Society at a Glance
Asia/Pacific 2019

Chapter 2

Extending coverage and the future of social protection in Asia and the Pacific

Introduction

Economic growth has been substantial over the past decade, and while it has contributed to an overall reduction in absolute poverty, wide income disparities persist in Asia and the Pacific.

At present social protection systems in Asia and the Pacific remain underdeveloped: at 7% of GDP, public social spending in Asia and the Pacific is low. Moreover, most social spending is through social insurance schemes that cover (former) workers with a formal employment contract who generally belong to middle and higher-income groups. The share of informal employment in total employment varies across countries, but almost 70% of workers in the Asia/Pacific region are in informal employment, often the self-employed without employees (own-account workers) and/or contributory family workers, who often work long hours for little money and without or only limited access to social protection.

Changes in automation and the rise of the "platform economy" are widely recognised as posing challenges to labour markets across the OECD as well as Asia and the Pacific. However, developments in technology and automation also provide new opportunities for the extension of social protection as they can help overcome some of the administrative barriers to the receipt of benefit, payment of taxes and social security contributions. Advances in technology have at least the potential to contribute to a reduction in informality and the improvement of benefit delivery.

More should be done to support the poor, which requires scaling up investment in social-support systems and better targeting of supports. This chapter includes a selection of reform efforts across the region to increase coverage social protection. But given the low level of spending and taxation overall, widening the tax base and greater progressivity in taxation and financing of social insurance schemes would be important contributory factors to a greater effectiveness of national policies to combat poverty.

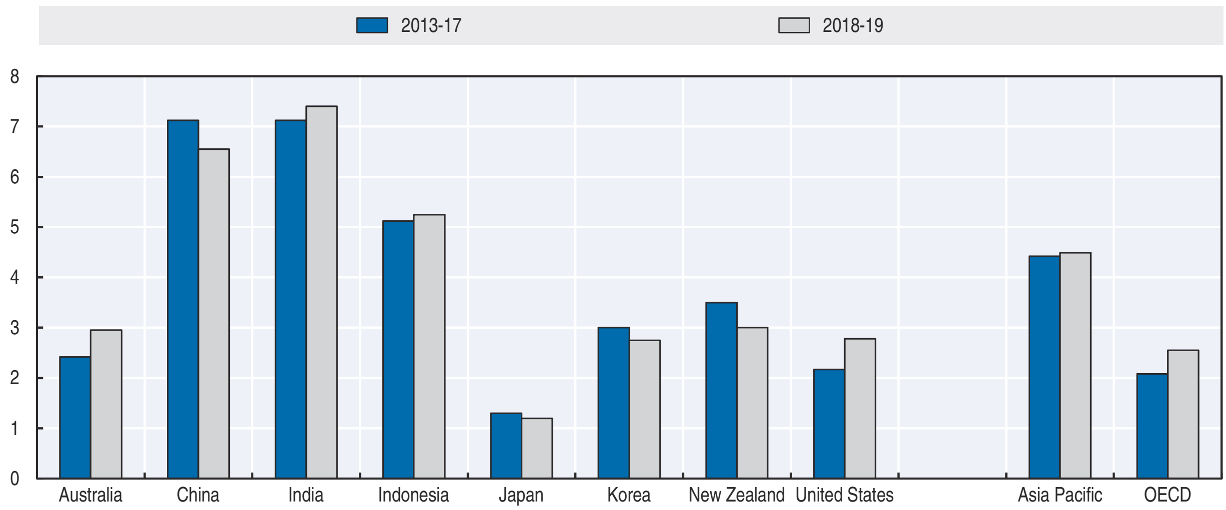
Strong growth, but social expenditure is low in Asia/Pacific

