



**Asia-Pacific
Economic Cooperation**

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

Annex B

AEPR 2017 Individual Economy Report (IER) Questionnaire: Structural Reform and Human Capital Development

This year's AEPR will discuss the linkages between structural reform and human capital development, with a focus on making economic growth, trade, and investment more inclusive. As an important aspect of the AEPR, the Individual Economy Reports (IERs) provide an opportunity for economies to identify ways forward for structural reform in human capital development. The IERs will contribute to developing a broader picture of the lessons, gaps and challenges, and opportunities in implementing structural reform in human capital development in the region. It will also contribute towards finding a way forward for individual APEC economies as well as avenues for regional cooperation and capacity building.

For the purposes of this questionnaire, we define structural reforms for human capital development as policies in the education, health, employment, labour, or social protection sectors whose ultimate aim is to improve skills and productivity, making labour markets more efficient and inclusive, and making economies, industry sectors and households more resilient to economic shocks and market shifts. Furthermore, we define inclusive growth as a pattern of economic growth that provides greater opportunities for economic participation and employment for women and youth, and among underprivileged segments of society such as the poor, indigenous peoples, minorities, people living with disabilities, the underemployed, and those who have difficulty accessing global markets or who work in industries or sectors that may be adversely impacted by international competition.

Please limit responses to a maximum of four pages in total.

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

AEPR 2017 Individual Economy Report (IER) Questionnaire: Structural Reform and Human Capital Development

Australia

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

The Higher Education Participation and Partnerships Program (HEPPP), implemented in 2010, is a particularly effective human capital development reform. The HEPPP aims to ensure that Australians from low socioeconomic status (SES) backgrounds who have the ability to study at university have the opportunity to do so. It provides funding to assist universities to undertake activities and implement strategies that improve access to undergraduate courses for people from low SES backgrounds, as well as improving the retention and completion rates of those students.

The HEPPP consists of three components, each with specific objectives and funding arrangements:

- **Participation:** supports students from low SES backgrounds to access higher education and support them in their studies.
- **Partnerships:** supports development of outreach activities to build the capacity of people from low SES backgrounds to participate in higher education.
- **National Priorities Pool:** provides funding for projects that support the more effective implementation of HEPPP nationally and at the institutional level.

University enrolments of students from low SES and other disadvantaged backgrounds have increased at a greater rate than the growth in total student numbers since introduction of the HEPPP in 2010 and the demand-driven system of higher education in 2012. A key reason for the HEPPP's effectiveness is its whole of student lifecycle approach:

- **Pre-Access:** outreach to schools and communities to shift the perceptions of low SES people, including those as young as in primary school, and their families and communities, regarding the feasibility of attending university, and improving their ability to undertake higher education through targeted academic support.
- **Access:** improved pathways and admissions procedures that extend existing university activities and initiate new measures to encourage low SES students into higher education.
- **Participation:** support for low SES students during their studies contributes to increasing their participation, retention and completion rates.

The HEPPP was evaluated in 2016. The evaluation found that overall the HEPPP is positively influencing the quantity and rigour of higher education equity activities and policies. The

evaluation also found that the number of low SES individuals applying for, being offered a place at, commencing at and enrolling in university has increased considerably. Growth on each of these measures is higher in the low SES group than the medium and high SES cohorts. This growth has seen the share of higher education students from low SES background increase from 14.8 per cent to 16.1 per cent and the proportion of low SES individuals from the Australian population in higher education increase from 2 per cent to 2.5 per cent over 2010-2015.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Australia faces a mix of challenges in making economic growth more inclusive and support greater job creation so that more Australians can benefit from work. The three most important challenges to inclusive growth in Australia are:

- 1) **Boosting Labour Force Participation** - Population ageing poses a challenge to many advanced economies, including Australia. The labour force participation rate for people aged 15 years and over is projected to fall to less than 63 per cent by 2054–55, compared with around 65 per cent today. Improving workforce participation rates for groups with potential for higher participation is not only a pathway to boost Australia's productive capacity, but can improve equity and opportunity for all Australians. For example, Australia has a gender gap in labour force participation, while Indigenous Australians, mature age Australians and people with disability also have much lower participation rates than the general population. Young people are particularly vulnerable to unemployment during periods of economic and labour market softness, as they tend to have less education, skills and experience. The youth unemployment rate in April 2017 was 12.8 per cent, more than double the national rate. Improving youth participation in employment, education or training is therefore a priority for the Australian Government. Australia achieved a substantial decline in long-term unemployment by the time of the Global Financial Crisis, reaching 15.3 per cent April 2008. Since then, the number of long-term unemployed has risen to stand at 24.1 per cent in April 2017.
- 2) **Skills and Training** - Over recent decades, growth in demand for skilled labour has outstripped growth in demand for unskilled labour, both in Australia and in most other developed economies. The growing use of automated systems is increasing the complexity of tasks and requiring higher skill levels for entry-level positions. The consequence is likely to be a raised skills and education bar for entry into many professions and occupations. The shift from manufacturing and agriculture to a service economy in Australia implies growth in demand for adaptable and skilled workers (including in regards to teamwork and creativity). Early childhood education and basic schooling remains essential to foster economic growth, as a workforce with a high level of foundation skills (such as literacy and numeracy) is better able to adapt to the dynamic shifts in the demand for skills that are typical of a modern economy. Investing in higher-level skills is also essential, to foster productivity growth and support the strong service and primary industries Australia needs into the future.

3) **Job Creation** - Job creation was slow following the Global Financial Crisis, with Australia's unemployment rate reaching almost 6 per cent. This partly reflected the challenge of managing structural change between industries with varying labour requirements. Strengthening job creation will require a strong commitment to boosting economic growth and opening up employment opportunities through innovation and new forms of work. Investment in education, skills and training are essential to ensure existing and new entrants to the workforce are able to adjust quickly to changing labour market demands. Job creation for indigenous Australians and populations in regional areas continues to remain a challenge. For example, unemployment rates in Australia tend to increase outside of capital cities and in regions. Stimulating long-term economic growth and delivering sustainable employment to regions is a priority for the Australian Government.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Reforms to increase and streamline the collection of education data

The Australian Government is committed to working collaboratively to build a world-class education system that equips all Australians to succeed. Improved access and a greater ability to link and analyse key education data could enhance the quality and scope of the domestic evidence base that can be used to monitor educational outcomes and assist with future policy development. The Australian Government has allocated AUD \$130 million over three years to build its capacity to improve policy and program implementation and expenditure through improved data capabilities in early childhood and care, schools, vocational education and training and higher education.

Increasing apprenticeship commencements and completions

Australian apprenticeship commencements and completions began declining in 2012. Improving these is a key focus for the Australian Government. The proportion of apprentices and trainees completing their training remains steady at 58.3 per cent according to the National Centre for Vocational Education Research. Investing in tailored support services to help employers recruit and retain apprentices, and assist apprentices to complete their training are key policy focuses for the Australian government. The government is undertaking a range of measures to achieve this including, providing loans that assist eligible trade apprentices with the day-to-day costs of living, learning and completing an apprenticeship; providing substantial incentive payments to employers who take on an apprentice in key occupations; and establishing a fund which will support state and territory governments to implement projects focused on improving apprenticeships and traineeships in high demand occupations.

Measures to encourage more students to study STEM

The Australian Government is committed to encouraging the study of STEM from an early age through engagement with children, families and the whole community to build an understanding of the importance of science. The majority (70 per cent) of employers in Australia characterise employees with STEM skills as the most innovative, and 75 per cent of the fastest growing occupations require STEM knowledge and skills. Education in STEM will equip all Australians

with the knowledge to navigate critical activities and challenges ranging from health and medical care and the environment, to the digital economy and life-long learning.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Australia takes a holistic approach to addressing issues relating to inclusive growth and labour market disadvantage. The Australian Government works to address all of these issues through policies, programmes and anti-discrimination regulations.

The Australian Government is boosting labour force participation through the following measures:

- Public employment services that promote stronger workforce participation by people of working age, and enable more job seekers to move from welfare to work.
- The Australian Government is committed to tackling youth unemployment through the Youth Employment Package, which was announced in the 2016–17 Budget. This package includes the new \$763 million Youth Jobs PaTH (Prepare-Trial-Hire) Program, for job seekers aged under 25 and registered with an employment service provider. This measure also includes a wage subsidy of up to \$10,000 and measures to encourage entrepreneurship.
- The Australian Government is boosting female participation by investing \$37.3 billion in childcare to help ease the cost of living pressures for around one million Australian families. The Government has also invested \$263 million to expand the ParentsNext program to assist parents of young children, who may be at risk of long-term welfare dependency, to plan and prepare for employment by the time their children are at school.

The Australian Government continues to implement a range of measures to boost skills and training and enhance job creation. These include:

- Quality Schools, Quality Outcomes is the Australian Government’s evidence-based approach to schools’ reform and improve learning outcomes for all Australian students regardless of their school or background. It sets out evidence-based priority reforms to help support improved outcomes for students and schools by focusing efforts towards five key area (1) boosting literacy, numeracy and STEM performance, (2) improving the quality of teaching and leadership, (3) Preparing students for a globalised world (4) Increasing public accountability through improved transparency (5) focusing on low socioeconomic students. In the 2017-2018 Budget, the Government committed to providing an additional \$18.6 billion in funding for schools for the period to 2027, to implement a new needs-based funding model for schools which delivers a consistent Commonwealth approach for all schools in all States and Territories
- A new \$1.5 billion Skilling Australians Fund announced as part of the 2017-18 Budget. This will support up to 300,000 apprentices, trainees, pre-apprentices and higher-level skilled Australians, many of whom will be young people entering the workforce for the first time.

- A \$220 million investment in the Regional Jobs and Investment Packages (RJIP), to help regions in Australia diversify their economies, stimulate long-term economic growth and deliver sustainable employment.
- Investment of \$112 million under the National Innovation Science Agenda initiative to inspire Australians of all ages to engage with STEM in society and participate in further study.
- A \$55.7 million Closing the Gap Employment Services package announced in the 2017-18 Budget to increase the number of Indigenous Australians engaged in the labour market and build the capacity of employment services to better connect Indigenous job seekers to jobs.
- Vocational Training and Employment Centres provide support for Indigenous Australians to enter employment. These centres connect Indigenous job seekers with guaranteed jobs, and bring together training and other support services to prepare them for long-term employment.
- Tailored Assistance Employment Grants support activities that help Indigenous Australians to overcome disadvantage in the labour market and connect them to employment. These grants also help job seekers gain experience and skills to build work readiness, and can assist employers to build a more diverse workforce through supporting cultural awareness activities.
- The Australian Government is also working with large employers through the Employment Parity Initiative to increase the number of Indigenous Australians employed in the private sector, with a target of 3 per cent of participating companies' employees being Indigenous by 2020 reflecting that Indigenous Australians are 3 per cent of the population. The initiative aims to get 20,000 more Indigenous job seekers into jobs by 2020.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

APEC economies have achieved rapid economic growth and prosperity in the last two decades; however, this has not been shared equally. To foster inclusive growth, member economies need integrated sets of policies that place people and jobs at centre stage. Effective international cooperation at bilateral, regional and multilateral levels can help to ensure the processes of globalisation and technological change can result in better jobs and reduce poverty, persistent inequalities unemployment and informal work. Further regional cooperation to enhance inclusive growth in the APEC region could look at:

- The need to foster adequate skills, especially foundational skills and those required in the digital economy that prepare people for changes in the labour market over their working life. APEC should encourage the implementation of the APEC Education Strategy and the APEC Framework on Human Resources Development in the Digital Age.
- Policy frameworks for the future of work that support innovation and inclusive growth and fundamental principle of rights of work.
- Projects aimed at developing an improved knowledge of employers' human resource requirements in a form that would be useful for education and training programme planners. Additionally, projects aimed at assisting developing economies build their

capacity to drive reforms that reduce the structural barriers blocking human resource development in their economies.

- A regional perspective on skill shortages by encouraging greater regional cooperation on sharing data on the APEC Labour Market portal.
- Strengthening efforts to reduce gender gaps in labour force participation and improving the quality of female employment.
- The role of apprenticeships in integrating young people into the labour market.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Brunei Darussalam

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Best Practices from the Oil and Gas Sector in Brunei Darussalam

Local Business Development (LBD)

As part of the effort to facilitate the sustainable development of capacities, competencies and competitiveness in the oil and gas sector, Brunei Darussalam through the Energy and Industry Department, Prime Minister's Officer (EIDPMO), have formulated directives on Local Business Development and also the Local Business Development Framework (LBD Framework) for this particular industry. One of the key components contained in this framework is the formulation of a Local Content Opportunity Framing report for major reports / contracts / agreements. This framing report aims to identify opportunities to increase local content and also local employment opportunities. In relations to human capital development, the directive seeks that oil and gas, midstream and downstream operators, their contractors, sub-contractors and suppliers operating within the oil and gas industry in Brunei Darussalam to adopt and undertake the following:

1. Formulation of a Local Business Development (LBD) Management System to include Local Training and Development Programs
2. To produce an LBD Performance report which includes the number of local employment and the amount of local content
3. To provide a conducive environment for the employment of locals by implementing measures as set and issued by EIDPMO from time to time, such as, but not exclusive to, minimum wage, career development plan and employment security.

Establishment and implementation of the Energy Industry Competency Framework (EICF) and its expansion into the non-energy sectors.

EICF was established in July 2013 through joint collaboration between the EIDPMO, the Ministry of Education and Energy Industry players. The EICF provides a pathway for groups in the Secondary School and below demography to receive training that meets industrial standards and for them to have the right competency to start work once they have completed their training through the COE Principle (Conditional Offer of Employment). The core objective is to generate an industry ready workforce that are aligned to the industry demands. Apart from that, it is a pathway for upskilling opportunities for individuals to continue from vocational training to higher education. Since its establishment in July 2013, the EICF has churned out 1,536 graduates and 1,201 (78%) are currently employed.

With the success of the EICF and under the steer of the Manpower Planning Council (MPC), the EICF Governance has now been replicated to a number of selected sectors and now called the Industry Competency Framework (ICF).

Establishment of the Manpower Planning Council in 2016

Brunei Darussalam has also established a Manpower Planning Council (MPC) in April 2016. The council's vision is to drive development and planning of the local workforce and also to build a pipeline of skilled Bruneians. Under the council, 11 priority actions have been endorsed towards skilling Bruneians and to reduce unemployment in Brunei Darussalam.

Formation of JobCentre Brunei and Mandatory Registration into the JobCentre Brunei Portal

One of the priority actions under the council is the mandatory usage of JobCentre Brunei system for local job seekers and job vacancies.

Starting 2nd August 2016, registration to the system was made mandatory with the objective to centralize available vacancies in the private sectors and to also gather real time data on job seekers. Initially only 397 companies and 4957 jobseekers are registered to the system. As of May 2017, the system have recorded 12,984 jobseekers, 3,409 companies and 5,088 vacancies posted. Since the policy roll out, the numbers of registrations have drastically increased, enabling collection of valuable job seeker real time data and also the showcasing of large number of vacancies in order to facilitate the job matching process.

Such collected data is critical for policy analysis and introduction of new manpower strategies including profiling of job seekers and targeted interventions, reviewing of current courses and trainings through industry driven manpower planning in order to close the gap between the current manpower supply and the economy's demands.

To complement the policy roll out, the JobCentre Brunei (JCB) was set up which began its operations on 1th January 2017. JCB strives to be a "One-Stop Career Centre" where local jobseekers may utilize available services to help improve their employability and marketability in the job market through the following services:

1. Information Centre of current vacancies in the market and an avenue for job applications
2. Career consultation on potential opportunities
3. By making available a selection upskilling and reskilling programs
4. By providing services that helps to increase the employability of job seekers including CV writing tips, interview skills and digital literacy courses.

The JobCentre aspires to promote the development, competitiveness, inclusiveness, and employability of all levels of the workforce. It is also set up to facilitate the job matching process for local job seekers and to provide support to companies in their efforts to search for local talent.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

In the recent years, Brunei has been impacted by the falling of oil prices. In relation to this, structural reforms to depart from the hydrocarbon-dependent development are critical to enhance productivity and to sustain economic growth. The three most important challenges in making economic growth more inclusive are as follows:

i. High unemployment number

At the moment, Brunei is facing an unemployment number of 12,984 jobseekers (as of 19th May 2017), whereby 46% are male and 54% are female. Majority (37%) of the jobseekers are secondary school leavers and below and the second majority group is of the Technical and Vocational background. Youth unemployment (18-29 year old) is also high at 79% of the unemployed. Therefore, to make this group job-ready, various reskilling and up-skilling strategies and programs are required.

ii. Limited supply of skilled locals to Foreign Direct Investment Activities

A number of job opportunities have been identified to be generated by Foreign Direct Investment (FDI) in Brunei Darussalam. At the moment, the recruitment opportunities for locals are secured via proactive engagements with the companies to ensure commitment to provide the job opportunities and development for the local job seekers. The number of locals acquiring the skills and experience required for a number of specific roles and occupation groups by these companies are currently limited.

iii. Courses offered in institutions are not aligned to industrial need

The MPC secretariat have identified several areas of study with high record of surplus against industry needs.

Several initiatives to tackle this issue have been taken. At the moment, the Manpower Policy and Planning Unit (MPPU) serving as the secretariat agency to the MPC is working closely with the Ministry of Education specifically Higher Education Institutions and Institute of Brunei Technical Education (IBTE) in reviewing current courses and determining relevant new industry driven courses with the purpose to reduce manpower surpluses. In addition, various inter-governmental collaboration with other agencies are on-going whereby MPPU serves as the centralized data provider, in its first step towards systematic policy analysis and formulation.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

In the current situation, the three biggest policy gaps with respect to structural reform in human capital development are as follows:

iv. The absence of an industry-driven manpower framework

The absence of such framework, policy makers and other relevant agencies are still unable to systematically plan and cater to the industries' manpower requirements. In most cases, it is found that there is a limited number of suitable local job seekers for a number of specific occupation types and job levels required by the industry. As such, in order to meet the business needs, these jobs are currently being filled by foreign workers.

v. No minimum wage currently in place

The Energy & Industry Department, Prime Minister's Office (EIDPMO) has issued a Reasonable Wage Guideline. This guideline was introduced as part of the efforts to enhance the Local employment in the oil & gas industry in Brunei Darussalam and to ensure that all lower qualified Local Employee(s) working in the Industry are accorded a Reasonable Wage (RW) for the essentials of life and to allow a reasonable standard of living, all oil and gas upstream, midstream and downstream operators and their contractors and sub-contractors, within Brunei Darussalam.

At the moment, Brunei Darussalam does not implement any mandatory minimum wage. Similar to a few other developed economies, the level of wages in Brunei Darussalam are left to the market forces, to be negotiated freely and agreed with between the employers and employees. Under the ILO's Minimum Wage Fixing Convention, 1970, the elements that need to be taken into consideration in determining the level of minimum wages should, so far as possible and appropriate in relation to national practice and conditions, include the needs of the workers and their families taking into account the level of wages in the economy, cost of living, social security benefits and relative living standards of other social groups. Current practice ensures that wages are competitive, based on qualifications and takes into account the affordability of companies to employ workers, sustain and grow business operations to employ more of the existing job seekers in the labour market. Initial work towards establishing a minimum level of salary for workers in the private sector is currently in progress. Extensive and in-depth work is required to ensure a minimum wage level that is balanced and well accepted by all stakeholders in the economy.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Since the formation of the MPC, several short term and medium term priority actions have been endorsed to address a number of these challenges and gaps. The priority actions are as follows:

Short-Term Priority Actions

1. Mandatory usage of www.jobcentrebrunei.gov.bn for Job Vacancies and Job Seekers.
2. National Level Job Fair which is to be an annual iconic event.
3. Centralized Database to consolidate data pertaining to manpower planning.
4. Labor market reforms strategies including reviewing and refining of the labor quota policy which is now known as the foreign workers permit, introduction of the Progressive Wages, local content policy directive and a levy system in the non-oil and gas sectors.
5. Enhancement of the Career Unit Function across education institutions.

6. Expansion of the Energy Industry Competency Framework (EICF) to other sectors and now called the Industry Competency Framework (ICF).
7. Identification of Job Types for Job Creation (Industry Driven Manpower Planning).
8. Review and refining the IBTE (Institute of Technical Education Brunei Darussalam) Function and collaboration with RTOs in alignment with ICF aspirations.

Medium-Term Priority Actions

9. Facilitation of Economic Growth from a manpower supply perspective.
10. Creating better career path awareness for better transition from School to Work-Life.

Long-Term Priority Actions

11. Introduce Education Strategy with emphasis on mid-career up-skilling support through lifelong learning.

MPC is still in its first year of its establishment. Since the formation of the council, one of the key directive for the implementation of these strategies is to adopt and ensure a whole of nation approach. At the moment, several agencies lack inter-organizational collaboration whereby agencies are mainly focused on their own core business. Collaboration needs to be further strengthened and a whole of nation approach is required for better coordination and monitoring of initiatives and programs in order to achieve the council's set objectives.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

In the face of such challenges and policy gaps, Brunei Darussalam are taking initiatives to address the various aspects of the Human Capital Development in the economy. Brunei Darussalam seeks further collaboration through regional cooperation and international organizations through the following ways:

- vi. Sharing of Best Practices.
- vii. Sharing of information and data particularly in policy formulation, as an international benchmarking exercise.
- viii. Sharing of experiences, particularly from more advanced nations and from nations or international organizations of similar demography with Brunei Darussalam.
- ix. Knowledge sharing by experts including sharing of competency frameworks and international/regional placements or internships.

At present, Brunei Darussalam is working closely with TalentCorp, Malaysia via the APEC Youth Connect program. Through short-term working opportunities in various APEC member economies, the program aims to encourage skills and technology transfer and connectivity among APEC youth while creating a network of global talent with skills, knowledge and work experience in APEC economies.

Aside from that, Brunei Darussalam is also interested in the competencies framework project proposed in APEC HRDWG such as Data Analytics Raising Employment in order to strengthen the local human capacities.

