Table 2: The typology of service innovation

Technological innovation	<ul style="list-style-type: none"> • Retail: online shopping • Banking services: ATM services, e-banking • Education: e-learning • Human resource: cloud-labor platform • Restaurant: use of online ordering • Satellite monitoring of fertiliser use in farming
Organization innovation	<ul style="list-style-type: none"> • Air transport: low cost carrier services • Catering services: door-to-door delivery of food • Direct marketing in selling tourist products • Outsourcing of human resource management in construction

Source: United Nations Economic Commission for Europe, 2011

Formal intellectual property rights (IPR) regimes, such as patent, are often not always appropriate for services innovation. Services innovators often rely on other mechanisms of IPR protection such as lead time, trademarks and secrecy. The lack of adequate IPR protection in services and the problem of the ease of imitation of service innovation have often been highlighted as a barrier to services innovation. In services, imitation is easy as information is often relatively cheaper to copy and share.

Recognizing the importance of IPR protection and enforcement, in 1996, the Committee on Trade and Investment of APEC established an Intellectual Property Rights Experts Group (IPEG). The IPEG

implements a work program which aims to:

- Deepen the dialogue on intellectual property policy;
- Survey and exchange information on the current status of IPR protection and administrative systems;
- Study measures for the effective enforcement of IPR;
- Fully implement the World Trade Organization's Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement);
- Facilitate technical cooperation to help economies implement TRIPS.

The IEPG would provide an appropriate platform for APEC policy makers to discuss possible changes to the IPR scheme to reflect the characteristics of services innovation, such as intangibility, relatively short life cycle and multi-dimensional nature. Some economies have reformed the IPR regimes to accommodate new types of inventions such as software-related and business methods patenting. Since patents provide incentives to innovate, it is important for APEC policy makers to enhance cooperation in IPR. It is also important, however, to strike the right balance between the use of patents to ensure the right appropriation of the fruits of innovation by patent holders and the diffusion of technological knowledge for the whole society.

A productive services sector, even more so than other sectors of the economy, depends crucially on the supply of high-skilled workers, such as skilled professional ICT workers. Therefore, the shift towards a more modern and productive service economy may also require changes to human resource and educational policies. Despite the region's success in providing high-skilled labor, some APEC member

economies are facing shortages and that demographic change may exacerbate this problem. The numbers of high-skilled workers can be increased through a strengthening of human resource development and putting additional investment into education and training. APEC can also promote the exchange of skills and knowledge across borders by enhancing greater people-to-people connectivity. Indeed, work on the facilitation of movement of people, which may include tourists, business people, professionals and workers, women and youth, has been discussed in APEC.

As innovation in services relies heavily on the successful acquisition and adaptation of productivity-enhancing technology, it is important to remove impediments that prevent services firms from seizing the benefits of information and communication technology advances. In the APEC region, there exists a great disparity in the usage of ICT. For example, fixed broadband subscribers per 100 inhabitants in the some merging and developing APEC economies are general lower than those in more advanced APEC economies (Figure 23). Much progress remains to be made to bridge the technological divide across APEC members.

In this regard, policies that promote effective competition in ICT infrastructure, network services and applications, notably for broadband, will be crucial. There is also strong support for the establishment and maintenance of an ICT-related business environment, such as encouraging public procurement via e-commerce and developing standards for e-commerce. These priorities fit well with the work agenda of the APEC Telecommunications and Information Working Group (TEL) whose aim is to improve telecommunications and information infrastructure in the Asia-Pacific region.

Figure 23: Fixed broadband subscribers/100 inhabitants, 2013



Source: World Bank's World Development Index