Economies in Asia/Pacific often enjoy steady economic and employment growth

Economies in the Asia/Pacific region continue to grow faster than OECD economies. Over the 2013-2017 period, countries in the region experienced strong economic growth at 4.4% on average in real terms): a growth rate that is twice as high as across the OECD on average (OECD, 2018[1]). Among OECD countries in the region over the same period, growth was most pronounced in New Zealand (3.5%), while Korea (3%) and Australia (2.5%) also performed above the OECD average: at just over 1% per annum over the past five years economic growth in Japan was sluggish (Figure 2.1). By contrast, economic powerhouses such as China (7.1%), India (7.1%) and Indonesia (5.1%) continued to enjoy strong growth trends since 2013. Smaller and often relatively poor economies, such as Bangladesh, Bhutan, Cambodia, Lao PDR, Myanmar, the Philippines, Tajikistan and Viet Nam also experienced annual growth rates of around 6-7% over the 2013-17 period (ADB, 2018[2]).

Figure 2.1. **Strong growth is expected to continue in Asia/Pacific**

Real GDP growth, per cent per year



Source: ADB (2018), Asian Development Outlook 2018: How Technology Affects Jobs, *www.adb.org/publications/asian-development-outlook-2018-how-technology-affects-jobs*; OECD (2018), *OECD Economic Outlook*, Volume 2018, Issue 1, *https://dx.doi.org/10.1787/eco_outlook-v2018-1-en*; and, OECD (2018), *OECD Interim Economic Outlook*, September, *www.oecd.org/economy/outlook/economic-outlook/*.

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The outlook for 2018 and 2019 for many economies in the region is to continue to enjoy steady growth (Figure 2.1). The growth rate in China is anticipated to slow down as it is in Central Asia and the pacific (ADB, 2018[2]) Growth in India is projected to stay strong, and Southeast Asia is projected to maintain its growth momentum, averaging 5.2% per year from 2018 to 2022 (OECD, 2018[3]). However, there are risks, including an escalation of trade tensions which might significantly affect the economic expansion, while persistently high oil-prices will increase inflationary pressures and could aggravate external imbalances in many countries (OECD, 2018[1]). Also, the increase of wage costs over the past decade in China and elsewhere in Asia has eroded the previous benefits of “offshoring”, and in some cases have contributed to s shift back of production to the country of origin, as, for example, Philips Electronics that shifted production back from China to the Netherlands in 2012 (World Bank Group, 2018[4]).

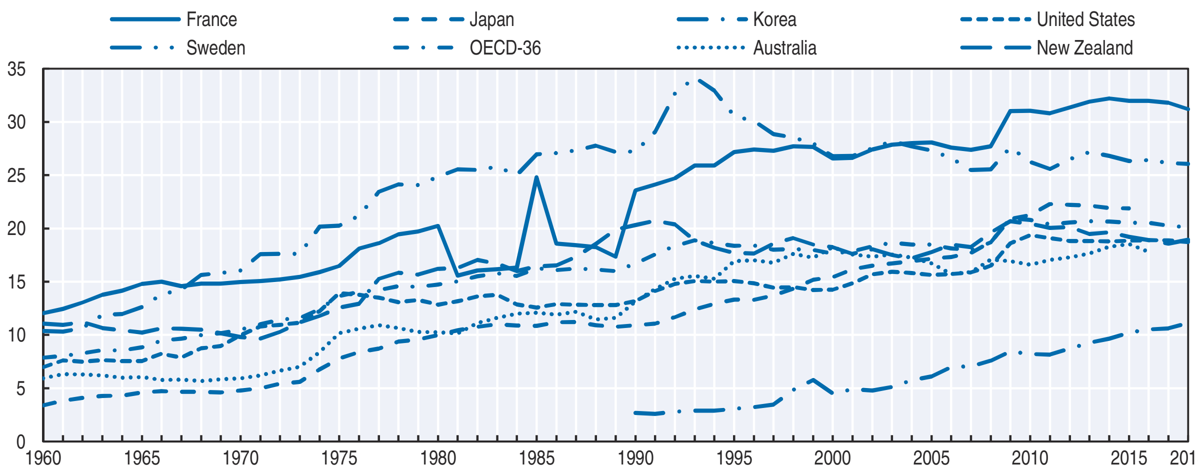
Notwithstanding concerns about income inequality and future employment growth, strong past economic growth in the Asia/Pacific region, has contributed to important progress in reducing extreme poverty. Over the past decade: the share of people living in extreme poverty – with incomes below USD 1.9 per day, has almost halved to 6.0% across the Asia/Pacific region, see *Indicator 5.1. Poverty* (throughout the chapter there are references to Indicators that are included in Chapters 3, 4, 5, 6 and 7 of this volume). The reduction in extreme poverty over the past 10 years was most pronounced in China, Indonesia, India, Timor-Leste and Viet Nam.