Moreover, the government is also in collaborations with the International Labour Organisation (ILO) in various projects which aims to enhance the labour market information and other labor market strategies.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Canada

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

With regards to structural reforms in human capital development, Canada has been most effective in ensuring collaboration between different levels of government and the private sector through specific mechanisms such as the Forum of Labour Market Ministers. This, among other forms of intergovernmental collaboration, has enabled us to develop structural reform initiatives to support post-secondary education and skills training, strengthen labour markets and increase support to low-income families. This experience could be relevant for other APEC economies. Initiatives to address ongoing human capital development challenges and efforts to promote greater inclusion are described under the appropriate headings below.

The Government of Canada believes that a growing economy that works for all Canadians starts with equal opportunity to good, well-paying jobs. At a time when innovation and advances in technology are changing the way that Canadians work, the best way to ensure that all Canadians are prepared for the jobs of the future is to provide ongoing opportunities to learn new skills. This means continuing to break down the barriers to full participation in Canada's society and economy.

Forum of Labour Market Ministers

As human capital development is a broad area with shared responsibilities among Canada's provincial, territorial and federal levels of government, one of the key aspects to the success of recent and ongoing work to improve labour market policies is the collaborative work undertaken in partnership with provinces and territories (PTs) through forums such as the Forum of Labour Market Ministers (FLMM), created in 1983. For example, in July 2015 Ministers in the FLMM endorsed the creation of a Labour Market Information Council to improve the timeliness, reliability and accessibility of labour market information to facilitate decision-making by students, workers, job seekers, employers and policy makers, in support of a flexible and efficient labour market.

Labour Market Transfer Agreements

Another example of successful collaborative efforts include Labour Market Transfer Agreements, where the Government of Canada transfers nearly \$3 billion in annual funding to provinces and territories to design and deliver a range of programs, from skills training to career counselling to job search assistance, to help unemployed and underemployed Canadians access the training and employment supports they need. Following broad-based consultations, the Government of Canada will work with provinces and territories to reform the Labour Market Transfer Agreements to provide increased flexibility to meet the needs of local labour markets and address emerging trends. The Government is also providing additional funding of \$2.7 billion over six years, starting in 2017-18, to boost training and employment supports under the agreements. There will be ongoing work with provinces, territories, and other relevant actors through the FLMM to further enhance the agreements, such as supporting an inclusive labour market, increasing innovation and strengthening performance measurement.

Skills Development and Lifelong Learning

As recommended by Canada's Advisory Council on Economic Growth, as well as the FLMM, new approaches are needed to address skills gaps and support lifelong learning throughout Canadians' working lives. To that end, the Government of Canada will invest \$225 million over four years, starting in 2018-19, and \$75 million per year thereafter, to establish a new organization to support skills development and measurement in Canada. Working in partnership with provinces and territories, the private sector, educational institutions and not-for-profit organizations, this organization will identify skill gaps with employers, explore new and innovative approaches to skills development and share information to help inform future skills investments and programming.

Through extensive research, the Government of Canada, along with other national and international agencies, identified and validated key literacy and essential skills that are used in nearly every job throughout daily life. For example, the Government of Canada's Office of Literacy and Essential Skills, founded in 2006, supports English as a Second Language (ESL), literacy and other kinds of programs. This helps Canadians, particularly those further from the labour market, to improve their job skills. The program aims to provide 13,000-17,500 Canadian with essential skills training or supports in 2017-2018.

Employment Insurance

To help more unemployed Canadians receiving Employment Insurance (EI) get the training they need to get a good, well-paying job, the Government of Canada will make better use of existing flexibilities within the EI program that allow EI beneficiaries to pursue self-funded training and maintain their EI status. For example, unemployed workers receiving EI can return to school for training without fear of losing their EI benefits.

Targeted Employment Strategy for Newcomers

The Government of Canada also fosters inclusive growth by providing opportunity and

assistance to Canadians with distinct needs. For example, once in Canada as permanent residents, highly skilled newcomers can face barriers that limit their employment opportunities. To ensure that newcomers to Canada are able to put their skills to good use and maximize their contribution to the economy, Budget 2017 announced a Targeted Employment Strategy for Newcomers, with three components: 1) improved pre-arrival supports, so that newcomers can begin the foreign credential recognition process before arriving in Canada; 2) a loan program that will assist newcomers with the cost of having their foreign credentials recognized; and, 3) targeted measures to test innovative approaches to help skilled newcomers gain Canadian work experience in their profession. The Targeted Employment Strategy for Newcomers will help reduce barriers and support newcomers as they put skills to work in the Canadian labour market.

Youth Employment

To support a more inclusive labour market for youth, the Government of Canada's Youth Employment Strategy (YES), inaugurated in 2003, helps young Canadians between the ages of 15 and 30 to get the information, skills, job experience and abilities they need to make a successful transition to the workplace. Through three complimentary streams of programming, the YES reaches a wide variety of youth, including vulnerable youth (e.g., Indigenous youth, young persons with disabilities, recent immigrant youth), post-secondary graduates and students seeking summer employment who intend to return to school in the following year. Budget 2017 proposed to invest an additional \$395.5 million in the YES over three years, starting in 2017–18. The additional funds from Budget 2017 combined with Budget 2016 measures, will help more than 33,000 vulnerable youth develop the skills they need to find work or go back to school; create 15,000 new green jobs for young Canadians; and provide over 1,600 new employment opportunities for youth in the heritage sector.

Post-Secondary Education

Post-secondary education is increasingly necessary for full participation in Canadian society and the global economy. The Government of Canada currently works in partnership with the provinces and territories to ensure that post-secondary education remains accessible and affordable to all Canadians. The Government of Canada's key efforts to ensure Canadians can afford a post-secondary education are the Canada Education Savings Program (CESP) and the Canada Student Loans Program (CSLP). The CESP provides the Canada Education Savings Grant to all Canadians who save for their children's education through a Registered Education Savings Plan, and it provides additional supports to low-income Canadians via the Canada Learning Bond. The CSLP provides Canada Student Loans and Grants to eligible students, as well as repayment assistance measures for student loan borrowers.

Education Support for Low-Income Families

The Government of Canada also recognizes that lower-income Canadians often face additional barriers to academic and labour market success, which is why it invests in Pathways to Education Canada. Pathways to Education is a charitable organization that provides a comprehensive set of academic, financial and one-on-one supports to youth from lower-

income community to help them graduate from high school and successfully transition into post-secondary education, training or meaningful employment.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Two areas for further improvement with regards to structural reform and HCD are:

- 1) fostering greater inclusion, and
 - 2) preparing Canadians for the changing nature of work, and helping them to cope with adjustments related to globalization and technology.
- Addressing these areas is part of an inclusive growth strategy.

Today, the evolving nature of work means that people may find that they change jobs many times over the course of their working life. This could lead Canadians to make difficult choices about where to live, what kind of post-secondary education and training paths to follow, and the types of jobs to pursue. Compounding this evolution are labour market adjustments associated with increased globalization and trade, which further the need for flexible and lifelong skills development.

The government is implementing targeted measures to address barriers to inclusive growth, including through enhancements to student financial assistance and skills training programs and support for lifelong learning, and modern infrastructure that facilitates access to education, social and work opportunities. Such measures will specifically focus on addressing important challenges faced by vulnerable groups such as:

- 1) Women and youth
- 2) Indigenous peoples and communities
- 3) Low-income families

To address some of the challenges outlined above, the Government of Canada has:

- Reduced child poverty. With the introduction of a more generous and better targeted Canada Child Benefit, approximately 300,000 fewer children will be living in poverty in 2017 compared with 2013, representing a reduction of about 40 per cent in overall child poverty.
- Increased income support for vulnerable seniors. Due to enhancements to the Guaranteed Income Supplement, 750,000 seniors now receive more money each month - an increase of up to \$947 per year for Canada's most vulnerable seniors. This will help to lift 13,000 seniors out of poverty.
- Focused on women and gender issues. This had been accomplished by systematically

requiring gender-based analysis for Memoranda to Canada's Cabinet, making better use of data to inform decision-making, and by better engaging Canadians in the policy-making process. For example, Canada's 2017 Budget includes a first ever Budget Gender Statement, an analysis of the ways in which the policies put forward impact women and men in different ways.

- Made post-secondary education affordable and accessible to all Canadians. By introducing a pilot project on the Canada Learning Bond, the Government of Canada aims to improve awareness of and access to this federal education savings incentive for low-income families. Complementary to that, the Government of Canada has committed to a number of measures that will increase eligibility to Canada Student Grants and Loans for different types of learners (e.g., Indigenous, adult, people with disabilities, low-income) throughout their lives.
- Made historic investments totalling \$11.8 billion to support Indigenous communities. This increased funding will lead to better-quality education for on-reserve First Nations youth, improved access to healthcare on reserve and improved health outcomes for First Nations and Inuit, improved living conditions in First Nations and Inuit communities, and economic development support for Métis.
- Removed barriers to education for lifelong learners. This includes a three-year pilot project to test new approaches to make it easier for adult learners to qualify for Canada Student Loans and Grants; and, expanding eligibility to Canada Student Grants for students with dependent children.
- Continued to work in partnership with Indigenous communities and organizations to support skills development and job training, which contributes to improved employment outcomes. This year, approximately \$390 million is being invested in Indigenous organizations which provide Indigenous people with a full continuum of services, from pre-employment training (e.g., literacy, numeracy and acquisition of other essential skills) to more advanced training-to-employment for skilled jobs.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Addressing issues associated with the changing nature of work and adjustments due to globalization requires global dialogue on best practices. As such, the Government of Canada is committed to working with international partners in this area. This includes APEC, the OECD, and others, in which Canada can share insight and best practices on gender inclusion, life-long learning, the changing nature of work, flexible government services and other human capital development considerations.

While gender equality and the avoidance of discrimination based on gender is one of many elements that Canada has pursued during trade negotiations, notably via language regarding

the elimination of employment discrimination in our Labour chapters, more recently we have sought to include more gender-related elements in our FTAs. One of the most recent examples is the inclusion of a Trade and Gender chapter in the modernized Canada-Chile Free Trade Agreement. The new Trade and Gender chapter, which is based on the Chile-Uruguay FTA signed in October 2016, is now a first in terms of Canadian FTAs. The chapter acknowledges the importance of incorporating a gender perspective into economic and trade issues to ensure that economic growth can benefit everyone. The Chapter also establishes a Trade and Gender Committee that will oversee cooperation activities and share experiences in designing programs to encourage women's participation in national and international economies. We intend to continue placing an emphasis on incorporating gender-related provisions in future FTAs.

International education can strengthen bilateral and regional commercial and political relations. It also plays an important role for Canada's economy because of its impact on Canada's ability to acquire the skills to perform in a fast-changing competitive environment. The international education export sector has a significant impact on the Canada's prosperity, with international students spending over \$12 billion in Canada (larger than exports of wheat, lumber or financial services), and it is the single largest service export to China. International students bring in global knowledge, different perspectives, and enhanced research strength. The Government of Canada is committed to ensuring that young Canadians receive the education and training they need to prepare for the jobs of today and tomorrow, such as providing innovative and abundant research opportunities. Employers are increasingly looking to hire graduates with global experiences, such as studying or partaking in work-integrated learning (WIL) opportunities abroad, as these experiences enable students to develop sought-after competencies (e.g., intercultural skills, problem-solving, adaptability, flexibility) that better prepare them for the workplace. In this regard, regional cooperation and international organizations can play a role in supporting increased student mobility between economies, such as through reciprocal academic and WIL mobility agreements and partnerships.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Chile

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Over the past years there has been many policies being discussed and implemented regarding human capital development, one of the most notorious was focused on education; Promulgated on May 29, 2015, the “Ley de Inclusión” (Inclusion Law) mandated three changes to pre-college education:

(i) No profits in schools that receive public financing. Voucher schools may not generate profits and must allocate in full any revenues for educational purposes.

(ii) Free education in voucher schools. Voucher schools that continue to accept public financing must phase out any tuition and fees required of parents. For the 2015-2016 school year, these copayments are capped at the prior year rates. In future years, the schools must decrease the copayments as they receive increased subsidies from the Ministry of Education. In addition, schools may not require parents to pay for any study materials as a condition for attendance at the school.

(iii) No discriminatory practices in admission processes. Voucher schools cannot consider an applicant's prior school performance or socioeconomic background (including education level, marital status, or parent finances) or require parent interviews as part of the admissions process. Partial exemptions exist for academically demanding schools (e.g., “emblematic” schools) and schools that require early specialization (e.g., trade schools). In order to ensure objective, fair and transparent admission processes, the law outlines requirements and shared responsibilities between Ministry of Education and schools that necessitates a common enrollment system.

These reforms have been effective so far, and are under constant evaluation, aiming to achieve objectives such as:

(i) Restoring Constitutional rights to education. In presenting the Law to the Senate and Chamber of Deputies, the Ministry of Education stressed that the law intended to protect the right to education for all students, as required by the 1980 Constitution. Enshrined in the Constitution is also parents' right to choose the educational establishment for their children. Voucher schools' admission requirements and parental copayments can be seen as both a failure of the State to provide free education to all children and an infringement of parents' right to

choice. By requiring payments, many poor parents have no choice but to send their children to municipal schools.

(ii) Ensuring equal opportunity to all students. The elimination of copayments and discriminatory practices is meant to open voucher schools to all students. It creates greater equality of opportunity. No longer will low-income families be locked out of voucher schools due to copayments that exceed their meager means nor will the children of divorcees be rejected from Catholic voucher schools.

(iii) Encouraging greater social integration. As parents take advantage of the greater access, diversity in the student body will increase, and the schools will transform into inclusive spaces where children encounter others from diverse socioeconomic, cultural, ethnic, and religious backgrounds. A provision of that law, which requires 15 percent of seats in any schools that conduct lotteries to go to low-income students, intends to ensure vulnerable students are represented in a greater variety of schools.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

There has been a consensus among different political and social sectors of the society defining a common ground when it comes to assess the variety of challenges to tackle in the long run. This priority areas are grouped as follows: (i) Improve the quality of public policy in strategic services; (ii) Enhance the conditions to boost productivity growth: innovation and diversification, and (iii) Enhance labor productivity and reduce labor market segmentation;

(i) Improve the quality of public policy in strategic services

Improve the quality of education. Despite Chile's progress in educational attainment and achievement, it still lags in quality. High-quality education will be critical for Chile to move to a more knowledge based, technology intensive economy. Improving the quality of education is at the forefront of the government's agenda and has been widely recognized as a key priority for long-term economic growth and equity. Chile's 2014 education reform, as highlighted in the previous question, is aimed to guarantee equal opportunity to access quality and well-financed education at all levels. Through these reforms the government can provide those from the most disadvantaged backgrounds the tools necessary to be highly productive and thus earn higher wages. Thus, ensuring the correct implementation of these reforms will be crucial to ensure long-term gains for both equity and productivity. Chile should also focus more on improving the quality of vocational and technical education, as having a strong basis allows workers to better adapt to changing labor conditions and the use of new technologies.

Improve health care regulation and financing to ensure quality of health care provision and equitable access to affordable health insurance. Chile's health financing remains inequitable. Chile's insurance market could improve its regulation with differentiating premiums, particularly for women and the elderly. Chile's health system would benefit from stronger regulation of its private insurance market, standardization of benefits and regulation of

premiums. Overall significant efficiency gains can be achieved through improvements in the clinical effectiveness and efficiency in addition to the management of hospital care services.

(ii) Enhance the conditions to boost productivity growth: innovation and diversification

Boost innovation. If Chile is to achieve sustainable productivity growth, it must close the technology and innovation gap, increase spending on R&D, and boost entrepreneurship. Chile has developed a strong base of entrepreneurs and new business formation is accelerating in response to regulatory improvements and government programs, including measures to start a new business (2011, 2013), a bankruptcy law (2014), and, the Start-Up Chile program (2010) and related support, including SME credit access facilitation and increased expenditures in Corfo to support entrepreneurship. Nonetheless, program scale and take-up has not been large enough yet to have a substantial impact. Chile's spending in R&D has not increased substantially, with most of it concentrated in the publicly funded university sector. To further boost innovation, programs should be reviewed and designed such that they can be adequately evaluated to ensure they are cost-effective.

Promote export diversification. Trade diversification both geographically and in the product space by upgrading value chains, removing barriers to competition, and encapsulating processes in services is needed to move toward an economic model that is more knowledge and technology intensive. The goal of Chile's Productivity, Innovation, and Growth Agenda is precisely to move from an economy based on natural resources to a knowledge-based economy. This will require an improvement in the quality of human capital and the incidence of innovation. Chile could draw upon its comparative advantage in copper mining, but make further progress in moving up the mining value chain as well as entering the markets for mining services. Service exports need to be further boosted and transport sector can be further liberalized to strengthen competitiveness.

(iii) Enhance labor productivity and reduce labor market segmentation

Enhance education-labor market linkages. Skill mismatch is associated with lower labor productivity. Thus, if skills are to translate into growth, these must be efficiently allocated and be used effectively across the economy. A third of Chilean workers that have completed tertiary education have jobs that require less skills than their academic preparation. High level of skill mismatch may be a result of low quality tertiary education or Chileans leaving the education system without the skills employers want and need to boost productivity. As an initial step, the government has created a network of public technical training centers to focus tertiary education on growth enhancing value added services in each region.

Evaluate the adequacy of the labor market structure and regulation. Economies often face trade-offs between promoting labor market flexibility and increasing labor market rigidity. On the one hand, labor market flexibility allows the private sector to adapt more rapidly to changing conditions (an important asset for a small open economy) and thus enhance productivity gains, whereas labor market rigidity could become a drag on productivity growth. On the other hand, however, labor market flexibility transfers some of the risk from the employer to the employee, leaving some workers more vulnerable to shocks. In addition, current Chilean legislation

provides strong protection for employees with indefinite contracts, whereas workers in nonstandard contracts have little or no security, implying a segmented market. Labor market segmentation is one of the economy's key binding constraints to achieve more inclusive growth.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

(i) The quality of education is lagging in Chile given the economy's level of development; achieving universal secondary education skills may increase growth by 0.6 percentage points per year. Chile's scores in reading, mathematics, and science in the Program for International Student Assessment (PISA) position it globally as lagging despite substantial improvements over the past decade. While attaining universal access in Chile by 2030 would boost the growth rate by 0.1 percentage points per year, improving the quality of schools so that all students would achieve Level 1 would increase the growth rate by 0.5 percentage points per year. If both scenarios are combined, the growth boost is 0.6 percentage points, implying that real GDP would be 8.5 percent greater by 2030.

(ii) Chile also spends below what it is expected on R&D and lags even regional peers. Chile spends only 0.4 percent of GDP on R&D compared with 2.4 percent in the OECD and even below the Latin America and Caribbean average of 0.8 percent. Moreover, most R&D activity in Chile is done outside firms, mainly in state-financed universities. For this reason, Chile ranks low on the global competitiveness index on company R&D spending. Similarly, the economy has only 350 full-time equivalent R&D researchers per million people, well below the 4,700 in the United States, the 3,200 in the euro area, and the 500 in the region.

(iii) Chile has been unable to diversify its export sector. Its export basket has barely shifted over the past decade. This experience contrasts with the experience of Canada, New Zealand, and Norway, which are major exporters of mining products, but have nonetheless also developed a sound manufacturing base. While these developments did not preclude strong economic growth in Chile, suggesting an example of income convergence without a strong manufacturing base in the core of the product space, it made the economy more vulnerable to changes in external conditions.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Since 2014 the government has announced many measures that are still under discussion, including reforms of the labor market, the constitution and infrastructure, there are some others that have a clear program or are already passed by the Congress. In particular, the tax and education reforms, and the infrastructure plan within the broader "Productivity, innovation and growth Agenda" that started being implemented in the 2014 and at the beginning of 2015. To name a few, some of the measures that are currently being discussed are the following:

Transportation and telecommunication. The agenda aims at strengthening urban and intercity connectivity and port infrastructure (including through the construction of a large port in the central area of the economy), by direct investment and by incentivizing the direct involvement of the private sector, through new and expedite procedures for public-private partnership (PPP). For telecommunication, the agenda aims at boosting internet access, data transmission, and coverage of the fiber optic national network.

Increasing female labor market participation. This would not only increase the labor force but also boost productivity. First, in aggregate, the increase in female labor supply, especially of more highly educated women, can help boost structural change. Second, the employment of women enables companies to draw from a larger talent pool increasing productivity by reducing mismatches between worker skills and occupations. An increased presence of women in entrepreneurial activities can raise the average talent of entrepreneurs.

Income tax. To help finance the cost of the reforms the authorities completed a fundamental tax reform in September 2014, which changed Chile income tax system. The new tax law introduced several changes, including: i) gradually increasing corporate tax rates, and ii) offering firms the choice between an integrated tax system which is less generous than the old one. In both new regimes, marginal tax rates on capital will increase. While matching the increase in outlays with new permanent revenues is prudent, higher taxes on capital income might have a dampening effect on corporate savings and investment.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Certainly, economies could benefit from international cooperation in many ways depending on its level of integration and openness. Best practices on different strategic policies seems to be the first approach, although the mobility of economic factors are an important feature, especially when facing the issue of labor markets and the exchange of knowledge among economies. Political integration also appears to drive the convergence. Institutional forces outweigh market forces in bringing national economies closer together. Economic arguments can show freer trade and factor mobility from integration allow less-developed members to grow faster than more-developed ones. Factor price equalization further supports this convergence scenario.