Social expenditure and tax revenue are relatively low

Welfare states in OECD countries have developed over many years. Back in 1960, public social expenditure ranged from 5-10% of GDP in Japan and the United States, and 10-15% of GDP in Australia, France, Sweden, and New Zealand (Figure 2.2). Over the years, public social expenditure (Box 2.1) has ratcheted up with crises in the early 1970s, 1980s, early 1990s and most recently the Great Recession that blew up in 2007/8. In addition to economic crisis

Figure 2.2. **Welfare states in OECD countries took a long time to develop**

Trends in public social protection spending as a percent of GDP, 1960-2018



Source: OECD (2019), Social Expenditure Database (SOCX), *www.oecd.org/social/expenditure.htm*.

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Box 2.1. **Defining social expenditure**

The OECD defines social expenditures as "the provision by public and private institutions of benefits to, and financial contributions targeted at, households and individuals in order to provide support during circumstances which adversely affect their welfare, provided that the provision of the benefits and financial contributions constitutes neither a direct payment for a particular good or service nor an individual contract or transfer." Transfers between households – albeit of a social nature, are not: this is important as in the Asia/Pacific region support between family members (often living together) is a central part of the social fabric (Adema, Fron and Ladaique, 2011[5]).

Broadly speaking there are two main criteria that have to be simultaneously satisfied for a programme to be classified as social: the programme has to redistribute resources across people and has to serve a social purpose (OECD, 2019[6]). The inter-personal redistribution of resources is often brought about by compulsory participation or by public financing of social benefits. The extent of redistribution can also be determined by programme characteristics as benefit caps, increased contribution rates for workers with higher earnings, and is most evident when support is provided for free, e.g. free medical aid or the provision of income support under minimum living standard schemes such as in China, Japan or Korea.

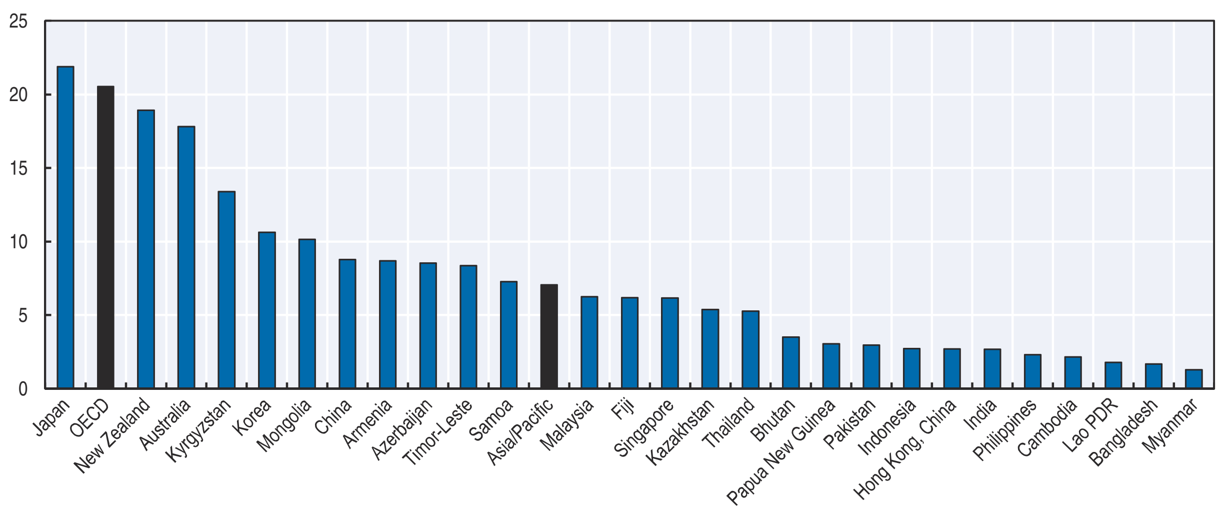
There are different categorizations of social support (OECD, 2019[6]; ADB, 2018[2]; Eurostat, 2016[7]; ILO, 2005[8]), but benefits with a social purpose generally include: support for the elderly and pensions for-old-age and/or survivors; incapacity related benefits, including invalidity benefits, benefits accruing from occupational injury and accident legislation, and employee sickness payments; family benefits – child allowances, childcare support, and income support during maternity leave; housing allowances; unemployment benefits and active labour market policies – e.g. training, direct job creation, and start-up incentives; and, health supports as in- and out-patient care, medical goods, and health prevention.