APEC has a strong track record of partnership with many multilateral organizations. The breadth and magnitude of the challenges presented not only by one economy but also in coordination with others should encourage further collaboration among international organizations as they support governments in their efforts, keeping in mind that national governments have the primary responsibility for implementing their own agendas.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

People's Republic of China

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

In China, structural reform has played important role in human resource development since 2012. Chinese government has focused on deepening comprehensive education reform, improving institutions and mechanisms for promoting employment and entrepreneurship, establishing a more equal and sustainable social security system, and deepening the reform of medical and health system. Among these reforms, **improving institutions and mechanisms for promoting employment and entrepreneurship** has made great success. It includes improving government's institutions accountable for employment, regulating the system of employing people, streamlining preferential policies to encourage entrepreneurship, establishing total-life-circle professional training mechanism, setting special fund to help the people who lost jobs due to excess capacity alleviation, and arranging government budget to build up public practical training bases, etc. Thanks to these institutions and mechanisms, 52.58 million citizens found jobs and new employees per year are more than 13 million from 2013 to 2016, and unemployment rate maintained around 5% in 31 major cities. In recent years, 13,000-15000 new enterprises get registered every day on average. It cultivates new industries and new type of business efficiently, pushes forward economic transformation and upgrading, and creates a favorable environment for accumulating human capital and improving the quality of human resources. As a result, inclusiveness of economic development has been improved.

The reform of Chinese institutions and mechanisms for improving employment and entrepreneurship can be valuable reference for APEC economies. **Firstly, it fits in the policy priority on employment and labor market.** Nowadays more economies attach importance on employment target, and make policies according to labor market fluctuation. China has the same

practice and regards the employment as the most essential indicator of people's livelihood. **Secondly, it's beneficial for enhancing inclusive development.** In recent years, anti-globalization ideas rise around the world since some social groups can't share the bonus of globalization and technical innovation. Improving employment policies could enhance labor participation as a whole, and more vulnerable groups could share the achievements of reform and development. **Thirdly, it meets practical demand of accelerating economic transition.** In digital economic period, rapid technical innovation and industrial change provides both challenges and chances for economies' transition. China's structural reform of institutions and mechanisms for improving employment and entrepreneurship can help unemployed people get re-employ opportunities by taking training, and increase the amount of skilled labor necessary for industrial development.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

During rapid economic growth, China implements the innovation-driven development strategy, deepens supply side structural reform, and makes great efforts to promote quality and benefit of economic development in order to enhance inclusiveness. However, China still faces some problems which are unfavorable for inclusive economic development.

The first challenge comes from the large gap between rich and poor. China's Gini Coefficient is going down; the income gap is narrowing between town and rural areas, as well as between different groups. However, owing to the rapid growth of asset prices like house price, the gap between rich and poor is enlarged and influences the social equity. **The second challenge comes from the opportunity inequity.** Owing to the large population and regional disparity, opportunity inequity problems exist in education and health care. For example, rural education conditions are poorer than that in cities; in outstanding universities, the proportion of students coming from rural area is quite low. The inequity of education resources brings negative effects on human resource development and social mobility. **The third challenge comes from insufficient social security system.** China has built a wide safety net. However, regulation is insufficient, financing is weak and business insurance is less developed due to imperfect

mechanisms. China has become an aging society; UNDESA predicts that Chinese aged people will account to 17.5% by 2020. Rapid population aging will weaken families' risk resistance capacities, and bring negative effects on human capital accumulation and inclusive development.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Considering the reality of rapid population aging and new normal economy, China's structural reform of human capital development has spaces for improving in the following aspects.

Firstly, encourage and normalize preschool education. With the implementation of policy which allows each family to have two children and rapid development of preschool education industry, laws and policies normalizing preschool education become insufficient, resulting in disunity of industry standards and lesser fair all kinds of opportunist behaviors. It also leads to insufficient supervise on service providers and insufficient protection for consumers' interests. The quality of preschool education is unsatisfactory.

Secondly, develop senior human resources moderately. For getting used to aging society, China has carried out plans of delayed retirement, but policies to develop senior human resources are in absence. There are policy gaps in old people's job market, professional training, rights protection, health service and so on. For instance, China doesn't have special employment policy for aged people, and there is no specific employment guidance system for aged employees. Besides, there are some system obstacles to senior human resources development, because of inadequate endowment system, undeveloped sanatoria industry and lack of protection for old people's rights.

Thirdly, improve overall quality of professional education. China pays high attention to increase input on professional education. However, due to the traditional idea that good students should choose university education instead of professional education, the effort to cultivate high-quality skilled labor has been weakened. Furthermore, professional education has some

weakness, etc., poor infrastructure, absent regulating systems and unpractical training lessons. Professional education can't match the need of industrial transformation and development.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Based upon challenges and policies' gaps in developing human resources, Chinese government will accelerate structural reform in the following areas.

First, deepen income distribution reform, and accelerate regional development in a well-coordinated manner. China will strengthen wage determination and increasing mechanism, minimum wage mechanism, wage payment guarantee system, and collective wage negotiation system. China will improve income distribution controlling system and policies, establish personal income and property information system, and take effort to narrow the income distribution gap between different areas and different occupations. Furthermore, China will use diversified policy tools for well-targeted poverty alleviation, etc., industrial policies, educational policies, health care policies, ecological policies and other measures. Besides, China will control housing price to avoid financial bubbles, and guide financial resources to support the real economy.

Second, innovate educational resources supply methods and improve opportunity equity on education. China will improve funding system for students who have financial difficulties, establish efficient mechanisms with IT method to expand coverage of good educational resources, and narrow gaps among regions and groups step by step. China is also supposed to push forward standardized public school construction, communication and exchange of principals and teachers. What's more, school union, outstanding schools running branch campus and so on will be encouraged. China will improve opportunity equity through equal allocation of compulsory educational resources in a whole between urban and rural areas.

Third, improve the quality of social security. China would accelerate to establish multilevel social security system which includes supplementary pension, occupational pension, business

insurance and etc. More state-owned capital would be input into social security funding. By 2020, the rate of contribution to public finance from state-owned capital gains would increase to 30%, which would be used for improving people's livelihood. China would also push forward the marketisation and diversification of social insurance funds.

Fourth, improve institutions and supporting policies for senior human resources development. The government will introduce policies aiming at old-age people employment, set up targeted employment guidance information broadcasting and professional training systems. Systems and industries specific for serving old-age people would also be developed.

Fifth, strengthen linkage between education and industrial development to improve quality of professional education. The government will require large enterprises to provide professional training for employees, provide internship and occupations for students and teachers in professional schools. According to current tax laws, enterprises' justifiable, income-related costs for providing internship could be exempted when calculating taxes. Enterprises are supported to build public training bases which have both productive and educational functions.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Since China has become a typical aging society, China's key issues in human resources development include getting used to aging trend, developing senior human resources moderately, strengthening professional education to train high-skilled labor urgently needed by industrial development. Therefore, China would communicate and cooperate with APEC economies in how to react to aging society, developing "silver-haired economy", developing professional and preschool education, and improving social security system. At the meantime, China would accelerate opening up service sectors such as medical care, education, and sanatoria through regional cooperation, which will improve related industries and achieve win-win result in APEC regional cooperation.

AEPR 2017 Individual Economy Report (IER) Questionnaire: Structural Reform and Human Capital Development

Hong Kong, China

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

As a small open economy with no natural resources, human capital is undoubtedly one of the most important assets of Hong Kong, China (HKC). In this connection, the Government always accords high priority to enhancing the productivity of the labour force with a view to achieving sustainable economic growth and continued improvement of people's livelihood. Not only in the five recent years but also many years in the past, the Government has been endeavouring to encourage and facilitate the labour force to enrich their skill sets to cope with the international competition. Indeed, the sustained improvement in education level of our workforce, as well as labour productivity growth that contributed to HKC's continued economic upgrading, have vividly reflected the effectiveness of the Government's policy in this regard. In particular for continuously equipping our workforce with the latest skill sets, HKC's major initiatives include:

- Operated by HKC, the Continuing Education Fund (CEF) subsidises continuing studies for Hong Kong residents aged between 18 and 65. On completion of an approved course, eligible applicants would receive reimbursement of 80 per cent of the fees paid, at the maximum amount of HK\$10,000 per person. No means test is required. As at end May 2017, a cumulative total of over 756 000 HKC residents have opened CEF accounts and about 583 000 CEF reimbursement claims have been approved.
- Set up under the Employees Retraining Ordinance, the Employment Retraining Board (ERB) is a statutory body providing market-driven training and employment support services through about 90 appointed training bodies. People aged 15 or above with education attainment up to sub-degree level may enrol in ERB's full-time, placement-tied courses and half-day or evening generic skills training courses. As at May 2017, there were around 700 courses covering 28 industries. ERB plans to offer 130 000 training places in 2017-18. To support women as one of its target groups, ERB launched the "Modular Certificates Accumulation Scheme" for specific courses (e.g. courses on post-natal care worker training) to encourage women and homemakers who are unable to pursue ERB courses on full-time basis due to family commitments to make flexible study arrangements and acquire recognised qualifications. It also collaborated with specific employers to run the "First-Hire-Then-Train" pilot programme to assist (middle-aged) women and homemakers to land on jobs in elderly homes and

resort hotel. On-the-job training and other related support measures (e.g. modified working hours and leave arrangements) are provided to cater for the trainees' needs and encourage them to stay in employment. The Vocational Training Council (VTC) also offers vocational training, namely industry-specific and subject-specific training short courses to youngsters and practitioners in various industries. VTC plans to offer 173 000 vocational training places in 2017-18.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

The two important challenges facing HKC are population ageing and an expected decline in labour force participation rate over time, which would weigh on our long-term economic vitality and competitiveness for an extended period if not properly addressed. The ageing trend would also bring about significant structural changes in the economy and the labour market, and those who cannot readily adjust to the new environment, such as the lower-skilled and underprivileged, could feel left out of the society.

Ageing Population

As a result of the longer life expectancy, the relatively low birth rate and the post-war baby boomers entering retiring ages, HKC is facing an acute population ageing issue. According to the 2014-based population projections, the proportion of elderly population aged 65 or over in HKC is projected to rise markedly in the decades to come, doubling from about one-sixth in 2016 to more than one-third in 2060s.

Decreasing Labour Force Participation Rate

The greying of our population together with the relatively low fertility rate would result in a decrease in persons of prime working age and hence total labour force. According to the 2014-based labour force projections, our labour force is expected to peak soon and then dwindle over the following decades. As a result, it is anticipated that the overall labour force participation rate would fell from around 60% in 2016 to around 50% in 2060s.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Taking into account the two challenges as pointed out in Question 2, it is necessary to offer incentives and facilitation to groups with special needs, such as youth, women, new arrivals, ethnic minorities, persons with disabilities, low-income persons, elderly, middle-aged persons, to enhance their economic participation and employability by broadening their skill sets through various training and re-training schemes with a view to addressing the manpower need of a sustainable economic development.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

The following major initiatives are being / will be undertaken by HKC to address the challenges and policy gaps identified above:

- HKC launched the Low-income Working Family Allowance Scheme in May 2016. Its objective is to relieve the financial burden of non-Comprehensive Social Security Assistance low-income working families to encourage self-reliance through employment, with a focus on supporting families with youths and children to ease intergenerational poverty.
- HKC has earmarked about HK\$147 million to implement a Navigation Scheme for Young Persons in Care Services, providing care service placements for young people in elderly and rehabilitation service units, and subsidies for them to pursue a relevant two-year part-time course. It provides a total of 1 000 training places in several years starting from the financial year of 2015-16.
- To remove the barriers for women to enter or stay in employment and to respond to the demand for child care services, HKC has earmarked about HK\$134 million for strengthening child care services, which include increasing by phases from the financial year of 2015-16 onwards the provision of Extended Hours Service by about 5 000 places at aided child care centres and kindergarten-cum-child care centres in districts with high demand, about 1 200 of which have been provided since September 2015.
- HKC implements various initiatives to cater for the employment needs of ethnic minority (EM) job seekers, including engaging staff proficient in EM languages to provide employment services for EM job seekers; employing young EM trainees of the Youth Employment Training Programme to undergo on-the-job training at job centres; and staging thematic job fairs for EM job seekers. HKC also provides free services for open employment to job seekers with disabilities. The Work Orientation and Placement Scheme encourages employers to employ persons with disabilities and provides them with coaching and support through the provision of an allowance. In September 2016, a two-year pilot scheme was also launched to provide professional psychological and emotional counselling to job seekers with disabilities in need of this service.
- HKC is committed to encouraging employers to adopt “employee-oriented” good people management measures so as to create favourable conditions for employees (including women and mature persons) to keep a balance between work and personal life, and remove the barriers for them to enter or stay in employment. ERB also provides dedicated training and employment support to young people, women, new arrivals from the Mainland, ethnic minorities, people with

disabilities, people who have recovered from work injuries, and rehabilitated former drug abusers and former offenders.

- HKC proposes to inject an additional HK\$1.5 billion into CEF in the financial year of 2017-18, and would consider various measures to enhance the operation of the Fund to encourage continuous learning.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation and international organisations such as APEC could play a pivotal role in addressing the challenges identified above. Initiatives under APEC, such as exchange of knowledge and best practice sharing, may give APEC member economies choices of feasible solutions which will be highly useful for tackling their own challenges.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Indonesia

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Indonesian government is truly committed to structural reforms in human capital development. In the last 5 years, many programmes have been implemented to improve the quality of human resources, one of them is social security, which will be highlighted in this report.

The Indonesia National Social Security System (referred to as *Sistem Jaminan Sosial Nasional*, or SJSN) is a transformation of a number of social security plans that had been introduced in the past, and restructures the existing scattered programs on social protections covering health and employment. The goal of the SJSN is to develop eventually a single payer system of social security in Indonesia, servicing the entire population with an integrated system at the national level.

Social protection was the mandate of the Constitution of Republic Indonesia. The constitution was implemented by:

- Law number 40 of 2004 about National social protection system
- Law number 24 of 2011, as the basis for the establishment of Social Security Administering Agency (BPJS) of health and Employment. BPJS administered social protection programme for labour and employee covering the work accident insurance, death insurance, and pension plan.

The top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.

1. The SJSN integrated scattered social security plans into a single national social security plan that covers health and employment benefits
2. The SJSN also integrated the national and local social security plans.
3. There is an increase awareness and confidence to join the social security programme.
 - There is a significant increase in the member of employment protection (covering work accident insurance, death insurance, pension plan, and pension insurance), from 16.791.397 people in 2014 to 19.275.061 in 2015. In 2016, the active member became 22.633.082. The average growth is 17% per year in the 3 last years.
 - The increasing participants of companies from 216.593 in 2014 to 361.972 companies in 2016, showed the stability of business field and job opportunity development in Indonesia, as well as the increasing of the companies' confidence to participate in employment protection system.

- The increase of collected premi fee by BPJS by 26% on average per year or IDR48,52 billion in 2016. In the same year, the overall claim paid was IDR 20,06 million. From the fee gathered, overall, BPJS has invested IDR260,54 billion and earned IDR22,5 billion. The good company performance has increased the confident of costumers to join the program.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

1. Demography and Geography

Indonesia is one of the biggest populated economies in the world (236 millions) and grew about 1.3% during the last 15 years, projected to be 283 millions in 2025. This big population occupy an archipelago economy that consist of thousands of big and small islands, provide challeges in term of logistics, connectivity and job opportunity that cause disparity between income groups, regions and between urban and rural areas across the nation. Of Indonesia's 258.6 million population, 125,44 million is in the workforce, 94%are employed, 6% unemployed and about 30 million or 12.5% of the total population is considered poor (BPS 2017). This unemployed and the poor have limited access to participate in the social security programmes.

2. Informal Sector Worker

Indonesia depends much on "people-based economy", among which is its large informal sector workers. This was among the factors that keep the economy resilient despite global economic shocks. Yet at the same time managing an economy with large informal sector requires certain approaches in policy adjustments. The social security program has targeted this group however further arrangement is needed to cover more people of this group.

3. Decentralization

Indonesia is a economy that adopts a democratic system with decentralized policy-making authorities at the district levels, which means that the national programs interact with local government policies and the dynamic of the election cycle, which could be challenging at times. However, it is worth noting the determination of the national government to make the reform a sustainable one across administrations. Eventhough policy adjustment has been made to integrate various social security program at national and local level, regulatory and institutional transformation are still a big deal.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

1. Assessment of contribution rate and benefit

There is a need to integrate the evaluation of contribution and benefits of both healthcare and employment security against the overall macro-economic condition in Indonesia. Indonesia does not have that yet given that the reform has only been implemented in less than 5 years but soon such evaluation must be done.

2. The quality of services varies across areas depending on geographic location and response from the local stakeholders. In Eastern part of Indonesia, especially in the islands, accessibility of benefits remain a challenge even if the government chose to subsidize the participation of workers and poor people in the area because the social security agency receiving claims and the hospitals or primary care remains distant from many remote villages.
3. Fiscal sustainability is an issue that encompass all economies integrated to the global market. While commitment to invest in human capital development is high, the uncertainty of the market often raise doubts among corporations and workers that what they invested would last longer than their age. Such reality cannot be solved alone at the domestic level; it requires cross-economy cooperation as part of sustained collaboration on economic development.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

The short plan of Indonesia to address the gap is to conduct bi-annual evaluation on the contribution rate and benefits of both healthcare and employment security. The government also invests significantly in building infrastructures across cities and improving ports that could connect islands. While the impacts may only be seen in the longer run, at least concrete steps are taken to bridge remote areas to the better-facilitated areas.

The medium-term plan of Indonesia is to improve the management of BPJS Health and BPJS Employment, also to identify ways to connect local government initiatives with the national social security schemes.

Role of Regional Cooperation. *What role can regional cooperation and international organisations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

APEC has been a window of opportunity for Indonesia as an economy to connect with the dynamic economies of Asia Pacific. All along most efforts and attention have been directed to increasing access to trade and economic cooperation but little has been discussed on human capital development. The case of Indonesia investing in human development through social security reform should encourage APEC economies to direct attention to ways to facilitating more and more people to contribute actively in the economy, that is by first providing them with social security benefits that would allow for improved productivity and awareness on standards for labour protection in global economies.

Further cooperation to enhance human development in the APEC region may include:

- Common tools to connect measurement of economic growth with investment of reform in human capital development
- A regional perspective on social security as facility to improve economic growth

- Projects aimed at empowering APEC members to drive economic growth through mobilization of informal sector workers
- Projects aimed at enhancing knowledge on social security reform to enhance workers' productivity

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Japan

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

An Effective structural reform regarding human capital development in Japan is women's empowerment.

Since the inauguration of the second Abe Cabinet in December 2012, Prime Minister Abe has consistently promoted women's empowerment. He led to compile the Growth Strategy of which positioned women's empowerment as one of the cores in population ageing and low birth rate in April 2013. In December 2015, the Fourth Basic Plan was approved by the Cabinet. In addition, the Act on Promotion of Women's Participation and Advancement in the Workplace went fully into force in April 2016, and it requires national and local government entities and large companies which have more than 300 employees to devise and disclose action plans with numerical targets and to announce data on women's participation and advancement. At the same time, another major initiative under the Act is the allocation of additional evaluation points for public procurement to companies which promote work-life balance to incentivize companies to pursue women's advancement and work-style reforms.

In parallel with above measures, Prime Minister Abe himself requested to the economic associations twice to promote women to board members and managerial positions proactively in all listed companies, to appoint at least one female as a board member to begin with, and to promote to disclose the information regarding the appointment of women. Other various measures also have been implemented such as requiring companies to record the ratio of female board members in their financial statements in order to promote "visualization" of women's empowerment since before requirement of information disclosure regarding women's participation by the Act.

In the result, during four years under the Abe administration, while labor force population further decreased, the number of employed women has increased by 1.5 million and the employment rate among women of child rearing age 25-44 increased 5% to approximately 73%. The percentage of women who continue to work after the birth of their first child has exceeded 50% for the first time. Regarding the proportion of women in leadership positions, the number of female board members in listed companies has doubled.

There are some reasons why these measures have an effect on promoting women's empowerment in Japan such as:

- a) Not only positioned women from a perspective of human rights as vulnerable and to be protected, but also positioned women's empowerment as one of the cores of the Growth Strategy.
- b) Not only encouraging private companies to make independent and voluntary efforts through such as devising and disclosing action plans with numerical targets and information disclosure, but also implementing the allocation of additional evaluation points to companies which promote work-life balance to incentivize companies through public procurement by the Act.
- c) Established the foundation of enabling women to keep on working while raising children through "The Plan to Accelerate the Zero Childcare Waiting List Project", which promote to secure the capacity of childcare facilities for 500,000 children in five years up to the end of FY 2017.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

While there several challenges toward inclusive growth, the challenges Japan prioritize are (1) to create "a society in which all citizens are dynamically engaged" through enhancing childcare supports and social security, (2) to achieve "work style reform," which includes correcting unreasonable disparities between regular and non-regular workers and reducing working long hours, and (3) to expand talent pool toward increase in the number of female leaders.

First, to tackle the structural issue of the declining birthrate and aging population which is at the root of the obstacles in economic growth, we create "a society in which all citizens are dynamically engaged" where everyone can play active roles.

We aim for "the desirable birthrate of 1.8" (which is based on data indicating the percentage of single young people willing to get married is approximately 90% and the number of children desired by a couple is approximately 2. The current birthrate in Japan is as low as 1.44 (2016) because of some backgrounds such as a "childcare waiting lists" problem where parents cannot find spaces in childcare centers or "After-school Kids' Clubs" and the problems of employments and working conditions of youths). We also aim for "no one forced to leave their jobs for nursing care" (approximately 100 thousand people leave their jobs annually to provide nursing care, which is partly caused by the unavailability of nursing care services). That is why we now enhance childcare supports and social security.

We build a society where young people can get married and give birth as they desire, and people can provide nursing care while keeping on working. We will consequently realize "a Japanese-style inclusive society" which is participated by all citizens, whether they are women or men, the elderly or youths, people who have experienced a failure, people with disabilities and people fighting an illness.

Second, We work on "work style reform" as cross-sectional themes in realizing "a society in which all citizens are dynamically engaged."

For example, while non-regular workers account for 40% of all workers in Japan and there are many women who voluntarily choose to engage in non-regular employment from the latter half of their 30s for various reasons, such as because they get married, or to have more time to raise their children, there are irrational gaps in the treatment of two different work styles of “regular” workers and “non-regular” workers.

And, while the practice of long working hours makes it difficult for us to balance work with family life, the number of working hours of full-time workers has almost remained unchanged for 20 years.

By tackling these problems, we build a society where everyone can choose various work styles.

Thirdly, it is necessary to increase women in leadership positions in order to achieve inclusive growth. For achieving it, it is required to increase recruitment of women and give them many opportunities to get experience for increasing female leaders’ candidates in the future, but it can’t possibly be achieved overnight and we need to continue making steady efforts.

Policy Gaps. *Considering your economy’s current situation, what are your economy’s three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

While there are some policy gaps about the structural reforms of human capital development, Japan prioritizes reducing education gap, receiving re-education of people in the labor market, and resigning jobs by women due to their childcare.

There are young people who cannot receive desirable education because of their household economic conditions. (The rate of high school graduates who go on to universities by household income level is as follows; more than ¥10 million: 62.4%, ¥4 million or lower: 27.8%) As seen above, there are examples of excellent students who give up advancement to the next step of education due to their financial difficulties despite of high academic interest. It could be said that social mobility is prevented by a cycle of poverty and consequently economic disparity is being widen.

Many working people wish to receive re-education, but it is difficult for them because of the practice of long working hours and the high cost of re-education. (Students with full-time job at 25 yrs. old or older who participate in a baccalaureate degree program: 18.1% (OECD average), 1.9% (Japan))

Many women, who were formerly regular employees and once resigned for their childcare, have very few choices but to work as non-regular workers such as part-time workers. (The rate of women who resigned from companies due to child birth or child care: Approximately 50% / who once resigned as regular and get re-employed afterward as non-regular among them: 88%). It is also a problem with respect to increase in labor productivity.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

The short- and medium-term plans to address the above challenges and policy gaps are as follows: the Japan's Plan for Dynamic Engagement of All Citizens, the Action Plan for the Realization of Work Style Reform and reducing education cost of households. In addition, we aim to compile a basic design of human resource development with a policy package scheduled for release in the first half of 2018.

The Japan's Plan for Dynamic Engagement of All Citizens. (Cabinet Decision, on June 2, 2016)

A long-term (a target period of ten years) plan formulated in order to build "a society in which all citizens are dynamically engaged" with policies including

- improvement in the environment for childcare such as additional childcare arrangements and improvement of working conditions of childcare providers
- improvement in the environment for nursing care such as additional nursing care arrangements and improvement of working conditions of nursing care providers
- enhancement of financial supports to students such as founding grand-type scholarship, enabling qualified students to receive interest-free scholarship without exception and significantly relaxing scholastic requirements imposed on children from low-income families.

The Action Plan for the Realization of Work Style Reform (The Council for the Realization of Work Style Reform Decision, on March 28, 2017)

A long-term (a target period of ten years) plan formulated in order to realize "work style reform" which enables everyone to choose various work styles and at the same time improve labor productivity, with policies including

- formulating the direction of legal revision on improvement in the working conditions of non-regular workers such as by providing equal pay for equal work
- enhancement of training and education benefits and education classes to enhance recurrent education. (the education for working people in universities, which will contribute to improvement in their job performance skills)

We are promoting to equip an environment where excellent students showing high academic interest do not have to give up advancement to the next step of education due to their financial difficulties and can study free from anxiety, as well as to realize a society where all citizens can engage dynamically. In concrete terms, based on the Japan's Plan for Dynamic Engagement of All Citizens, we are currently working on creating a grant-type scholarship scheme and accelerating the trend from interest-bearing loans to interest-free ones. Moreover, we have policy to drastically strengthen human capital investment in the whole society

including higher education. Obstacles that we might face during policy implementation are difficulties to build social consensus on increase of investment to young generation and to implement the reform to enhance quality of education.

Furthermore, we place human resource development as the utmost important issue for Japan and as the crux of realization of a society in which all citizens are dynamically engaged. We aim for a society in which any child can endeavor towards his or her dreams regardless of their family's economic situation, and a society in which anyone can return to study at any age and can take on new challenges.

This August, Prime Minister created a new position of Human Resources Development and set up the "Council for Designing 100-year Life Society" headed by Prime Minister himself. In this council, themes such as ensuring educational opportunities that are open to all people, reforms of higher education, and promotion of recurrent education for adults who want to resume their education will be discussed. We will compile an interim report by the end of 2017, followed by a basic design with a policy package scheduled for release in the first half of 2018.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

We expect regional cooperation and international organizations including APEC to share best practices to address the above challenges and policy gaps.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Republic of Korea

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

In the past five years, the Korean government has introduced several structural reforms for human capital development and achieved remarkable success. Among them, the “Work-Learning Dual System (2013),” a Korean model of work-based learning methodology, has been the most effective reform program.

This program was introduced to solve the problem of skills mismatch, which is prevalent in Korea's job market despite the government's heavy investment in human resource development. Korea's total expenditure on private education for school age children amounted to 17.8 trillion won (equivalent to 16 billion USD) in 2015 while the college entry rate reached 70.8 per cent in 2016. Nevertheless, the business sector has experienced shortages in skilled workers. According to a 2013 study from the Korea Employers Federation, the average company spends 18.3 months and 59.6 million won (equivalent to 53,000 USD) in training a newly-hired graduate.

The key concept of the “Work-Learning Dual System” is to provide hands-on job experience to trainees and enable them to apply the technical knowledge they have learned from school to their actual work. Participating trainees can attend classes at schools that teach this concept and simultaneously receive on-the-job training (OJT) at a company, which allows them to combine theory and practice. Participating schools and companies also receive financial support for creating a favorable training environment.

The program has received enthusiastic responses from both employers and trainees. The level of satisfaction was reported as 4.0 from employers, 4.08 from trainees, and 3.97 from OJT trainers (with full mark being 5 points). Respondents were in favor of this program as it helped both students find jobs and companies reduce spending in training.

The program has delivered encouraging results owing to the following three factors. First, the program was implemented in close and effective collaboration with the relevant players, including vocational schools, universities, and Micro, Small, and Medium Enterprises (MSMEs). Second, there was a general consensus in developing the program, which would ease the financial burden of both job seekers and MSMEs in their recruiting process. Third, sharing successful cases of work-based learning enabled program directors to gain insight on how to better manage the program.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

The three most important challenges Korea is facing in terms of inclusive growth are the dual structure of the labor market, youth unemployment, and the shortage of decent jobs for middle-aged workers.

First, the gap in training opportunities has deepened disparities in work skills between employees of large companies and MSMEs, and also between regular workers and non-regular workers. There was a great discrepancy in 2015 between companies with 300 or more employees and those with less than 300 employees in the rate of employees participating in training, which were 27.8 per cent and 11.5 per cent, respectively. The proportion of employees with professional training experience was 62.6 per cent for regular workers and 45.6 per cent for non-regular workers as of August 2016.

Second, youth unemployment is severe especially among those born between 1991 and 1996, the offspring of second-generation baby boomers. They are struggling with the lack of jobs available in the labor market amid prolonged low growth. Moreover, during periods of unemployment, young jobseekers are being deprived of opportunities to accumulate job experience as many of them are stuck with low-quality jobs, most of which are part-time.

Lastly, middle-aged retirees, who are pressured to retire early, are also facing difficulties as they fail to get a new job and end up either self-employed or with a low-quality job. These tendencies may be attributed to various reasons including reemployment support programs.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

The biggest challenge for the Korean government in reforming human capital development policy would be the wide gap between declared targets and reality. This is most prominent in the following three areas: reducing working hours, enhancing productivity, and raising the economic participation rate of women.

First, long working hours have become the norm in Korea. In 2010, the Korea Tripartite Commission of labor, management, and government has agreed to cut down the working hours per year to around 1,800. Despite subsequent efforts, however, results have been unsatisfactory, Korea ranked second among OECD members for longest working hours, with 2,113 hours per year. According to OECD, as of 2015, the average working hours per year of its members was 1,691.

Second, Korea's labor productivity per hour (measured in US dollars) records a meager 29.9, while the US, Japan, and Germany are 56.9, 36.2, and 50.9, respectively, according to the Korea Productivity Center. The figure for Korea is expected to fall as the working-age population is shrinking, due to low birth rate and aging population.

Lastly, women's economic participation rate in Korea stands at 57.9 per cent, far below the OECD average of 67.5 per cent. To address this issue, it is vital to make childcare support and infrastructure more accessible to female workers. Even for those who are guaranteed parental leave and employment after pregnancy, many women find it difficult to rear children and have a career at the same time, due to Korea's long working hours and the widespread perception viewing parenting primarily as the mother's duty.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

The Korean government has been implementing several programs to overcome challenges hindering inclusive growth and to achieve policy goals for human capital development, which are as follows.

First, the government attempts to narrow down the disparity of workers' skills in large companies and MSMEs by providing more training opportunities to employees in MSMEs. The government helps them improve their skills by providing professional training courses and reforming the National Key Strategic Industries Program to not only enhance workers' creativity and productivity, but also prevent industries from facing manpower shortage.

Second, facing the advent of the fourth industrial revolution, the government is making efforts to develop in-demand human capital. The process of creating an ecosystem for vocational education and training in the new era includes fostering pioneers in emerging industries such as big data and smart manufacturing, enhancing the competence of vocational trainers, and developing smart education and training platforms.

Third, to tackle the problem of youth unemployment, the government is working on improving training programs and currently providing financial support to young jobseekers. In a bid to support the prompt employment of youth, the government is presently implementing reforms in areas concerned with vocational training, such as OJT training and career guidance. This would address the mismatch between MSMEs and young jobseekers. Among these youth, for those who have worked for MSMEs over two years, the government also provides financial subsidies, with the intention of not only helping them save up a lump sum as they embark on building their career, but also supporting MSMEs to retain young talents.

Fourth, the government is striving to raise the low economic participation rate of women. The government encourages fathers to share parenting duties and is gradually increasing financial benefits given to workers on parental leave. Employers are also encouraged to allow employees with infants or young children to cut down their working hours during periods of infant/child care or opt for flexi-time arrangements.

Lastly, the government attempts to improve the environment for middle-aged retirees facing sparse job opportunities. It has promoted the use of job matching services for middle-aged workers to facilitate their reemployment. In line with the recent trend of early retirement, efforts are being made to strengthen the social safety net, including employment insurance.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation among APEC economies is crucial in addressing challenges and policy gaps that the government is now facing, such as skills mismatch and youth unemployment. As mentioned in the APEC Framework for Youth Education, Employment, and Entrepreneurship adopted in HRDWG, August 2016, enhanced regional cooperation is one of the driving forces for APEC Economies in achieving better employment outcomes. In this context, APEC can contribute to economies' structural reforms for human capital development in the following ways.

First, it should promote economies to share best practices on enhancing employment and entrepreneurship through various means, such as holding policy dialogues among stakeholders. Sharing these best practices will benefit APEC economies in devising effective human resource development strategies.

Second, APEC should play an active role in facilitating the mobility of youth in pursuit of career opportunities across the Asia-Pacific region. To this aim, it should promptly consider consolidating a qualifications recognition framework through the leveraging of existing activities and working with relevant domestic agencies. The enhanced mobility of students, researchers, and faculties will promote cross-border education and increase interaction among higher-education institutions across APEC.

Lastly, APEC should promote collective efforts for skills development of youth in the region by engaging with the APEC Business Advisory Council (ABAC) and identifying capacity building projects to help economies improve policies and infrastructures for vocational education and skills training. It should also encourage collaboration with not only the APEC Scholarship and Internship Program, but also the private sector, such as ABAC and multinational recruitment agencies, which will stimulate the exchange of information on job vacancies, internship opportunities, and job descriptions.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Malaysia

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Malaysia has made good progress through its implementation of the tenth Malaysia Plan (2011-2015), in which the Government introduced a range of measures to improve the labour market and transform its education system. Key achievements include the creations of 1.8 million new jobs that contributed to a decline in the unemployment rate from 3.3% in 2010 to 2.9% in 2015, which is considered full employment. The government also implemented the minimum wage that has benefitted 1.9 million wage earners. In education, there was an increase in enrolment across all levels. Annual intake in Technical and Vocational Education and Training (TVET) also grew from 113,000 in 2010 to 164,000 in 2013. Major strategy documents were developed to chart out the clear transformation of the human capital ecosystem such as:

- Malaysia Education Blueprint 2015-2025 (Preschool to Post Secondary);
- Malaysia Education Blueprint 2015-2025 (Higher Education); and
- Talent Roadmap 2020.

At present, Malaysia is currently implementing the 11th Malaysia Plan, which puts emphasis on Structural Reform on Human Capital through its Strategy: *Accelerating Human Capital Development for an Advanced Nation*. As such, there is continuous commitment by the Government to develop industry-ready graduates, which is in line with Malaysia's efforts to ensure that structured programmes are organised in order to help investors obtain knowledge-intensive manpower in highly demanded skilled-based jobs. The top three effective outcomes which have been achieved from the 11th Malaysia Plan are:

1. The change in mindset and increase of awareness of various Education Institutions of the need to match the current technical requirements required by Industries.
2. The establishment of the Human Capital Council, which is chaired by the Prime Minister. The objective is to enhance the governance of Human Capital Development through the establishment of the Industry Skills Committee (ISC), which is co-chaired by the Ministry of International Trade and Industry and Malaysian Employers Federation.
3. The establishment of the Critical Skills Committee (CSC) which focuses on key initiatives such as to construct Critical Occupation List (COL) that will be evidence-based and reflects the most sought-after occupations by industry, which may also be hard-to-fill positions. The

COL will serve to become the primary instrument to promote more effective coordination of human capital policies aimed at upskilling the workforce, guiding TVET and higher education teaching programme; retaining skilled Malaysians while also enticing returning Malaysians; and attracting foreign talent.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

The three most important challenges in making economic growth more inclusive are:

1. **Vulnerable Group**

Having largely eliminated absolute poverty through a relatively equitable development path, Malaysia's focus has turned to the vulnerable group. This calls for reforms with respect to access to quality education, healthcare, social protection, labour force participation among vulnerable such as the B40, women and older persons. It is a major challenge for Malaysia to ensure job opportunities, access to healthcare services and education, and a reliable social safety net for the vulnerable group to have the opportunity for a better life. Allowing the B40 households to remain in their current socio-economic status will create social costs for all Malaysians. Upskilling and providing job opportunities to the 2.7 million B40 households will increase the nation's skilled workforce and reduce inequality which will be passed on to future generations.

In 2015, women made up 48.7% of our total population, and formed 61% of total graduates enrolment in Malaysia. Female labour force participation rate rose significantly from 46.8% in 2010 to 54.1% in 2015, although lower than most neighboring ASEAN members. Raising female participation rate to increase inclusiveness is one of the strategies in enhancing labour market operation to maximize efficiency and effectiveness. They are an important component in addressing the talent gap in Malaysia, and in achieving our socio-economic development objectives.

The proportion of the elderly (above 60 years) has increased, from 7.9% in 2010 to 8.8% in 2014. This figure is expected to grow to 10.6% by 2020. Better quality of life and advances in healthcare has resulted in longer lifespan. Many of our senior citizens are thus in a position to continue contributing to the society even in their golden years. Employees Provident Fund (EPF) data indicates that 80% of 54-year old members would not have enough savings to live above the poverty line if they retire at age 55, while half of all retirees exhaust their saving within five years. Thus, concerted efforts need to be undertaken to enhance the quality of life of the elderly.

2. **Youth unemployment**

In 2015, over 90% of those unemployed were aged between 15-29 years old. While aggregate unemployment in Malaysia stands at 4%, youth unemployment is around 10.7%. Hence, it is a challenge to produce rounded and balanced graduates who meet the needs of industry, which will help to reduce the skills mismatched and boost employment among the youths.

3. **Global Economic Slowdown and the weakening of Malaysian Ringgit**

The global economy has affected many economies across the globe. In Malaysia's case, it has affected investors the manufacturing activities which is one of Malaysia's key economic activities where fewer jobs are created and offered. On the currency exchange, the fluctuation of the exchange rate and weakening Malaysia Ringgit have led to a fall in international reserves, affecting Government expenditure thus causing slower economic growth.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Among the policy gaps for structural reform for human capital development include:

1. The need to formulate and implement policies that are able to **address the rapid changes and needs of industries** as the pace of technologies accelerate with each generation of discoveries and applications;
2. The challenges in **mapping the workforce analytics** and drawing insights from workforce data and projection;
3. According to OECD, Southeast Asian Economic Outlook 2013: Structural Policy Notes-Malaysia report, **employers' over-reliance on unskilled and cheap labour** has led to inadequate growth of skilled workers in the labour market. As a result, only 25% of Malaysia's labour force is composed of highly skilled workers, as compared to significantly higher percentages in Singapore, Chinese Taipei and Korea. This has become the main obstacle to business operations and growth.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Identified Action Plans to Address the Policy Gaps:

Efforts and strong emphasis on up-skilling and upgrading the workforce are also being prioritised. There have been significant investments, at both the national and sectoral level, in continuously upgrading and up skilling human capital. Several initiatives were recently undertaken to improve the quality of training in order to produce a highly-skilled workforce.

1. Industry-Academia-Cooperation (IAC).

- The IAC is one of the Government's initiatives which identifies priority clusters/sectors by engaging with selected companies, which encourages industries to participate in developing the curriculum for internship programmes and industrial training that would complement their specific talent/ skill set requirements of the industries and investment.
- The initiative has seen a total of 14 leading employers, partnering with nine public universities, which will address skill gaps within seven key technology clusters in the

E&E industry. These cover Integrated Circuit Design, Embedded System, Wireless Communications (Radio Frequency), Wafer Fabrication, Opto/LED, Solar and Advanced Manufacturing.

2. Gearing up Malaysian Industries for the Fourth Industrial Revolution

- Under the 11th Malaysia Plan, industries will be encouraged to increase productivity through automation. Greater automation and technology utilisation will be promoted to reduce the reliance on low-skilled foreign workers. The scope of existing financial assistance will be expanded to include acquiring of technology, training, reskilling and upskilling for the purpose of operation and maintenance of machinery.
- Measures towards automation and higher productivity will be supported by enhancement of industry-led skills training through greater collaboration with industry experts and training institutes. The measures to be undertaken are aligned with the shift towards technical and vocational education and training (TVET).
- Encouraging local manufacturers to collaborate with skills development centres to equip and upgrade the training facilities with up-to-date equipment and machinery to ensure workforce readiness; and promoting re-skilling and up-skilling of skilled workers to upgrade their level of competency and to acquire high-paying jobs.

3. Talent-Related Initiatives and Structured Programmes for Graduates

a) International Internship Programmes

MyAPEC Youth Connect

- In APEC, Malaysia has initiated MyAPEC Youth Connect programme which sets to promote development of skills, cultural exchange and closer ties between Malaysia and APEC economies by allowing citizens of these economies to undergo internship in Malaysia and vice versa.

MyASEAN Internship

- At the ASEAN forum, Malaysia is leading the MyASEAN Internship initiative in which Malaysian students from local and overseas universities will get the opportunity to undertake their internships at various ASEAN members. This programme is also open to interested students from ASEAN members that are currently studying in Malaysia.

b) Apprenticeship

- This is a tripartite collaborative effort between Malaysia's Investment Development Authority (MIDA), Human Resources Development Fund (HRDF) and Skills Department to address the issue of skills gaps as well as the shortage of skilled workers, particularly in the technology sector. This programme will enable employers to be effectively involved in training apprentices which are selected amongst high school leavers. Under this scheme, the training conducted is a combination of theoretical, (off-the-job) syllabus conducted at the approved training centres; as well as practical training (on-the-job) exposure at the premises of the sponsoring employers. Upon completion of a combination of modules at the training

centres, apprentices will undergo a practical training at the premise of sponsoring employers, in-order to reinforce the theoretical concepts learnt.

c) Graduate Employability Management Scheme (GEMS) 2.0.

- The main thrust of the Graduate Employability Management Scheme (GEMS) is to enhance graduate employability with the aim to reduce talent shortages in the key areas of economy by 2020. It will equip fresh and unemployed graduates with skills required by industries. Under the purview of TalentCorp, GEMS has been revived to be more sector focused and demand driven. GEMS aims to:
 - equips unemployed graduates with industry-relevant skills and experience via a place-and-train methodology; and
 - focus on demand-driven from leading employers in selected key industries.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

APEC can play a significant role by:

- Providing a platform for APEC economies to collaborate and discuss the future needs of human capital;
- Providing engagement sessions between business community/industry and APEC economies to map out human capital demands in the APEC region;
- Improve procedures to facilitate better mobility of highly skilled talents among APEC economies; and
- Capacity building and sharing of experience on the success of best practices in human capital development among APEC Economies.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Mexico

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

In 2012, the Mexican government started to promote a set of structural reforms in order to face the different challenges. Therefore, 11 structural reforms were approved in the first 20 months of this administration.

This set of reforms pursue overall, raising the productivity in order to boost growth and economic development of Mexico. Among this reforms were the amendment to the Federal Labor Law, commonly known as Labor Reform, which was published in the Official Gazette of the Federation on November 30, 2012 and entered into force on December 1st same year.

As part of these amendments, several provisions were incorporated to emphasize that the guiding principle in labor relations should be the labor productivity, and training of workers is the way to achieve higher productivity and better working conditions. In addition, the reforms encouraged training programs and certification of labor competencies for workers.