inducing increased spending on unemployment compensation, social assistance and active labour market policies as well as a decline in GDP (the denominator in the spending-to-GDP ratios), population ageing in OECD countries is driving up social spending through increased health and pension expenditures. With population ageing and increased spending on health and pension insurance benefits social spending in Japan has increased to 21.9% of GDP. Population ageing is less pronounced in Australia and New Zealand while income-testing in social protection systems of these countries has limited growth of social spending over the years: in both countries public social spending was just below 20% of GDP in 2017. In Korea, a much younger welfare state, public social spending amounted to just over 10% in 2015, just like in many western-European OECD countries back in the mid-1960s. However, population ageing will unfold much more rapidly in Korea, and Korean policymakers will have less time to put adequate social protection provisions in place than their western-European peers had (*see Indicator 3.5, Old-age support ratio*).

Compared with on average 20% across the OECD in 2016/8, public social expenditure across Asia and the /Pacific is relatively low at 7% of GDP in 2015 (Figure 2.3). Public social spending in Australia, Japan and New Zealand is at least around 20% of GDP, and around 10% in Korea and Mongolia. In Bangladesh, Bhutan, Cambodia, Hong Kong, China, India, Indonesia, Lao PDR, Myanmar, Pakistan, Papua New Guinea and the Philippines, public social spending amounted to less than half the average for the Asia/Pacific region.

Figure 2.3. **Public social spending in Asia/Pacific is about one-third of the OECD average**

Public social expenditure as a percent of GDP, 2017 or most recent year



Note: See notes and sources to *Indicator Public Social Expenditure*.

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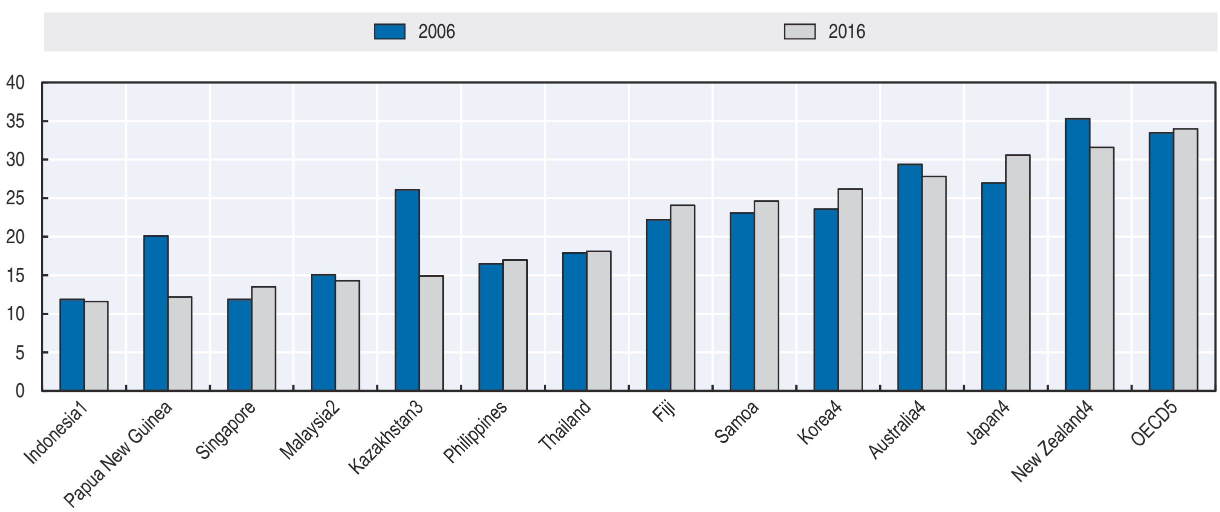
Most Asia/Pacific countries have introduced statutory social expenditure programmes towards employment injuries, disability and support in old-age. However, financial support in the case of sickness, maternity and unemployment sometimes critically depends on employer financing, and about one-third of the countries in the region do not have statutory provisions towards family allowances (ILO, 2017[9]). In practice, however, social protection systems provide limited supports, as coverage is often limited to only a small portion of workers and the (working-age) population (see below). The relatively low level of public social spending implies that a large number of people in many countries are vulnerable to contingencies that adversely affect their welfare such as poverty, illness, disability and unemployment receive little or no support.

The differences in social spending levels between Asian countries and OECD countries are mirrored in differences in tax revenues (Figure 2.4 and (OECD, 2018[10]; OECD, 2018[11]). In 2016, the tax-to-GDP ratio across the OECD on average was 34%, and in many European countries the tax intake was considerably higher: tax-to-GDP ratios were highest in France and Denmark at almost 46% (OECD, 2018[10]). Tax-to-GDP ratios among OECD countries in the Asia/Pacific region remain below the OECD average even though having increased by 3 to 4 percentage points since 2010 in Australia, Japan, Korea and New Zealand (OECD, 2018[11]). Tax-to-GDP ratios in Indonesia, Kazakhstan, Malaysia, Papua New Guinea, the Philippines, Singapore and Thailand are lower still and ranged from 11.6 to 18.1% of GDP in 2016; the recent decline in Kazakhstan was largely due to a fall in oil tax revenue (OECD, 2018[11]).

Figure 2.4. **Tax revenue in Asian countries is well below the OECD average**

Tax revenue to GDP ratios, 2005 and 2016



1. Data on social security contributions are not available but they are thought to be negligible as they relate only to the "Asuransi Kesehatan" – a health insurance programme for employees in for-profit state-owned enterprises.
2. Figures do not include tax revenues from local governments (Quit Rent and Assessment tax), which are unavailable.
3. The data are estimated for 2016 (social security contributions).
4. Data for Australia, Japan, Korea, New Zealand and the OECD average are taken from the OECD Revenue Statistics 2018.
5. Represents an unweighted average for the 36 OECD countries in the OECD Revenue Statistics 2018.

Source: OECD (2018), Revenue Statistics 2018, *https://doi.org/10.1787/rev_stats-2018-en* and OECD (2018), Revenue Statistics in Asian and Pacific Economies, *https://dx.doi.org/10.1787/9789264308091-en*.

StatLink *http://dx.doi.org/10.1787/888933899641*

The relatively low tax-to-GDP levels suggest that there is space to increase tax receipt to enhance social expenditure. ADB (2016[12]) suggests that in the majority of Asian countries a basic level of social protection can be provided without introducing high levels of taxation, and that major gaps in social protection can be closed by increased spending worth 2 to 3% of GDP. Re-allocation of resources within national budgets, increasing taxation and improving tax collection can all contribute to creating the necessary budget space for improved social spending. Recent developments in information and communication technology (ICT), both for electronic filing and for payment of taxes, have presented many opportunities for revenue bodies to increase government revenue, improve efficiency, and enhance the quality of services delivered to taxpayers. At the same time, ICT-development has enabled an overall reduction in taxpayer compliance costs and government administration costs, while delivering improved enforcement (OECD, 2017[13]).