In that regard, the STPS designed a package of programs, tools and incentives in training and productivity, aimed to improve productivity in the work centers, as follows:

- Between January 2013 and March 2017, 227,822 workers were trained by free through the training programs offered by the Secretariat of Labour and Social Welfare (STPS), an increase of 179% compared with the people trained between 2006 and 2012.
- In 2013 in the guidelines of the Productivity Support Program (PAP) was added a new stimulus to certify labor competencies. As a result, between January 2013 and March 2017, 10 thousand 550 workers working in the industrial, commercial and services sectors of the economy were evaluated and obtained a certificate of labor competency issued by the authority in the matter, the National Council for Standardization and Certification of Labor Competencies (CONOCER), of the Ministry of Public Education.
- A new advisory program was undertaken for employers to comply with the obligation to train all their workers and the STPS has the function of recording the lists of certificates of competencies or labor skills that support this training. As a result, during 2016, 3.4 million trained workers were added to the Qualified Workers' Registry, a figure that represents an increase of 949,311 workers compared to those trained in 2015 that is 38% more.
- The first website specialized in labor productivity, the Training and Productivity Portal, was established with the aim of making available productivity tools for the workers. Furthermore, a self-learning guide known as PROLAB was also designed in digital format

and included in the website, aimed at micro and small companies and with the purpose of provide them with elements that facilitate the implementation of programs to increase the productivity of their workers. <http://productividadlaboral.stps.gob.mx>

- The National Labor Award (PRENAT) is aimed to recognize the developing and implementation of labor good practices in the working centers This award consists in a public recognition and an monetary fee for the workers. In the actual sexennial period, there were 1,126 labor practices interested in participating in PRENAT and 342 workers have been rewarded.

These actions are part of the Labor Reform, and have contributed to the development of human capital in Mexico, in order to increase the productivity in the workplace.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

1. Develop relevant competencies:

Improve the level of competencies of students in compulsory education.

Increase access to higher education while improving the quality and relevance of competencies developed in higher education.

2. Activate the supply of skills:

Eliminate barriers in the area of supply and demand in order to activate skills in (formal) employment.

Promote the activation of skills of vulnerable groups.

3. To use more effectively the competencies of the people:

Improve the use of skills at work.

Support the demand for greater skills in order to boost innovation and productivity.

The fulfillment of the three objectives could reduce, various asymmetries that are present today in the labor market and in many cases cause some social groups or individuals not to be included in the formal labor market, with the costs for those who are excluded from the benefits of formality.

The intention is to design a short, medium and long-term action plan to address these challenges in an inter-institutional way, as a state policy. Inclusive growth means people with the necessary employability to enter the formal labor market, high productivity jobs and, in turn, to develop relevant skills in people and that these skills are used in productive activities for which they were developed.

Note: For further information on the subject, it is suggested to review the following electronic link of the Organization for Economic Co-operation and Development (OECD):

<https://www.oecd.org/mexico/Diagnostico-de-la-OCDE-sobre-la-Estrategia-de-Competencias-Destrezas-y-Habilidades-de-Mexico-Resumen-Ejecutivo.pdf>

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

As in many of the emerging economies, one of the main problems in Mexico has been insufficient economic growth to generate sufficient formal employment (decent employment), which is demanded by the large number of young people and women entering the labor market every year. This additional pressure on the labor market, which has been generated for decades for different reasons - currently explained more by the demographic bonus - has found a way out of informal employment, which has led to a large proportion of employment is generated in jobs of low quality and productivity, as well as greater inequality.

In this sense, the gaps that have been identified, and in which the Government of Mexico is putting its efforts to close them, are:

- The gender gap (access of more women to the labor market under conditions of equal opportunities and remuneration)
- The skills gap of the workforce (equipping workers with the necessary skills to insert, adapt and remain in the labor market).

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Beginning in 2015 and in coordination with the OECD, the Government of Mexico started the necessary work to design a Life Skills Training Strategy that contributes to the development of the economy's human capital.

During 2016, several works were carried out in which the Secretariat of Labor and Social Welfare participated actively. The result of these works was the integration of the document entitled "OECD Skills Strategy Diagnostic Report: Mexico 2017", which was made publicly known on January 10, 2017 during the First Ordinary Session of the National Productivity Committee (CNP).

At that session of the Consultative Body, two agreements were adopted concerning this strategy:

- 1) The OECD's diagnosis of the competence, skills and abilities strategy of Mexico is received. The CNP will continue to work with the OECD in the development of an Action Plan.
- 2) Subcommittees are instructed to develop recommendations with matrices of commitments and performance indicators for a Lifelong Skills Training Strategy, using as input the work developed in collaboration with the OECD.

Under these agreements, the CNP will develop the Action Plan of the Strategy of Formation of Abilities.

The works of design the Action Plan will involve different dependencies and entities of the Federal Public Administration, as well as international organizations such as the Inter-American Development Bank, the World Bank and the International Labor Organization.

The aim of the action plan is to generate a profound change in the different aspects inherent to the way public programs are designed and operated in the areas of human capital development: planning, programming, budgeting, the exercise of resources and evaluation and control of results.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

For Mexico, international cooperation has proven to be an efficient mechanism for identifying innovative measures and good practices with positive results in promoting solid, sustained and balanced growth, which results in benefits for all, particularly in an unfavorable international economic context.

One of the central elements of international cooperation is the exchange of concepts, ideas and proposals, which contribute to the design of public policies to address the diverse challenges, both nationally and internationally, always considering the diversity of national scenarios and regional.

Therefore, STPS participation in the international labor scenario has been consolidated through frank and open dialogue, through close collaboration with other economies and with various regional and international organizations.

Currently, under the APEC Vietnam presidency, the STPS has participated in the exchanging of good practices and the dispatch of experts in two projects:

- "Project DARE (Data Analytics Raising Employment)", in which we are part of the Project Advisory Group that directs the analysis of competencies required by the labor force in the APEC region, in order to support with this the sustainable growth and prosperity of the economies part.
- "APEC Symposium on Promoting the Employment of Persons with Disabilities", which outlined the main actions implemented by the STPS for the inclusion of persons with disabilities in the labor market.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

New Zealand

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

New Zealand's human capital settings are relatively strong and perform well for the majority of individuals. However, there are segments of the population that continue to experience poor outcomes, including long-term welfare dependency. To get better long-term results for people with needs that are not being met, New Zealand is applying rigorous and evidence-based investment practices to social services.

This social investment approach aims to improve the lives of New Zealanders and increase government effectiveness through a focus on understanding what improves long-term outcomes for different population groups. Social investment aims to put the needs of people who rely on public services at the centre of decisions on planning, programmes and resourcing by:

- Setting clear, measurable goals for helping those people.
- Using information and technology to better understand the needs of people who rely on social services and what services they are currently receiving.
- Systematically measuring the effectiveness of services, so we know what works well and for whom, and then feeding these learnings back into the decision-making process.
- Purchasing outcomes rather than specific inputs, and moving funding to the most effective services irrespective of whether they are provided by government or non-government organisations (NGOs).

New Zealand first applied investment approach principles to the welfare sector to support an increased focus on supporting people back into employment. Each year an actuarial valuation of the lifetime cost of the current beneficiary population is produced. The actuarial valuation has helped to understand where best to target support to those who are capable of working, but are most likely to become long-term welfare dependent without additional assistance. It can also be used to chart the impacts of policy and service changes to identify which interventions will make the biggest difference to different cohorts. The Ministry of Social Development produces an annual report into the performance of the benefit system. The 2015 report (<https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/evaluation/investment-approach/2015-index.html>) uses changes in the valuation, as well as other data, to evaluate the performance of employment assistance services in supporting people into sustainable employment.

Early intervention is at the heart of an investment approach. This is reflected in the recent establishment of the Ministry for Vulnerable Children, Oranga Tamariki as a new stand-alone ministry. The creation of the new Ministry signals a ‘whole of sector’, child-centred approach which establishes the new Ministry as a single point of accountability for ensuring vulnerable children and their families get the services they need. This will ensure that government agencies work together to provide coherent and complete services to these children, young people and their families.

The Government is also applying a number of the investment approach principles in the education system. In devolved and complex systems, like the education system, applying investment approach principles depends on reinforcing a focus on understanding the impact of services at all levels of the system. The range of education reforms outlined below (under ‘Action Plans’) are focused on improving the impact of the early learning and compulsory education sectors on long-term outcomes. The aim is to achieve better social and economic outcomes for learners, including those in the tertiary sector, by using improved information about outcomes to support smarter investment and encourage providers to improve the relevance and quality of their services.

While social investment is still developing, it has the potential to be effective in lifting human capital stocks for the following reasons:

- Focusing on outcomes – this means targeting resources to where they can make the biggest difference to improve living standards particularly for those that are the most disadvantaged.
- Role of data – a key part of social investment is the application of rigorous and evidence-based investment practices to social services.
- Evaluation – a key element of social investment is a focus on evaluation and feedback loops for decision makers on the performance of interventions and services.
- The impact of these insights also depends on developing better mechanisms and incentives to shift existing less effective or well aligned resources and models of care. This includes improving commissioning practices and considering devolved or collective impact models.

Challenges to Inclusiveness. *Considering your economy’s current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Social inclusion ensures that all New Zealanders benefit from increasing the economy’s prosperity. It is about removing the significant barriers to social and economic participation for the minority of New Zealanders who face challenges living the lives they value. Some challenges faced to improve social inclusion include:

- Improved provision of government services – The government spends a significant amount of money on social services for New Zealanders. Improving the outcomes achieved from these services has the ability to contribute to improved living standards

and enhanced productivity and growth. This is encompassed by the social investment approach (referred to above).

- Housing affordability – The affordability of quality housing has implications for: people’s ability to purchase a home; household debt; educational attainment; health outcomes; and consumption of other essential goods (e.g. medical care and food). More affordable, quality housing would likely result in a range of positive well-being and social outcomes for communities.
- Lifting the participation of Māori and Pasifika in the workforce – The Māori and Pasifika populations are rapidly growing and tend to be younger than other ethnicities so will become an increasing proportion of the future New Zealand workforce. Raising achievement in Māori and Pasifika education and employment will help ensure that individuals, families and communities can fully contribute to and share in New Zealand’s future economic success.

Policy Gaps. *Considering your economy’s current situation, what are your economy’s three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

New Zealand’s human capital outcomes remain strong by international standards. New Zealand has high rates of participation and performance in school and tertiary education. This, combined with flexible labour market settings, has enabled high labour market participation and relatively low unemployment. Labour productivity, however, remains below the OECD average. Policies will need to ensure New Zealand has a flexible and highly skilled workforce in the future to manage the effects of technological changes in the labour market and maintain and improve labour productivity performance. The main focus areas for policymakers in New Zealand with regard to human capital development are:

- Policies to improving the levels of educational achievement for younger New Zealanders. Qualification attainment levels of young New Zealanders are increasing over time but not at the same rate as in other economies. New Zealand has a lower proportion of tertiary educated young people than the OECD average and a higher proportion of young people without upper secondary qualifications many of whom end up not in employment, education or training. There was also a decline in performance for New Zealand students in the OECD’s Programme for International Student Assessment (PISA) across the achievement distribution between 2009 and 2012, in maths and science in particular. In 2015, performance appeared to stabilise.
- Policies to address barriers for disadvantaged groups. Socio-economic background has more impact on educational attainment in New Zealand than in most other OECD members and fewer students from disadvantaged backgrounds go on to study at a higher level after completing schooling. Building the capability and resilience of the Māori and Pasifika labour force is a key challenge. There remains a persistent gap between the incomes and unemployment rates of Māori and non-Māori households. Pacific peoples face similar challenges. Ensuring social policy interventions, including in the education,

training and welfare systems, can address these issues will be increasingly important as the population and labour force become more diverse. For example, between 2013 and 2038, those who identify as Māori are projected to increase from around 16 percent to almost 20 percent, Asian from 12 percent to 21 percent, and Pacific from eight percent to 11 percent.

- Policies to improve the responsiveness of the education system to the labour market. Despite New Zealand having a highly qualified labour force compared to other members, a significant proportion of employers report that workers lack the skills that employers require and one of the results is that skill shortages persist in many occupations. Employers report both a lack of non-cognitive skills, and a disconnect between tertiary providers and business.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Improving educational attainment in schools

In order to address issues related to education attainment in schools, New Zealand has embarked on an extensive education reform programme, including a review of the primary legislation. Many of the reforms apply investment approach principles to improve outcomes for all learners, particularly those most at risk of not achieving. Key reforms underway or recently implemented include:

- Communities of Learning | Kāhui Ako provide additional investment to collaboratively lift student progress and achievement and offer new career pathways for teachers and leaders. The reform is principally focused on supporting education providers (including early learning, schools and tertiary providers) to collaboratively address common achievement challenges they identify, which often focus on disadvantaged learners. About two-thirds of schools have joined a Community of Learning since the policy was launched in 2014.
- A broad review of education system funding, exploring how the funding system can best support student progress and equitable student outcomes. This includes reviewing the mechanisms used to target additional funding to mitigate the impact of disadvantage.
- A new centrally-funded professional learning and development system, in place since early 2017, to better target national priority areas and schools' capability needs.
- Supporting the system to maximise the opportunities of digital technology.
- Reforms to lift the entry standards and quality of initial teacher education.
- A review of learning support to improve access to services for students with additional learning needs including disabilities and strengthen investment information about what works for whom
- Education strategies focused on improving the education system for Māori and Pasifika students.

These reforms are supported by legislative changes and publicly announced education targets that aim to strengthen education providers' and the public sector's focus on learning outcomes. The targets are:

- An increase in the proportion of 18-year-olds with NCEA level 2 (upper secondary qualification) or equivalent qualification to 85% by 2017. This is on track to be achieved. (In 2016, 85% of all 18 year olds achieved NCEA level 2, including 80% for Pasifika and 75% for Maori)
- 98% of children starting school will have participated in quality early childhood education by 2016. This will largely be achieved: the early childhood education participation rate was 96.7% for the 12 months to September 2016.
- A new set of targets focused on primary school attainment levels by 2021, to ensure learners have the foundational numeracy and literacy skills to enable them to progress in their learning (80% of year 8 students are achieving at or above the National Standard in writing and mathematics).

The educational impact of many of the reforms is dependent on the effectiveness of their implementation. Careful regulatory design, education sector engagement, and impact evaluation are therefore key. While very early days, the new focus on vulnerable children is also expected to develop a more cohesive and proactive approach to addressing some of the out of school barriers to full participation and learning.

Improving tertiary educational attainment

The Government has a public target to increase the proportion of 25 - 34 year olds with advanced trade qualifications, diplomas and degrees (at Level 4 or above) to 60%. Specific actions include:

- Extending vocational pathways for students, including additional funding for apprenticeships and a range of other vocational and trades training programmes, including those focused on Maori and Pasifika peoples.
- Supporting schools, tertiary providers and industry training organisations to collaborate.
- Expanding fees-free foundation education to students of all ages. Basic foundation skills equip people to go on higher levels of education and training that offer have better employment outcomes.

Improving the responsiveness of the education system to the labour market

New Zealand is strengthening the careers information and education available to students by providing accessible information on the employment and earnings outcomes of study choices.

This includes:

- initiatives to help students make more informed study and career decisions, including: smartphone apps and online tools with information on career prospects for selected occupations; vocational pathways that guide students' study choices to match their career interests; and publishing information on graduates' employment outcomes comparing different providers and different fields of study.
- the merger of the national careers advice agency into the tertiary education funding agency to provide better careers information to schools, and coordinate with schools, tertiary providers and employers on the skill needs of the labour market.

New Zealand has established three new ICT graduate schools operated by consortia of universities, polytechnics and industry. These offer programmes designed with employers to fast-track the supply of people with advanced ICT qualifications and connect them more effectively with industry.

The New Zealand Productivity Commission report new models of tertiary education was released in March 2017 <http://www.productivity.govt.nz/inquiry-content/2683?stage=4>. It proposes a series of changes to increase flexibility and innovation in New Zealand's tertiary education system so it can respond to emerging trends in technology, internationalisation, population, and the demand for skills. The government is currently considering the report and is likely to respond later in 2017.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation, such as through APEC, provides the opportunity to share experiences on the lessons learnt in improving human capital development. Understanding the broad range of experiences and challenges faced by APEC economies allows economies to learn from situations that are similar to their own.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Papua New Guinea

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Papua New Guinea's Technical Vocational Education and Training (TVET) system has been undergoing reform in recent years to keep up-to-date with social and economic challenges. Today, national priorities are seen differently as in the past, with the structural challenges associated with unemployment, poverty and inequality stimulating and refocusing the thinking of policymakers and citizens.

The Government's Vision 2050 sets out key strategies and priorities for PNG's development, with an emphasis on TVET. Key aspects of the recent TVET reforms include:

- rationalising trade skills in most provinces based on the demands of economic and industry growth within the district;
- trialling a technical secondary school concept to provide an alternative pathway for students;
- ongoing professional development and relevant qualification upgrading of vocational teachers;
- accrediting TVET institutions into offering National Certification Level Courses under the National Qualifications Framework;
- linking vocational training course programs to technical colleges;
- an ongoing 'Enterprise Oriented Training Education' with the Small Business Development Corporation to promote self-reliance and an entrepreneurship culture;
- institutions introducing short courses for the community, especially for women and girls; and
- offering scholarships to Papua New Guineans to study at the Australia-Pacific Technical College.

TVET reform has been effective because:

1. public awareness has been conducted for parents and students to understand the education pathways and routes to employment;
2. Government has increased funding to the sector; and
3. the TVET curriculum has been revised to be more competency based.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Three key challenges that Papua New Guinea faces in making growth more inclusive are the:

1. low level of human capital development within the economy;
2. lack of technical capacity building; and
3. lack of infrastructure and support mechanisms and systems to develop human capital.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Three of the biggest structural reform policy gaps that Papua New Guinea faces are:

1. the lack of a structured way in rolling out implementation, including a lack of effective coordination and the fragmented way in which programs are delivered;
2. suboptimal alignment between the supply and demand aspects of human capital development, for example, no direct link between TVET courses to industry and workforce needs; and
3. significant gaps in research and data collection to inform policymaking.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

A range of strategies are being adopted to address structural reform challenges and policy gaps in Papua New Guinea.

For example, the National Education Plan 2015-19 and TVET Strategic Plan 2010-20 call for TVET to provide a more seamless system with easier-to-understand and more accessible vocational options and pathways, with the aim of developing and promoting a less complex system that allows parents and students to more readily understand the certification pathways while seeing direct links to work skills and further training. The TVET system will be underpinned by the National Qualification Framework with all institutions that offer TVET courses becoming registered training organisations under one authority. Successful implementation will require overcoming the obstacles of legislation that governs the different sector providers, and effective coordination that provides skills and trade courses that meet industry demand.

In health, work is being undertaken to improve coordination through a more whole-of-government approach to issues (e.g. health workforce development to improve the provision of health services across the economy) and establishing a more effective mechanism for collecting data and undertaking research to inform policymaking. A key obstacle to reform is where necessary resources are diverted from the delivery of identified key result areas to funding unplanned activities.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Papua New Guinea would benefit from the experience of other APEC member economies in developing and implementing structural reforms to support human capital development, including the design of policies and practices, for example, to improve the quality of school education and deliver better health outcomes. Technical assistance and capacity building support would also be beneficial, as would APEC collaboration and partnership in undertaking research.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Peru

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

The quality of teachers is directly related to the students' learning achievements. Thus, achieving a true educational reform depends on the ability of the Ministry of Education to attract and retain competent and motivated professionals into the teaching career.

As part of the public policy to increase the value of the teaching career, "Ley de Reforma Magisterial" (a Teacher's Law Reform) has been implemented since 2014. This law's main objective is to attract and retain the best teachers into the public education system in order to raise the economy's education quality. Its implementation has improved teacher selection, installed a system based on performance incentives and raised teachers' salaries.

Through evaluations, the Ministry of Education improves teacher selection. These evaluations ensure that the admission, permanence, promotion and access to positions in the teaching career are based on merit. Since 2015, 8,648 teachers entered the first stage of the teaching career, while 63,958 teachers were promoted to higher stages of the teaching career. Approximately 17,416 teachers were able to enter management positions.

Furthermore, the incentive-based system granted 995 "Vocación de Maestro" scholarships and 2,680 Attraction Bonus for those who decide to enter the public teaching career. Approximately 197,000 teachers (tenured and non-tenured) will receive bonuses due to its school type or location.

Finally, in 2016, the Ministry of Education has increased the teachers' salary as a result of temporary bonuses related to their positions. These increases represent on average a 15% raise in the monthly salary of a teacher. The Ministry of Education also offered teachers the opportunity to participate in contests to access leadership positions within the teaching career.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

The sector's remaining challenges are related to: provide a better access to population with especial needs; reduction of the illiteracy rate and greater coverage of the population who dropped out of school; and increase access to higher education of the population with lower resources.

The educational model for people with disabilities needs to be strengthened in its design in order to guarantee a better access and to be able to measure the quality of the service given. The current characteristics of the model do not seem to reduce the high access gap. By 2015, only 43% of students with special needs between 0 and 20 years old had access to education, 66% did so in inclusive educational institutions, but only 12% of them were assisted by SAANEE (support and advisory services for special educational needs). Among other causes, under coverage may be due to the absence of adequate conditions and proper incentives in schools, as well as the lack of specific strategies targeted at dispersed populations. Regarding the quality, there is not enough teaching and non-teaching staff, and the role they play is not monitored.

On the other hand, regarding Basic Alternative Education, it faces important challenges: to reduce the illiteracy rate and increase the coverage of the population that have abandoned the regular basic education. Between 2012 and 2015, illiteracy rate has remained around 6%, with a higher rate in rural areas. In this matter, the Literacy Program as a strategy of the Ministry of Education faces a number of challenges related to the absence of integral alternatives of quick literacy campaigns, a lack of continuity of studies and the fact that there is no sustainability inside learning circles. What's more, about a million people between 15 and 30 years old have not finished basic education and instead they are working or even worse, they do not work neither study. The main challenges for these programs designed to serve this population, is to present significant benefits and to offer the possibility of certifying in technical skills for employability.

Finally, while there is significant progress in the access to basic education, achieving coverages rates greater than 80% in all three levels, in the case of higher education we still have a big gap to reduce. In 2016, the enrollment rate in higher education of the population between 16 and 22 years old was approximately 22%. Moreover, this gap in higher education is more evident among the population with lower resources. The enrollment rate in higher education in the poorest quintiles, 1 and 2 of the distribution of expenditure, was 11% and 17% respectively; whereas the percentage of enrollment of the population of quintiles 3, 4 and 5 was 19%, 22% and 32% respectively. The greater and better access to higher education is associated with an increase in social mobility and the reduction of social inequalities. However, not all young people that has finished secondary education have access to a high-quality institution and have enough resources to finance studies that can guarantee them a job. Inequalities are also evident in culmination rates, while only 4% of the population between 19 and 30 years old of quintile 1 of the distribution of expenditure are completing higher education studies, the percentage in quintile 5 raises to 30% of students finishing studies. Fellowships represent an alternative for this low-income population, so more than 70% of scholarships awarded by the National Scholarship and Credits Program (PRONABEC) are focused exclusively on them.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Appropriate conditions of infrastructure is the most elemental guarantee that the Ministry of Education must offer to students. Schools do not have minimum conditions of quality to enhance learnings and capabilities. According to the "Plan Nacional de Infraestructura al 2025" (a

National Infrastructure Plan for 2025), the infrastructure gap is over 68,000 million Soles equivalent to 14% of gross domestic product.

Although there have been improvements in learning achievements, there is a hard work to do. Among 2012 and 2016, proportion of students with a satisfactory learning level on reading comprehension increased around 20 percentage points and in mathematics the score doubled in accordance to Students Census Evaluation (ECE) results. Meanwhile, gap in learning achievements within urban and rural areas are wide. In the same period, the percentage of students with satisfactory level in reading comprehension shifted from 37.5% to 55.1% in urban schools and it shifted from 7% to 18.5% for rural schools. Furthermore, percentage of students with satisfactory level in mathematics raised from 15.2% to 29.1% in urban areas and it changed from 4.1% to 12.3% for rural areas.

Despite efforts to close initial education access gap, by 2016, 35% of 3 years old children have not accessed school, meanwhile 95% of 4 and 5 years old children are attending school. It represents an important challenge to figure out the reasons behind this demographic gap.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

As part of the Delivery Unit developed by the Presidency of the Council of Ministers, the Ministry of Education have prioritized objectives related to interventions in rural areas in accordance with:

STRATEGIC OBJECTIVES
SO1: Improve teaching practices on multigrade rural schools
SO2: Improve learning achievements of rural primary schools in reading comprehension
SO3: Improve teaching practices on rural secondary schools
SO4: Improve student learning achievements of rural schools in reading comprehension
SO5: Improve access to basic services on rural schools

These objectives are related to several indicators that allow to measure developments by 2021:

STRATEGIC OBJECTIVES	INDICATOR	SOURCE	BASELINE		GOAL 2021
			DATE	VALUE	VALUE
SO1: Improve teaching practices on multigrade rural schools	Percentage of teachers on single-teacher and multigrade schools at an effective level (level 3 or 4) in critical thinking indicator.	MPE	2016	23%	35%
	Percentage of teachers on single-teacher and multigrade schools at an effective level (level 3 or 4) in classroom involvement indicator.	MPE	2015	22%	40%

SO2: Improve learning achievements of rural primary schools in reading comprehension	Percentage of second grade students on primary rural schools at a progress or effective level in reading comprehension of Students Census Evaluation (ECE).	ECE	2015	80.73%	88%
	Percentage of second grade students on full grade primary rural schools at a progress or effective level in reading comprehension of Students Census Evaluation (ECE).	ECE	2015	89.64	100%
SO3: Improve teaching practices on rural secondary schools	Percentage of secondary school teachers on at an effective level (level 3 or 4) in critical thinking indicator.	MPE	2016	20%	35%
	Percentage of secondary school teachers on at an effective level (level 3 or 4) in classroom involvement indicator.	MPE	2016	17%	35%
SO4: Improve student learning achievements of rural schools in reading comprehension	Percentage of second grade students on secondary schools at a progress or effective level in reading comprehension of Students Census Evaluation (ECE)	ECE	2016	11%	25%
SO5: Improve access to basic services on rural schools	Percentage of primary rural school with electricity, mains water supply and public sewerage system or septic tank.	Semáforo Escuela	2016	48.0%	65%
	Percentage of public primary schools with internet connectivity service (LESI)	Censo Escolar	2016	8.0%	25%
	Percentage of secondary rural schools with electricity, mains water supply and public sewerage system or septic tank.	Semáforo Escuela	2016	56,8%	70%
	Percentage of public secondary schools with internet connectivity service (LESI)	Censo Escolar	2016	24.0%	50%

In order to close the gap of access to pre-school education, the Ministry of Education built suitable infrastructure to attend 3-year-old children and developed a more flexible educational system to care for this target group. The goal to 2021 is attend at 85% of 3-year-old children.

To close Peru's gap in educational infrastructure, the Ministry of Education made rural areas in the rainforest a priority. It plans to gradually provide schools in these areas with equipment, furniture and other educational infrastructure. This will be done through (i) the purchase, delivery and installation of educational modules in 32 schools in the rainforest, (ii) the implementation of 6 Emblematic School projects and (iii) the installation of educational modules which include an alternative access to basic services (Water, sanitation and energy) in 6 schools. Furthermore, the Ministry of Education will continue giving maintenance and replacing furniture in the rest of rural schools.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation in the Asia-Pacific basin, particularly on the sphere of Asia-Pacific Economic Cooperation Forum, could contribute to the development of strategies, policy-building, and capacity-building of officials and teachers in various areas of the educational system, engine for the sustainable development of an economy. This could be done through the modalities of international technical cooperation such as consultancy, training, information exchange, among others, in the form of APEC projects or political dialogues. In addition, the space provides the opportunity for the development and enhance of bilateral relations, as well as the link with various working groups that enable a comprehensive approach to the issues under the scope of the sector.

In view of the above, in regard **special basic education**, the Forum, based on the experience gained from the development of initiatives and projects aimed to the inclusion of people with disabilities in the labor market, could encourage the exchange of information, strategies and lessons learned in relation to development and pedagogical practices for attend students with disabilities in their various manifestations, as well as for the establishment of appropriate conditions and incentives for the generation of inclusive educational institutions and mechanisms for the monitoring of these programs. In addition, it is recognized that, in order to develop this line of work, a closer relationship between the Human Resources Development Working Group and the Group of Friends on Disability should be sought.

With regard to the challenge of **reducing the rate of illiteracy and reintegration into the education system**, regional cooperation could contribute to the acquisition of knowledge on alternative comprehensive programs of rapid literacy, use of various methodologies and strategies for the sustainability of learning circles; recognizing that this problem has a greater presence in rural areas. On the other hand, the exchange of information on strategies and programs for reintegration into the educational system could be sought, particularly in relation to the socialization of the benefits that will be produced by the reintegration and considering the different realities of the population that have not completed their studies and nevertheless they work or do not study or work.

On the **access to higher education of the poorest quintile**, considering that one of the objectives of the Human Resources Development Working Group is the development of knowledge and skills for all, as well as one of the areas prioritized by the same group is the quality and development of tertiary education (technical and vocational and university), the forum could contribute to its development through the exchange of information related to programs that seeks to expand and promote the access to this level of education to this part of the population, as well as through the identification of programs for student mobility that enables the development of competences in a globalized world.

In terms of **urban-rural education gap**, it is worth highlighting the start of negotiations to implement an APEC strategy for the economic development of remote areas, which includes rural areas and the theme of educational development. It is necessary that this initiative allows

the recognition of the geographical differences between the member economies of APEC and therefore the differentiated strategies of attention. In this sense, regional cooperation could allow lessons learned, policies and strategies established to provide adequate attention to these areas, including the use of new technologies and new learning modalities.

Peru maintains a lag of more than a decade in **educational infrastructure**, being a priority today the attention to this problem, which is surely shared with other member economies of the Forum. Thus, regional cooperation could allow the knowledge of policies and strategies developed for the planning, construction, maintenance, repair and adaptation of the educational infrastructure according to the local context and according to quality standards that guarantee the conditions for the development of learning and capacities, and avoiding the affectation to the regular cycle of studies of the students. In addition, the APEC Business Advisory Council could be a liaison space to seek the rapprochement between the public and private sector in this area.

Finally, in relation to the gap in **access to initial education**, the forum could seek to identify those economies that consider initial education as part of their basic education system, seeking the exchange of information and knowledge between them in relation to reasons behind the access of this level and the diversification of models for their attention.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

The Philippines

Best Practices. Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.

1. There have been significant efforts to address the previous investment gaps in human capital of the economy. For instance, the budget share for social services climbed from an average 3.5 percent of GDP in the 1980s to an average of 5.1 percent of GDP beginning 2000s, and earmarked at 8.4 percent of GDP in 2017. The government's commitment to increase spending on major social services such as education, health, and social security and labor welfare, not to mention the vigorous investment on infrastructure build up, further increases the competitiveness and productivity of our present and future workforce¹.
2. In view of the foregoing, structural reforms in human capital development were anchored on strategies that will effectively make a dent on alleviating the conditions of the poor and vulnerable within the medium to long term horizon:
 - a. The **implementation of the Enhanced Basic Education (K to 12) program** is a major structural reform that seeks to enhance the quality of basic education in the Philippines. To date, the program's effectiveness is yet to be evaluated given that the first batch of students will only be graduating in 2018. Nonetheless, it is expected that the additional two years of basic education will result in the improvement of basic competencies of high school graduates to prepare them for the world of work, entrepreneurship, or higher education.
 - b. The ***Pantawid Pamilyang Pilipino Program (Pantawid Pamilya)***, a conditional cash transfer (CCT) program of the government, has been successful in influencing poverty reduction in the economy by improving human capital among the poor population. The program improved investment in education and health-seeking behavior of the poor. The ***Pantawid Pamilya*** provides education and health grants to poor households identified under the National Household Targeting System for Poverty Reduction (NHTS-PR, or ***Listahanan***) having children aged 0-18 years old, or pregnant woman.

The ***Pantawid Pamilyang Pilipino*** Program Impact Evaluation Results (DSWD, World Bank, Australian Aid, ADB; November 2014) show that the program is meeting the objective of increasing poor households' investments in their children, as evidenced by the shift in spending patterns among poor households in ***Pantawid barangays*** (villages). Household beneficiaries spent more on education and medical expenses than those in non-***Pantawid*** barangays. Furthermore, with the expansion of the program, ***Pantawid Pamilya*** became the fourth largest CCT program in the world. Also, it made impressive progress in improving its targeting efficiency and

¹ Report on the ongoing process towards developing the Philippine Labor and Employment Plan (LEP) 2017-2022. Source: http://www.ilo.org/manila/country/WCMS_523524/lang--en/index.htm

substantially reduced its administrative cost of delivering cash transfers to beneficiary families (Kakwani et al. 2016).

Improving the **National Health Insurance Program (NHIP)** coverage can be seen as one of the most effectively implemented structural reforms in human capital development in the economy over the past five years. The NHIP coverage has reached 93 million or 92 percent of the total population in 2015 from 72 percent in 2012. Of these, 61 million are among the vulnerable (informal economy, indigent, sponsored and senior citizens). **The effectiveness of this reform can be primarily attributed to the full subsidy of premium contributions of indigents and senior citizens.**²

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Despite the increasing economic growth in the Philippines, the economy's Gini coefficient³ remains to be one of the highest among its ASEAN Neighbors (Table 1).

Table 1. Gini Coefficient across selected ASEAN Economies

Economy	1990	2000	Latest	Economy	1990	2000	Latest
Cambodia	0.383 (1994)	0.419 (2004)	0.36 (2009)	Philippines	0.438 (1991)	0.461	0.43 (2009)
Indonesia	0.292	0.29 (1999)	0.381 (2011)	Thailand	0.453	0.428	0.394 (2010)
Malaysia	0.477 (1992)	0.379 (2004)	0.462 (2009)	Vietnam	0.357 (1993)	0.376 (2002)	0.356 (2008)

Source: WorldBank

1. The Philippine government has made great strides in **creating more and better employment opportunities for Filipinos**. In fact, the unemployment rate reached its lowest in the past decade in 2016, at 5.5 percent. Despite this achievement, many Filipinos are still forced to look for work elsewhere, and even take on low-skilled jobs. While these low-skilled jobs are a steady source of employment for many Filipinos, OFs employed in these kinds of jobs tend to be vulnerable to abuse and exploitation.

Underemployment rate also remains high. In the Philippines, where the degree of work informality remains high, and where a third of the employed are found in the agriculture sector, underemployment continues to be a more pressing problem.

2. **Inequalities in education attainment** is also a challenge to inclusiveness. A study by Albert et. al (2015), showed that inequalities in education attainment leads to vulnerable

² The passage of the National Health Insurance Act of 2013 (Republic Act 10606 amending Republic Act 7875) provided that all citizens of the Philippines shall be covered by the NHIP and that premium contributions for indigent members shall be fully subsidized by the national government. Likewise, in November 2014, the mandatory NHIP coverage of senior citizens has been passed, also with full subsidy on premium contributions. These policy interventions significantly contributed to the increase in NHIP coverage. The budget for the premium contributions are sourced from the proceeds of Republic Act No. 10351 or commonly known as the Sin Tax Law.

³ The Gini coefficient measures the extent to which income distribution deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of income received against the cumulative number of recipients, starting with the poorest individual. The Gini index measures the area between the Lorenz curve and a hypothetical line of perfect equality, expressed as a percentage of the maximum area under the line. The Gini ranges from zero (which reflects complete equality, i.e., all persons have exactly the same income) to one (which indicates complete inequality, where one person has all the income while all others have none). While a larger Gini coefficient signifies more inequality, the interpretation of the Gini is more straightforward when the figures are compared across time and space.

employment.⁴ Therefore, raising the quality of education and improving opportunities for school participation are important to increase the skills, competencies, and income-earning abilities of individuals.

For instance, inadequate quality of education and training was identified by employers as the most important reason for having skills gaps. Poor quality of training, lack of facilities, curriculum that is not responsive to industry, and weak industry linkage were found to be among the factors that contribute to the skills gaps of the workforce.⁵ In light of the recent efforts on globalization, ASEAN integration and increased mobility among all kinds of workers, especially the professionals, the pressure to improve the quality of education to the level of international comparability is an immediate task.

3. **Infrastructure investments in the economy has lagged behind** the region with insufficient and inefficient transportation hindering movement from homes to jobs and/or schools and vice versa. This was not helped by high cost of electricity and slow internet connectivity. In the next six years, the government has committed to pursue an aggressive infrastructure spending program over the medium term, dubbed Golden Age of Infrastructure. This will be characterized by massive infrastructure spending covering transport (road-based, rail, air, maritime), water resources (supply, sewerage, and sanitation, flood management), energy, ICT, social infrastructure (education facilities and housing) and solid waste.
4. Another challenge in making economic growth more inclusive is the **need to further mainstream the needs of the vulnerable sector in the development planning process and various development programs**. Furthermore, people's exposure to several risks such as life cycle risks, economic risks, environmental risks, and governance and political risks also pose as challenge in the human capital development of the economy.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

1. **Expanding the collaboration between government, academe, and industry, and ensure that the higher and technical education match the needs of industries.** The economy's relatively high underemployment rate suggests that the type of labor the economy produces does not reflect industry demand. With the dynamic labor market, continuous trainings and upgrading of services of training centers, schools, and universities should be a focus area. To address the labor-mismatch problem, better coordination between employers, academia, and government should be achieved so that information on the labor market demand and supply will be facilitated more efficiently.
2. **Addressing youth unemployment.** Policies that address the economy's relatively high youth unemployment (11.6% as of the October 2016) across sectors and geographical location are also of paramount importance. One area where government can focus its intervention is by reducing the number of youth that are not in education and employment, which currently is around 20.5 percent. Key policy areas will revolve around increasing access to education at all levels and improving the quality of education services with an end view of producing high-quality graduates and a highly competitive workforce.

⁴ <http://dirp3.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1501.pdf>

⁵ Gropello, Tan, Tandon (2010). Skills for Labor Market in the Philippines.

3. **Low productivity of the economic sectors.** In 2015, labor productivity of the industry and services sectors grew by 3.6 percent, lower than the medium-term Plan target of 4.1-5.0 percent. Meanwhile, labor productivity in the agriculture, forestry and fishing sector also fell below the Plan target.
4. **Reintegration of returning Overseas Filipinos (OFs) needs to be improved.** Along this line, reintegration initiatives for OFs should be continuously pursued. While there are already a number of programs related to reintegration, there is still a need for improvement in terms of coherence of reintegration programs given various migration-related government agencies handling, as well as effective monitoring and evaluation of programs and projects, and accurate skills matching with domestic opportunities. For reintegration to be successful, it should be intentional, and should be taken into consideration throughout all stages of the migration cycle: from the pre-departure, on-site, and then, the return phase. It should also refer to different reintegration pathways for different types of returning OFs, such as temporary, permanent, irregular and distressed.
5. Some policy gaps include the **need for convergence strategy to improve efficiency of social protection (SP)** programs in the economy. There is also a need to improve programs and services focusing on the vulnerable group --children, women, persons with disabilities (PWDs), Indigenous Peoples (IPs), overseas Filipinos (OFs) and their families, workers in the informal economy, and older persons. There is also a need to improve social safety net mechanisms in times of disasters caused by natural hazards and human-induced shocks, as well as in times of armed conflict.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

The Philippine Development Plan 2017-2022 targets to increase the income earning ability of Filipinos through improvement in employability and productivity, as well as enhancement of labor mobility and income security.

1. The Philippines continues to address unemployment and job skills mismatch in order to produce globally competent workforce through the following interventions⁶:
 - a. Intensifying skills training, upgrading, and retooling programs consistent with global standards;
 - b. Establishing skills training centers or hubs equipped with advanced technology;
 - c. Reviewing education curriculum and harmonizing all enterprise-based training models (i.e., learnership, apprenticeship, and on-the-job-training); and
 - d. Hastening school-to-work transition through implementing the Government Internship Program (GIP) targeting youths who need to have relevant work experience and those who aim to work in the public sector, Special Program for the Employment of Students (SPES) providing short-term work opportunities for poor students, and JobStart Program which facilitates the employment of at-risk youth.

⁶ Source: Philippine Development Plan 2017-2022

2. **Improve employability.** Labor entrants employability will be ensured through four major strategies: (1) Encourage skills development and retooling through continuing education and training; (2) Strengthen employment facilitation services; (3) Strengthen and expand internship, apprenticeship and dual-training programs that facilitate school-to-work transition; and (4) Implement programs that encourage women to participate in the labor market.
3. **Improve productivity.** To improve productivity the following strategies will be implemented: (1) Strengthen the implementation of the two-tiered wage system; (2) Ensure safety and health in the workplace; and nurture workplace harmony.
4. **Enhance Labor mobility and income security.** Labor mobility and income security shall be enhanced through: (1) provision of income support and emergency employment, and (2) enhancement of the efficacy of the minimum wage policy.

Obstacles to achieving the PDP targets and desired outcomes:

1. **Investment in human capital.** With our local labor market being tied to the global labor market, and with the protectionist bent of political economies, the economy's pool of workers must be equipped to meet challenges whether for domestic or overseas employment, that are geared towards specialized fields and high quality work. The government must continue spending on human capital needs to prepare our workers for the ever changing world of present and future work.
2. **Passage of labor bills.** The PDP has also spelled out the priority legislative agenda that are deemed critical for the labor sector (i.e. 100-Day Maternity Leave Act, Productivity Incentive Bill and Unemployment Insurance). The non-passage of these bills would make it difficult to achieve the end-of-goal targets for the sector.
3. **Brain drain contributes to the problem of low level of innovation and of creating a knowledge-based economy in the economy.** This is as potential researchers, scientists, and engineers, who are the key actors for the innovation ecosystem to flourish, prefer to seek employment overseas due to better economic opportunities and potential for advancement. Since knowledge and technology are mostly embodied in human resources, this stresses the urgency to accelerate the development of R&D human resource.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

1. **Regional cooperation and international organizations can play an important role in helping members improve the quality of health and education services to be at par with international and/or regional standards, particularly in terms of facilities, knowledge, and skills requirements.** In the case of the ASEAN for instance, the approval of the Qualifications Reference Framework (QRF) for education will ease learner mobility within the region and pushes member-states to update course programs and address issues related to the implementation of Mutual Recognition Agreements (MRAs).
2. **Key policy issues and challenges facing Asia involve the potential contagion to growing income inequality, with large portions of Asia's population not benefiting from the**

region's overall increased prosperity. For one, the APEC can be the platform to discuss and propose regional frameworks towards greater labor mobility. Significant barriers can be overcome when the member economies engage in social dialogues/fora that mainly aim to identify which areas/policies they need to amend to allow for a more mobile labor market, which is beneficial not just to businesses (as there is greater pool of talent to choose from) but also to workers (better career opportunities and chances to improve living conditions of families, etc).

3. Regional cooperation initiatives under the ASEAN Community Vision 2025, fosters the facilitation of movement of skilled labor in ASEAN. This can provide additional opportunities for skilled OFs, as well as to encourage foreign scientists and experts to share their knowledge and specializations in the economy. Furthermore, ASEAN will consider further improvements to existing MRAs on skilled labor and consider the feasibility of additional MRAs to facilitate the mobility of professionals and skilled labor in the region.⁷ These will be pursued given that the existing MRAs allows for only eight professions, among which, engineers are the only ones allowed to engage in STI activities.
4. Guidance from the ASEAN Declaration of Social Protection (October 2013) is appreciated and has helped in providing direction to improve SP programs and services in the economy.

⁷ ASEAN 2025, Forging Ahead Together

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

The Russian Federation

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Set of reforms that have produced a significant impact on the development of the human capital in Russia are related to the **improvement of higher education**. The main objective of higher education reform was optimization of the existing system of Russian higher education through the elimination of the poorly performing universities that fail to deliver quality education, and establishing new consolidated universities. On top of that, a Competitiveness Enhancement Program (5 top 100) was launched to improve and to enhance international standing of the Russian universities for the duration of time through 2020. The selection process has identified 21 Russian universities that received government support and additional funding.

Besides directly addressing the issue of improvement of a system of higher education, this reform has encouraged attainment of strategic goals. Establishing a network of 'regional flagship universities' gave new opportunities for development of human capital in Russian regions. So far, federal universities became the new centers of regional development that attract the most gifted audience of young people and create environment for the fulfillment of their talents. At the same time, federal universities became the channels of the most important government initiatives and projects that focus on the development of human capital on the regional level.

As can be seen from above, several positive effects are apparent, including the following ones:

- General level of higher education and its quality have been improved;
- Optimization and re-distribution of the educational funding allowed to allocate money for the implementation of the projects that would help develop universities throughout the economy, to modernize their infrastructure, and to adopt advanced technologies and practices;
- The universities that were established became the centers of attraction and development of human resources and human capital;
- Federal universities that were established in remote regions of Russia became areas of technological growth and socio-economic development, and function as talent pipelines for the regional economy;
- Government funding of the internationalization of education sector in the leading universities fosters integration with the global research and academic communities that

offers new opportunities for the development of human capital.

Other important area of structural reforms in the development of human capital in Russia is the **improvement of conditions for women to combine child care charges with the employment**. In this field in Russia corresponding measures aim at achieving the following:

- ensuring the availability of pre-school educational institutions;
- development of children's health care institutions, as well as other organizations that provide services in the field of leisure and development of underage children;
- implementation of flexible forms of employment and distant employment;
- assistance in the employment of women with children under the age of 18, including the promotion of self-employment;
- creation of vocational guidance and vocational training (retraining) for women that are on parental leave with child at the age up to 3 years, as well as informing about the content of such activities and the course of their implementation.

Implementation of these measures in 2013 – 2016 let to achieve following results:

- the employment rate of women aged 20-49, with children under the age of 18, amounted to 76.0% of the total number of women of this age, that exceeds the same indicator for the entire population by 10,0%;
- the unemployment rate among women aged 20-49 with children under the age of 18 decreased by 0.2% compared to 2013, and amounted to 4.7% of the economically active population (in 2013 - 4.9%). At the same time, this indicator is 0.6% below the same indicator for the entire population;
- during the period 2013-2016 63.1 thousand women on maternity leave completed their studies.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

In the field of the improvement of employment conditions for women one of the challenges is that most women, after the expiration of the maternity leave, while getting the job, are facing the problem of the reduction of their professional qualifications and partial loss of professional skills for the performance of the corresponding type of professional activity.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

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Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Among the initiatives aimed at modernization of school education and introduction of elements that focus on creative and innovative development of the state's economy one should mention the establishment of a network of the Quantorium technoparks for school children. Russia is also exploring the opportunities provided by digital education. There is a program "Russian digital school" which is looking for the ways to create free online video-courses for all general subjects of elementary and general education. In the sphere of Higher Education and TVET it is the educational portal Open Education. This web site provides Russian citizens with an opportunity to get proper higher education avoiding geographical and financial limitations. These open online courses will expand the boundaries of education for every student.

In the field of the improvement of labor conditions for women that are on maternity leave, the development of measures in the following areas will be continued:

- to enhance conditions for women to combine responsibilities for the upbringing of children with labor employment;
- to organize vocational training (retraining) for women on parental leave with child up to 3 years.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation and international organizations (such as APEC) can play an important role in addressing possible problems and "gaps" that all economies face today. As perspective directions of such cooperation it is possible to consider:

- growth of energy, infrastructure, transport, information, financial connectivity at the level of economies, regions, cities, companies.
- development of cooperation in the field of APEC education, including the development of internship programs and student exchange, joint strategic research, and, in accordance with the rules of national education systems, information exchange in the field of educational standards of participating economies, qualification requirements and credit systems, and measures for the transition to the practice of mutual recognition, improvement in women's employment
- development of proposals for the implementation of the resolutions adopted earlier (Ministerial meetings in 2004-2016) to develop mutual APEC education competencies, as well as to develop measures to increase the mobility of students, researchers and providers of educational services in the Asia – Pacific Region (APR).

Active participation in different programs implemented and suggested by member economies and exchange of knowledge and experience may give a new impetus for the improvement and development and bring a major positive change to the existing systems.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Singapore

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Singapore's most precious asset is its people. Education is a priority from the perspectives of economic growth and nation building. The education policies of Singapore have evolved over the years in tandem with the economic shifts, while maintaining the focus on developing each child to the best of his / her potential. Singapore's education system is rated at or near the top of global benchmarking studies like the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS).

Singapore's education journey has followed several principles, three of which are highlighted below:

1. **Political Leadership** – The strong relationship between education and economic development has kept investment in education a central priority for Singapore. Political leadership is key in driving improvements to the education system. Singapore's advantages lie in its stable political environment and willingness to take a long-term view of education policy to cater to the aspirations and needs of our students, as well as the needs of Singapore's economy.
2. **High Quality Principals and Teachers** – Singapore has placed a strong focus on talent recruitment and capacity building for both principals and teachers to deliver outcomes and reforms at the school level.
3. **Future Orientation and Adaptability** – In developing Singapore's education system, we learnt best practices around the world. Singapore consistently benchmarks its educational practices against the best in the world. In today's world of rapid changes, it is key for Singapore to strengthen its capacity and inclination to learn and adapt.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

We are in an era of **rapid technological change**. Innovation cycles have shortened. New technologies can supplant entire industries, displacing all their workers, even as they create new

opportunities. Robotics and artificial intelligence programs are displacing routine jobs in manufacturing and services alike.

The recent rise of new businesses like Uber and Grab have made some jobs redundant. These businesses also contribute to the significant increase in the amount of contract, temporary, and freelance work – dubbed as the “**gig economy**”. This has impacts on the skill levels and career development of workers; and may create “precariats”.

Singapore has an **ageing population**. There is thus an urgent need for government and businesses to adapt to an ageing workforce, such as offering opportunities for re-training or re-skilling and rehiring into advisory roles. Our aim is to create a culture of lifelong learning as well as acceptance of mature workers.

Policy Gaps. *Considering your economy’s current situation, what are your economy’s three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

1. **Adapting to technological disruption and economic restructuring** – Cultivate a lifelong learning culture amongst students and workers, to prepare them for rapid changes in the job market. There is also an intensified need to facilitate career conversions and transitions, especially for more vulnerable jobseekers.
2. **Enhancing capacity** – Improve effectiveness of schools and curriculum; as well as equipping workplaces and employers with the capability to tap on a changing workforce, e.g. ageing workforce, changing aspirations
3. **Strengthening partnerships with industry** – Deepen partnerships between higher education institutions and industry to co-develop learning options that are industry relevant and that include exposure to real work environments, as well as strengthening relevant industry players’ (eg. HR professionals) capabilities to enable progressive HR practices / human capital development practices in companies.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

Facilitate career conversions / transitions

Singapore has put in place various initiatives, such as the Adapt and Grow initiative, to provide employment and placement support for jobseekers in finding work. These encompass wage and training subsidies, to encourage employers to hire and train mid-career workers, as well as facilitate re-skilling and career transitions.

Ageing Workforce

Singapore has had a legislated minimum retirement age of 62 since 1999, to protect and enhance employment opportunities for older workers. Additionally, the Retirement & Re-employment Act (RRA) of 2012 requires employers to offer re-employment opportunities to eligible employees aged 62 to 65 (the upper age will increase to 67 from July 2017). Singapore also provides support in the form of wage offsets to encourage employers to hire older workers, including voluntarily re-employing those not covered by the RRA.

To improve the quality of employment for older workers, Singapore provides incentives for employers to redesign jobs and adopt age-friendly workplace practices. Singapore also helps to build capabilities in age management among employers and human resource practitioners. Tripartite partners (industry, unions and government agencies) also undertake public education initiatives to positively shape the perceptions of employers, employees and the public, and to enhance workplace practices to improve the employability and productivity of older workers.

Gig Economy

Singapore is monitoring closely the impact of the gig economy, facilitated by online labour-sharing platforms, on workers' long-term well-being. To better understand the freelancer landscape arising from the rise of the gig economy in Singapore, the Government supplemented its annual comprehensive labour force survey with a more detailed survey on freelancers. The supplementary survey delved into whether these workers freelanced as their primary or secondary job, and whether they freelanced as a preferred choice. This survey will be run annually, and the additional information gathered will help us better understand how to support freelancers, who face unique issues different from those in employer-employee relationships.

Singapore has also formed a Tripartite Workgroup (comprising representatives from the Government, and union and employer groups) to study the issues that freelancers face, and come up with workable solutions for the well-being of the freelancing workforce in our future economy.

Basic Education

Singapore aims to develop students to be more confident and motivated towards learning, as they experience deep personal fulfilment from acquiring and applying new knowledge and practise their social-emotional skills. This is done through encouraging educators to supplement authentic learning with learning experiences beyond the classroom and school, including co-curricular activities and community projects.

In addition, Singapore also provides education and Career Guidance (ECG) Counsellors in schools to help students discover their interests and strengths, thus making better informed education and career choices in school and beyond graduation. Parents are key stakeholders since they are best placed to observe their children's strengths and interests.

Higher Education and Skills

Singapore is establishing a systematic approach for stakeholders from industry, education institutions, and the government, to develop and implement strategies to build deep skills in the workforce, and promote industry recognition in skills underpinned by advances in productivity and innovation. This multi-stakeholder approach is also extended to co-designing curriculum to orient education and training towards the needs of the industry. In addition, Singapore also encourages employer-led training and manpower recruitment and career progression based on skills.

Higher education institutions are encouraged to sustain and expand their links with overseas counterparts, e.g. through student exchange programmes. Singapore also support platforms for institutions to share best practices in leveraging technology to improve teaching and learning outcomes.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

Regional cooperation and international organisations (IOs) such as APEC provide a useful platform where APEC economies can share best practices and useful research/studies. For example, the sharing of best practices is useful as APEC economies can learn from the successful and less-than-successful experiences of other economies.

In addition, APEC can encourage and promote internationalisation in schools and institutes of higher learning through projects and long-term collaborations such as student and teacher exchanges, cultural immersions, technical exchanges and research collaborations.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Chinese Taipei

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Talent cultivation can be seen as one of the most effectively-implemented structural reforms in human capital development in Chinese Taipei in the past 5 years. And, the top 3 reasons for the effectiveness are as follows:

1. Updating the supply and demand of human resources periodically

The National Development Council (NDC) integrates and updates on a regular basis the information related to supply and demand of human resources in terms of long-term and short-term projections, so as to understand the need of human resources for industrial development and provide evidence-based reference to both the government and private sectors.

2. Cultivating, retaining, and attracting talents

Chinese Taipei launched “The Integrated Program to Cultivate, Retain, and Attract Talent (2014-2016)” and took pragmatic measures to cultivate high-quality talents for industry need and build up the human capital, such as promoting diverse and practical programs of advanced study and training, cultivating international talents, and developing occupational competency standards and capability appraisals, etc.

3. Shaping the environment for developing training industry

Chinese Taipei put forward “The Workforce Training Industry Development Program (2014-2016),” by encompassing the three aspects of strengthening supply, developing demand, and shaping the environment for developing training industry by guiding investment of private resources, so as to narrow the gap between school curricula and job markets and enhance professional and interdisciplinary skills of the mid-level workforce.

4. Strengthening the linkages between the industry, academia and research via a cabinet-level mechanism

To reshape the partnership of the industry, academia, and research and to link the innovative R&Ds, talent cultivation, and knowledge transfer mechanism more effectively, the Cabinet has established “the Board of Linking Industry, Academia, and

Research” in July 2016 so as to take charge of policy coordination in this regard.

Challenges to Inclusiveness. *Considering your economy’s current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Two major challenges to inclusiveness are the following:

1. To raise youth employment and improve youth pay

Since 2000, there has been a slowdown in salary growth in Chinese Taipei, especially among the youth. According to statistics of the Directorate General of Budget, Accounting and Statistics (DGBAS), the main monthly income of youth aged 15-19, 20-24 and 25-29 in 2016 was NTD 18,929, NTD 26,252, and NTD 32,605, respectively, which were lower than the overall average of NTD 38,476.

In 2016, the unemployment rate of the 15-24 year olds was 12.12%, which is 3.09 times higher than the overall unemployment rate of 3.92%.

2. To promote employment of the middle-aged and the elderly

The population of Chinese Taipei is aging rapidly, yet the labor force participation rates for the middle-aged and the elderly are trailing behind those members such as Japan, Korea, and Singapore.

Policy Gaps. *Considering your economy’s current situation, what are your economy’s three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Two major policy gaps regarding structural reform in human capital development are the following:

1. Brain drain due to low pay

In Chinese Taipei, the real wage growth is stagnant, and the real wage in 2016 is almost the same as that in 2000. Therefore, many citizens would rather work abroad to get higher pay. According to statistics of the Directorate General of Budget, Accounting and Statistics (DGBAS), the number of citizens working abroad in 2015 were 724,000, with a 62,000 increase from 2009.

2. Gaps between school curricula and job market

In recent years, due to rapid changing population structure and industrial structural transformation, we are faced with such conundrums as the over-supply of mid-level workforce and gaps between school curricula and job market, etc., which indicate the urgency to retrain the mid-level workforce for value-added skills and the opportunity to develop the industry for manpower cultivation. Thus, the successful development of the services industry for talent cultivation will become the vital momentum for Chinese

Taipei's manpower upgrading and industrial transition of the future.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

1. In the face of the challenges of international race for recruiting global talents and domestic brain drain, the Administration is currently promoting the “5+2 Industrial Innovation Program” and formulating the draft “Act for the Recruitment and Employment of Foreign Professional Talent,” in order to strengthen the efforts of attracting and retaining global talents, to boost economic development, and to accelerate industrial transformation. Through well-planned policy measures of assisting industrial upgrading and transformation, providing incentives for global talents, and building a friendly environment, we hope to reduce the brain drain and enhance our national competitiveness.
2. To promote inclusive employment and make all sectors benefit from economic growth, Chinese Taipei has launched the following programs:
 - (a) With the aim of promoting and fully utilizing the middle-aged and elderly workforce, Chinese Taipei is developing a dedicated employment law for the middle-aged and old workers to safeguard their employment rights and to build a friendly workplace.
 - (b) To promote youth employment and improve their work pay, we endeavor to embark on the following strategic policy directions:
 - Building a platform to help youth put into practice their creativity and inspiration to start up their own businesses. For example, the “Business Angel Fund” is to invest NTD 1 billion over the next five years to provide the needed capital for innovators to start businesses and provide entrepreneurs with startup space and consultation service.
 - Developing a plan to provide subsidies for cross-area movement for employment and overseas employment services.
 - Design of diverse, flexible and independent training programs for matching industrial trends and cultivating employment skills.
 - Providing complete career exploration tools and improving professional skills to allow career exploration to take root.
 - Help youth find out about and use government career service resources.
 - (c) To provide comprehensive employment information for women, Chinese Taipei has established more than 300 employment service centers around the island, a Jobs portal website, a year-round 24-hour employment service hotline, and more than 10,000 touchscreen stations in the four major convenient store chains.

Ministry of Labor (MOL) also offers walk-around service, as well as streamlined customized services and related employment promotion measures. These efforts aim to provide a wide-range of choices for diversified employment opportunities, so that female workers can overcome potential hurdles and find suitable careers.

(d) Chinese Taipei has been offering free business start-up training courses and consultation service. In addition, to support women, residents from remote islands, and the middle-aged and old workers in developing micro-enterprises, MOL offers a low-interest start-up loan with a maximum amount of NTD 1 million per person for a term of no more than seven years. The borrower need not provide collateral or a guarantor. Through training courses and consultation service, we hope to empower aspiring business owners and help startups kick start and also benefit the economy.

3. To reduce the gap between school education and employment, Chinese Taipei has launched specific initiatives as follows:

(a) To encourage senior-high students to obtain pragmatic work experiences before further pursuing higher educational achievement.

(b) To establish the evaluation mechanism for recruiting talents with practical job skills and for strengthening curricula of vocational education.

(c) To promote regular industrial study and research for teachers to enhance the linkage with industrial practices and quality education.

(d) To promote on-the-job training programs to enhance students' professional competence and employability.

(e) To encourage teachers to guide interdisciplinary, cross-team, and cross-school collaboration to inspire students for local employment and startups.

4. To tailor occupational training for the need of the industry, Chinese Taipei has implemented several practical programs as follows:

(a) Occupational Standards

Chinese Taipei aims to establish a national occupational standard system by coordinating with concerned authorities and inviting industries to be part of the establishment of the sectoral and industrial occupational standards. Such a system will align training closer to labor market demand, so as to fully optimize the human capital investment and enhance our national competitiveness.

(b) Curriculum Quality Certification

Chinese Taipei develops an occupation-oriented curriculum quality certification. By inviting industry experts to review the curriculum, the certification system ensures the rigor and adequacy of the curriculum design and development, as well as the implementation effectiveness. Through this system, the overall training curriculum can better meet the demand of the industries and labor market and become more effective

in cultivating talent.

(c) Talent Quality Management System

With an objective to systemize vocational training programs, the Talent Quality Management System strives to improve the planning and execution capacity of training agencies and businesses, and to enhance training quality. This is a quality verification tool, which includes five main components of “Plan, Design, Do, Review, and Outcome.” This System ensures the reliability and accuracy of training procedure, while also motivating institutions to hold training activities with stronger capability.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

To address the challenges and policy gaps such as low wage and talents shortage in Chinese Taipei, various initiatives under the APEC Strategy for Strengthening Quality Growth, Framework for Youth Education, Employment and Entrepreneurship, and APEC Education Strategy, etc. could enrich regional cooperation to share good practices and identify cross-cutting policy issues.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Thailand

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

In the past 5 years, the outstanding reform in human capital development in Thailand has been a promotion of Dual Vocational Education and Training (DVET). From 37,694 vocation students attended the DVET of whom worked in 3,826 enterprises in 2012, the numbers rise to 134,597 students and 17,791 enterprises in 2017. This program allows students to obtain knowledge at school and simultaneously practice in the real working field. The program differs from regular internship as it offers a longer range of the practice in factories, training content, an allowance paid to the trainee, a well-designed supervision and cooperation between teachers and supervisors in the factories in order to draft action plans and set goals for students. The feedback is very positive. The companies are satisfied with the DVET students who have competency matched with their expectation, serving one of the purposes of education, which is to prepare students for employment.

There are three main reasons behind this achievement. First factor is the strong support and partnership from the private sector so that the DVET programs have been initiated in many vocational schools. They also help the schools to set quality curriculums and training system both in schools and factories. This increases the quality of students and results in job offers after graduation which is the second factor behind the successful of DVET because students are likely to enroll if they can see potential employment prospects. Lastly, there is a supported organized structure set up as the national committee called the Joint Public-private Committee for the Development of Vocational Workforce, together with 33 sub-committees, classified by industries and areas, to steer and make the cooperation happen.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

Thailand like many other APEC economies is facing increasing challenges in making economic growth more inclusive. First, the progress in technological advancement results in growing demand for higher skilled worker or labor specializing on or with multiple-skills, while currently more than 40% of Thai workforce graduated only primary education or lower and only 22% can achieve higher education.

Second, the growing numbers of the elderly people are expected to result in Thailand becoming an aged society within 5 years. This indicates the less working population which results in fewer

workforces for economy. Also, the poverty rate of elderly people is higher than overall population. So if there is more old aged population, the proportion of the poor inclines to be more. Moreover, the proportion of working-age population has been declining since 2015, which results in labor shortages in a wide range of sectors.

Third, educational inequality is prevalent as there is quite a large gap in access to quality education between the rich and the poor. According to the World Bank, the greatest concentration of functionality illiterate is found in rural villages¹.

Thus, without the good preparation in time for the technological change, the aged society and the educational inequality, inclusive growth tends to be harder to achieve where gain will be transferred to just a small group of people while a large number of people remain vulnerable.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

Reform in human capital development in Thailand during the next era will be ever more challenging especially in terms of how to prepare population for the 21st century and how to close policy gaps. The quality of the Thai education system is one of the major concerns. Although the biggest proportion of the fiscal budget has been allocated to education sector for the past 16 years, the students' learning achievement is still low; one reflection is the unimproved PISA² scores and the fact that they are lower than those of other economies with a comparable level of development. Moreover, the gap between the top tier performers and the lowest tier is quite wide (the difference is around 200 scores). The reasons behind that include the problematic design of both curricula and the teaching system, which mainly focuses on testing students' memory of the content rather than their understanding, which causes a lack of creativity. Furthermore, the distribution and allocation of teaching resources and teachers to remote areas are either lacking or inadequate.

The second gap is a slow increase in labor productivity. Labor productivity of the Thai workforce during 2001-2014 only increased by an average of 2.9 percent per year, a rate which is considerably lower than that of neighboring economies, including Malaysia, which has double the productivity of Thailand, and Singapore, which is 5 times higher. Last but not least is insufficient investment in early childhood education which is critical for child's brain to further develop. As a result, 27.5 percent of young children demonstrate delayed development. These 3 main issues could have seen to be the most important challenges that impede progress in structural reform in human capital development in Thailand.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

¹ World Bank (2017). Getting Back on Track: Reviving Growth and Securing Prosperity for All.

² Programme for International Student Assessment

In the medium to long term, the aforementioned challenges have been recognized in the national plans. The government has a draft for the 20 year national plan which will be cascaded to 5-year National Economic and Social Development Plans (NESDP). The vision of the current 12th NESDP which will use for the next 5 years (2017-2021) is to equip Thai population with the right mindset, right skills and the right wellness for the 21st century. The core focus areas are education, training system, human resources for the targeted future industries preparation, health promotion, moral development, and aged friendly society development. Many measures are introduced such as promoting STEM³ and art education, revamping teachers' evaluation system, partnering vocational schools with private sectors, advocating health preventive measures, supporting family to be one of the focal point to cultivate quality human resource.

Furthermore, the quality of public services will be the main challenge, particularly education and public health. Closing the social protection gaps by providing additional social welfare to targeted groups and increasing access to public services should be continued from the previous Plan, along with an emphasis on raising labor skills and pursuing labor policy that enhance labor productivity and income. Measures should also be linked to increasing the productivity of targeted groups such as the 40 percent of population with lowest income, the disadvantaged, women and elderly persons. In the short run, ministries as implementing agencies have adopted the framework of the 5 year plan and translate into their own action plans. For example, the Ministry of Labor is planning to upgrade potential training centers to be centers for high skills especially in the area of the S-curve industries aligning with the national agenda. The Ministry of Education is expanding STEM classes and revising the appraisal system for teachers. The government also aims to provide assistance in terms of support for SMEs, community- and social enterprises, development of microfinance and of financial access for job-creation, and promotion of access to high-quality inputs at fair prices.

To achieve these goals, the plan must be implemented effectively. This needs clarity of the contents, a sense of awareness and understanding of the plan's objectives, a sense of ownership, and the shared responsibilities of every sector in society. Additionally, it requires a systematic and integrated manner of bridging the goals and actions, which are also quite challenging to attain.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

It has always been APEC's top priority to accelerate the human capital development as can be seen in 2015, APEC prioritizes human capital development and equitable growth for all members of society. APEC's Human Resource Development Working Group (HRDWG) has played a vital role in helping the region in terms of building human capacity and ensuring that all people and communities in the region can participate in the global economy. Many initiatives on education, labor and capacity building to develop human resources have been implemented under this working group. For example, APEC vocational training program helped uplifting the status of individuals by acquiring new skills and enabling them to participate in the fast growing

³ STEM stands for Science, Technology, Engineering and Mathematics.

economy. This highlights the benefits of APEC's efforts to improve workforce capacity in the Asia-Pacific.

APEC provide an excellent platform for member economies to engage with other international organizations, for example, International Labor Organization (ILO), Organization for Economic Cooperation and Development (OECD), Association of Pacific Rim Universities (APRU), Pacific Economic Cooperation Council (PECC), Pacific Islands Forum (PIF) Secretariat, Southeast Asian Minister of Education Organization (SEAMEO), UNESCO, UNICEF, and World Bank. In other words, APEC member economies could help each other in bridging the gaps and challenges with respect to structural reform in human capital development through participating in these capacity building programs as well as other training program organized by APEC and its associated organizations. They play a huge role in addressing challenges in reform in human capital development through providing assistance that could help developing economies to enhance and align competencies to the needs of individuals, societies and economies as well as accelerate innovation for education in order to increase employability. Through capacity building and training programs organized by various working groups and committees under APEC, member economies could learn from each other's experiences which in turn give them the opportunity to apply best practices to their reform process in order to achieve the desired goals.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

United States of America

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

Occupational Safety Standards

In addition to their social costs, workplace injuries and illnesses have a major impact on an employer's bottom line. It has been estimated that employers pay almost \$1 billion per week for direct workers' compensation costs alone. The costs of workplace injuries and illnesses include direct and indirect costs. Direct costs include workers' compensation payments, medical expenses, and costs for legal services. Examples of indirect costs include training replacement employees, accident investigation and implementation of corrective measures, lost productivity, repairs of damaged equipment and property, and costs associated with lower employee morale and absenteeism. <https://www.osha.gov/dcsp/products/topics/businesscase/costs.html>

The Department of Labor's Occupational Safety and Health Administration (OSHA) was created by Congress in 1970 to assure safe and healthful conditions for working men and women by setting and enforcing standards and providing training, outreach, education and compliance assistance. In more than four decades, OSHA and state partners, coupled with the efforts of employers, safety and health professionals, unions and advocates, have had a dramatic effect on workplace safety. Worker deaths in America are down-on average, from about 38 worker deaths a day in 1970 to 13 a day in 2015. Worker injuries and illnesses are down-from 10.9 incidents per 100 workers in 1972 to 3.0 per 100 in 2015.

OSHA structural reform initiatives have been effective through a multifaceted approach to ensure that employees and employers know their rights and obligations to ensure a safe work place:

- **Investigations:** The OSHA is committed to strong, fair and effective enforcement of safety and health requirements in the workplace. OSHA inspectors, called compliance safety and health officers, are experienced, well-trained industrial hygienists and safety professionals whose goal is to assure compliance with OSHA requirements and help employers and workers reduce on-the-job hazards and prevent injuries, illnesses and deaths in the workplace.
- **Small Business Consultations:** OSHA's On-site Consultation Program offers free and

confidential safety and occupational health advice to small and medium-sized businesses in all states, with priority given to high-hazard worksites. On-site Consultation services are separate from enforcement and do not result in penalties or citations. Consultants from state agencies or universities work with employers to identify workplace hazards, provide advice on compliance with OSHA standards, and assist in establishing injury and illness prevention programs.

<https://www.osha.gov/dcsp/smallbusiness/consult.html>

- **Cooperative programs with business, labor, and other organizations:** OSHA offers cooperative programs under which businesses, labor groups, and other organizations can work cooperatively with the Agency to help prevent fatalities, injuries, and illnesses in the workplace.

https://www.osha.gov/dcsp/compliance_assistance/index_programs.html

Improving Higher Education Access and Affordability

In today's world, one important key to success is to gain the postsecondary education and credentials that careers and employers require. Millions of students and families want to make this investment in their future, but the college marketplace and student loan financing can be confusing.

Over the past two decades, the amount of total outstanding student debt has risen to over \$1.2 trillion and the average amount of student debt has risen to nearly \$30,000. Given the importance of encouraging postsecondary access, the United States has made several strides to improve the affordability of earning a postsecondary credential. The most significant are the commitment to maintaining the bedrock Federal postsecondary grant program, the Pell Grant and the availability of loan repayment programs based on a borrower's monthly discretionary income, rather than a flat amount (commonly referred to as "income-driven repayment programs").

Pell Grants: Although with rising tuition costs, the percentage of postsecondary educational expenses financed through grants has decreased, Pell Grants remain an important source of financial assistance, especially for lower income families. For the 2015-2016 award year, \$28.2 billion in Pell Grant funds were distributed to 7.6 million recipients. In an effort to facilitate students' matriculation in their respective programs, Congress authorized, as part of the Consolidated Appropriations Act of 2017, payment of up to 150 percent of a student's Scheduled Pell Grant Award during a single award year. Beginning with the 2017-2018 award year (July 1, 2017), this measure allows eligible students to receive Pell Grant funds on what is essentially a year-round basis. Previously Pell Grant recipients were limited to no more than 100 percent of a Scheduled Award.

Typically, a student takes coursework during the fall and spring semesters of an academic year, receiving (assuming eligibility for a Pell Grant) 50 percent of a Scheduled Award in each of those terms. In prior years, such a student, having used 100 percent of his or her Scheduled Award would, since most institutions attach summer to the previous academic year, receive no Pell Grant funding for the summer term. Many needy students seeking to matriculate at a

faster pace by taking coursework during summer sessions therefore found their options limited. This issue has been resolved under the new statute, which makes available an additional 50 percent of a Scheduled Award (up to a maximum of 150 percent for the award year). A Pell-eligible student may now, with some stipulations, receive full payments of a Pell grant award for attendance in the fall, spring and summer terms of the same academic year.

Income Driven Repayment (IDR) Plans: Recognizing that rising levels of student indebtedness were making it increasingly difficult for low- and middle-income Americans to complete a postsecondary credential, Congress created the first widely-available IDR plan as part of the College Cost Reduction and Access Act of 2007 (CCRAA).

An IDR plan sets a borrower's monthly student loan payment at an amount that is intended to be affordable based on the borrower's income and family size. For example, the original Income-Based Repayment (IBR) program created by Congress in the CCRAA sets a borrower's monthly payment amount to 15 percent of his or her discretionary income (defined as 150 percent of the poverty guideline for the borrower's family size and State).

IDR plans have numerous advantages for borrowers that ease the financial burden of attaining a postsecondary credential. For unemployed or low-income borrowers, IDR plans allow for temporary low- or even zero-dollar payments, enabling borrowers to avoid unaffordable monthly payments or possible loan default while they find employment or a higher-paying job. IDR plans can also provide for a repayment schedule more consistent with a borrower's earnings potential: as a borrower persists in the workforce and their income increases, their repayment amount also increases, while remaining an affordable percentage of that increased income. Finally, IDR plans provide protections for a borrower whose income is insufficient to pay a large loan balance even over an extended period. For a borrower that has repaid their loan for multiple decades but has not yet repaid the loan in full, IDR plans allow for the forgiveness of the remaining balance.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

There are 1.3 million fewer manufacturing jobs in the United States than there were at the beginning of the Great Recession in December 2007, while the share of Americans in the work force plummeted to lows not seen since the 1970s, the national debt doubled, and the middle class got smaller. Some of the most important challenges in making economic growth more inclusive include:

Addressing the Skills Gap: In the United States, we have about six million job openings and seven million unemployed workers. Businesses note that they are eager to fill their vacancies, but they cannot find workers with the right skills. One of our most critical challenges is giving our workers the skills they need to participate in an ever-changing, fast-moving economy. This calls for demand-driven education that gives men and women the technical skills they need now – and also prepares them to be agile, responsive life-long learners who can acquire new skills in our ever-changing workplace.

The Department of Labor is working to align job training with the skills the market demands of its workers, especially as advancing technology changes the types of jobs available in our economy. The Department of Labor, along with state and local governments, industry, and educational institutions, partner together to have substantial positive impact on American workers. This includes programs and initiatives under the Workforce Innovation and Opportunity Act (WIOA), including Jobs Corps and apprenticeship programs.

Gender: Women make up nearly half of the United States' workforce, and mothers provide at least half their families' income in over 40 percent of American households with children under age 18. Over the last decade, technological breakthroughs have fundamentally transformed the U.S. economy. But all too often, women do not fully experience these benefits. Women are invaluable players in the economy, and investing in women is absolutely critical for growing the economy.

In the United States, women are more likely than men to live in poverty and they face significant barriers to economic security and stability, including: occupational segregation; underrepresentation in higher-level positions; disproportionate concentration in low-wage occupations; unequal pay; inadequate workplace flexibility; and pregnancy and sex discrimination. Women, on average, continue to earn less than men, and women are significantly more likely than men to earn minimum wage or less for the work they do.. The gender wage gap results in significant lost wages that add up over women's lifetimes and even affect women's retirement security.

Women-owned businesses also cluster in sectors with lower profit margins and sometimes lack access to adequate capital. This can limit women's ability to invest in the high-technology systems that are transforming the way we do business.

Additionally, women are underrepresented in employment in the science, technology, engineering and mathematics ("STEM") fields, comprising only 26 percent of those employed in computer or mathematics occupations.

- In recent years, the USDOL has awarded small grants to study the feasibility of developing and expanding statewide paid family and medical leave programs. <https://www.dol.gov/wb/media/paidleavegrants.htm>
- Through DOL's Women in Apprenticeship in Non-Traditional Occupations (WANTO) grant program, community-based organizations receive funding to provide employers with technical assistance in recruiting and retaining women in apprenticeship and non-traditional occupations, thereby helping women enter into and succeed in higher-wage, high-growth occupations in industries such as IT, energy, construction, and advanced manufacturing.
- The U.S. Government Executive Orders 11246 and 13665 prohibit federal contractors from discriminating against employees and applicants because of their race, color, religion, sex, sexual orientation, gender identity, or national origin, or because they have discussed, disclosed, or inquired about compensation. Discrimination can occur in many aspects of employment, including recruitment, hiring, job assignments, training,

benefits, promotion, pay, discipline, or other workplace conditions, such as a hostile or harassing work environment.

<https://www.dol.gov/ofccp/SexDiscrimination.html>

<https://www.dol.gov/ofccp/PayTransparency.html>

Youth: Nearly all young people—98.6 percent—hold at least one job between the ages of 18 and 25. The average young person holds 7.2 jobs between ages 18 and 28. Some work part-time or summers only, while others see full-time permanent employment as their path to economic independence. Employment can be beneficial for youth by teaching responsibility, organization, and time management and helping to establish good work habits, experience, and financial stability. There are many advantages to working during high school, especially for low-income youth, including higher employment rates and wages in later teen years and lower probabilities of dropping out of high school. Knowing how to find and keep a job is not only critical for admission to the adult world but also is an important skill for which there is little in the way of formal, structured preparation.

To address the challenges that youth face, the Department of Labor provides funding through the public workforce system under WIOA focused on connecting disadvantaged youth to education and career pathways.

In addition, the Department of Labor implements Job Corps, the largest and most comprehensive, mostly residential, education and job training program for at-risk youth, ages 16 through 24. Job Corps combines classroom, practical, and work-based learning experiences to prepare youth for stable, long-term, high-paying jobs. <https://www.dol.gov/general/topic/training/jobcorps>

YouthBuild is a community-based alternative education program that provides job training and educational opportunities for at-risk youth ages 16-24. Youth learn construction skills while constructing or rehabilitating affordable housing for low-income or homeless families in their own neighborhoods. Youth split their time between the construction site and the classroom, where they earn their high school diploma or equivalency degree, learn to be community leaders, and prepare for college and other postsecondary training opportunities. The Department of Labor administers the program.

https://www.doleta.gov/Youth_services/YouthBuild.cfm

While Pell Grants and IDR plans have significantly eased the financial burden on students seeking postsecondary education, significant challenges continue to exist in encouraging postsecondary affordability and ensuring taxpayers' investment in student assistance programs is well-spent. The United States is taking concrete steps to address these challenges, as described below.

Pell Grants: Programmatic changes alone will not solve the problem of college affordability, but year-round Pell represents a pragmatic effort on the part of Congress and the Department of Education to remove what historically has been a structural impediment to students who want to pursue an accelerated path to graduation, and reap the economic benefits of entering the workforce or starting advanced degrees sooner rather than later. Many institutions have

designed programs that facilitate acceleration through the use of compressed schedules and/or enhanced course offerings during what have traditionally been periods of nonattendance for most students, such as summer.

In the past, the lack of access to Pell Grant funding outside of traditional fall and spring terms prevented many students from taking advantage of the schedule innovations offered by their respective institutions. Year-round Pell removes this impediment. While tuition at some institutions exceeds even the highest Pell Grant award, students at lower cost institutions such as community colleges are often able to cover most of their expenses with funding from Pell Grants. Facilitating these motivated students, many of whom come from economically challenged backgrounds, in achieving the goal of not only graduating but doing so ahead of schedule, can only benefit both those students and American society as a whole.

IDR Plans: In recent years, IDR plans have grown in popularity. However, choosing and enrolling in the right repayment plan is overly complicated by the numerous repayment plans authorized and required by law to be offered to student borrowers. For example, there are currently *five* different major IDR plans widely available to borrowers, all with different eligibility criteria, repayment amounts, and forgiveness terms. There is widespread agreement that the number of IDR plans is confusing and difficult to explain, often discouraging enrollment in any IDR plan and ultimately harming the most vulnerable borrowers.

In the Fiscal Year 2018 Budget, the Administration proposed to greatly simplify student loan repayment by consolidating five IDR plans into a single plan to make choosing a repayment plan less complex. This new IDR plan would set a borrower's monthly payment at 12.5 percent of discretionary income, while eliminating loopholes to ensure high balance borrowers make payments commensurate with their income. For borrowers with undergraduate student debt only, any balance remaining after 15 years of repayment would be forgiven. For borrowers with any graduate debt, any balance remaining after 30 years of repayment would be forgiven.

To support this expedited pathway to debt relief for undergraduate borrowers, the Administration has also proposed efficiencies designed to generate savings that help put the Nation on a more sustainable fiscal path, saving taxpayers \$143 billion over the next decade while insulating current borrowers from changes to their loan programs.

By taking these and other steps, the Administration aims to help more students and families afford the quality college education that can turn their dreams into action and their talents into success.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

With the new administration still developing its policies, we are unable to identify policy gaps at this time.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

With the new administration still developing its policies, we are unable to identify policy gaps at this time.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

With the new administration still developing its policies, we are unable to identify policy gaps at this time.

**AEPR 2017 Individual Economy Report (IER) Questionnaire:
Structural Reform and Human Capital Development**

Viet Nam

Best Practices. *Among your economy's structural reforms in human capital development in the past 5 years (2012-2017), which one do you think has been implemented most effectively? Please identify the top 3 reasons for the effectiveness of this structural reform that could be relevant for other economies.*

In the past five years, Viet Nam has made an array of efforts in radically transforming education, health and social protection so as to achieve significant progress in human capital development. Viet Nam has for decades adopted several goals related to human development, most noticeably the Millennium Development Goals (till 2015) and the Sustainable Development Goals (since 2015). In line with this, the key structural reforms at aggregate level include: (i) trade and investment liberalization which broadened economic opportunities for Viet Nameese enterprises and people; (ii) market-oriented reforms which enhanced freedom and ease of doing businesses; (iii) increasing mobility of labours across sectors and geographical regions; and (iv) promoting access to economic opportunities for women, youth, people in the mountainous and remote areas, and disabled people. Specific reforms in Viet Nam's health and education comprised of: (i) gradual relaxation of entry for private sector (including foreign suppliers); (ii) market-oriented reforms of training curricula; and (iii) State-budget-funded trainings and retrainings for labours to meet practical demand.

The above streams of reforms have brought about major changes. Economic growth has also been inclusive, as accompanied by high elasticity of employment. Productive sectors gradually accounted for an increasing share in employment structure. The share of agricultural employment decreased rapidly (from nearly 80 per cent during the late 1980s down to just 41.5 per cent in 2016), with the labor force moving to industrial and service sectors. Within the agricultural sector, positive structural change, with increased shares for more productive and higher income sub-sectors were recorded. The share of formal employment also increased, from 28.2 per cent in 2007 to 33.7 per cent in 2014. As a result, Viet Nam successfully reduced its relative gap in labor productivity. In 2016, the average labor productivity attained USD 3,853/person, with a growth rate of 5.3 per cent relative to 2015.

Effectiveness of structural reforms on human capital development was attributed to (i) long-term engagement in structural reforms and human capital development; (ii) alignment of structural reforms with supportive measures to ensure participation and shared benefits of various labour groups; and (iii) the wide range of cooperation activities to support human capital development in Viet Nam.

Challenges to Inclusiveness. *Considering your economy's current situation, what are the three most important challenges your economy faces in making economic growth more inclusive? Please explain.*

First, Viet Nam is encountering the risk of economic growth slow-down, while the contribution of domestic companies to growth has been slowly improved. Viet Nam has experienced lower economic growth in recent years (average of 5.9% per annum in 2011-2015; 6.2% in 2016) as compared to previous period (average of 7.0% per annum in 2006-2010, and 7.5% in 2001-2005), partly due to difficulties in external economic environment (such as the global financial crisis and slow economic recovery in various part of the world). Economic growth and export growth have also become more dependent upon FDI sector, while this sector is weak linked with domestic enterprises. Within the domestic economy, linkages between the formal and the informal sectors had lagged behind in the growth process, hence further aggravating the problems of a multi-speed economy.

Second, the education and health systems are struggling in response to the requirements of the new stage of development. The scale and quality of higher education and vocational training in Viet Nam still lag behind practical need. Enhancing autonomy of public service providers – which are dominant in these subsectors – has been emphasized, though Viet Nam is still in search for the optimal extent of such autonomy. Liberalizing prices of education and health services presents another challenge, as Viet Nam strives to balance the need to maintain reasonably low inflation and inducement of quality improvement in such subsectors. Maintaining equality in access to proper health and education services is no easy task, due to the uneven quality of staff in these subsectors, being more modest at the grassroots/rural areas and being more competent in central/urban areas.

Third, Viet Nam's fiscal space has become considerably narrowed. In the absence of adequate revenues to compensate for reduction of import tariff, Viet Nam's budget became more constrained. Prolonged budget deficit and sizeable public debts undermined capacity of the Government to make investment in hard and soft infrastructures, including such sectors as health and education. Financing retrainings for labours – especially those in remote, rural or mountainous areas - to adapt to new labour market condition, similar, is under difficulty.

Policy Gaps. *Considering your economy's current situation, what are your economy's three biggest policy gaps with respect to structural reform in human capital development? Please explain.*

- Increasing economic efficiency by accelerating domestic reforms in tandem with efforts to achieve greater regional and international integration through (i) the implementation of public administration reforms; (ii) accelerate structural reforms in the fields of public investment, finance and banking, State-owned enterprises and agriculture; (iii) Improving business environment on a competitive and equitable basis; and (iv) improvement of the efficiency and flexibility of the labor market

- Enhance connectivity and technological readiness as well as nurturing innovation through promoting industrial and service clustering, agricultural product chains and increasing the size of enterprises; public investments in key infrastructure, thus supporting connectivity and technological readiness; Reshaping the capital market to develop long-term financing and venture capital that supports R & D and innovation
- Renovation of the social protection system to secure greater levels of coverage and efficiency, thereby helping people and the economy to better cope with external shocks, improve their capacities to make investments for the future and seize productive employment opportunities.

Action Plans. *Considering the challenges and policy gaps you have previously identified, what are the short- and medium-term plans of your economy to address these challenges and gaps? What obstacles do you foresee, if any?*

- Short-term: Improving business environment and enhancing national competitiveness by attaining the average of ASEAN-4 (Malaysia, Thailand, Indonesia and the Philippines) in terms of Doing Business criteria in 2017 and reaching average scores of ASEAN-4 in terms of competitiveness by 2020.
- Medium-term: Restructuring the economy (during 2016-2020) in linkages with transformation of economic growth model, increasing the quality of growth, improving labor productivity and competitiveness of the economy. The restructuring of the economy bases on major tasks of (i) strong development of domestic private sector, and adequate attraction of FDI (ii) restructuring state sector, including SOEs, public investment, state budget and public services sector; (iii) restructuring of financial market with focus on credit institutions and securities market; (iv) modernization of planning the restructure of economic sectors and zones associated with increasing productivity, quality and efficiency; and (v) restructuring of major production markets such as land market, labor market and technological and scientific market.

Role of Regional Cooperation. *What role can regional cooperation and international organizations such as APEC play in addressing the challenges and policy gaps you have previously identified?*

- Continue working on policy framework on enhancing the labor mobility in the region;
- Enhancing cooperation of project/initiatives on human resource development directed towards vulnerable and disadvantaged groups in society, such as persons with disabilities, women and youth, as well as mobile workers;
- Trainings and workshops related to initiatives and experiences in the adaption of education and health system in response to new requirements;

- Technical assistance on renovation of social protection system and increasing efficiency of the economy.



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