Income inequality is high in the Asia/Pacific region compared with the OECD and income disparities seem widest in Malaysia and China (*see Indicator 5.2, Income Inequality*). As both public social spending and tax revenue are relatively low, the overall redistribution of resources though tax/benefit systems in Asia and the Pacific is limited compared to OECD countries (Adema, Fron and Ladaique, 2014[14]). Tax bases are small and the nature of tax systems is limited in progressivity.

Moreover, while contributory social insurance programmes account for the bulk of public social spending in many counties in Asia and the Pacific (ADB, forthcoming[15]), their coverage, by definition, is limited to formal workers: i.e. those who are comparatively well-off. However, even among formal workers in the Asia/Pacific region, the effectiveness of social insurance can be limited due to the combination of patchy coverage, the lack of unemployment insurance, and/or relatively low payment rates. As a result, the impact of social insurance benefits on the income distribution tends to be regressive whereas such benefits typically have a strong inequality-reducing effect in more advanced economies (Adema, Fron and Ladaique, 2014[14]). In all, social protection systems in Asia and the Pacific need to be further developed to effectively combat poverty in the region.

Technological progress will continue to contribute to growth but there are displacement risks for manual and routine jobs

Economic growth has contributed to strong job creation in Asia: ADB (2018[2]) asserts that over the past 25 years, the region has created 30 million jobs annually in industry and services. Investment in education, infrastructure, international trade, foreign investment, a favourable business climate and macroeconomic stability have all contributed to the adoption of new technology and the associated job creation. Technological progress has improved productivity in low-productivity sectors (subsistence agriculture), and also contributed to an overall shift away from agriculture to service sectors with higher productivity and pay. Some countries in east Asia, such as Viet Nam or Lao PDR, have managed to upgrade their human capital, expand the manufacturing sector and have young skilled workers apply new technology to upgrade manufacturing production and generate future growth on that basis (World Bank Group, 2018[4]).[1]

In other countries future employment growth will have to rely predominantly on service sector development and the wider application of ICT in it. Many Asian economies are well placed as, for example, internet use, a prerequisite for participation in much of the activity in the digital economy, has increased across the region in recent years, and in China, the Philippines, Thailand and Viet Nam about 40 to 50% of the population are regular internet users and this is close to 80% in Malaysia and Singapore (OECD, 2018[3]). However, while the manufacturing sector involves a considerable share of low- and medium skilled jobs, service sector employment growth in ICT or finance is likely to concern more highly skilled workers and the propensity to generate rapid employment growth in this sector is constrained by incomes (and demand) in the rest of the economy (Rodrik, 2015[16]).

With the creation of more productive jobs, average earnings have increased. However, there are large differences in access to technology across countries and the many small informal firms in Asia and the Pacific often do not have the capacity and incentives to invest in technology. In the Asia/Pacific region the informal sector is large and the majority of workers remain in low-paid low-productivity jobs. This curtails the prospects for such rapid service-led growth and also raises important concerns around widening earnings and income inequality and increased labour market polarisation, as for example, in India (OECD, 2017[17]).

In both Asia/Pacific countries as well as the OECD, there are growing concerns about the possible negative employment effects of continued digitalisation (ADB, 2018[2]; OECD, 2018[18]), and its implications for social protection (OECD, 2018[19]). Technological progress can displace some manual and routine jobs, but often automation concerns some tasks of a job, in which case automation can change the nature of a job and the tasks involved, and "free up" the worker to focus on more complex or new tasks involved in the job. Nevertheless, the dynamism embedded in rapidly evolving technological progress raises concerns that further automation could cause widespread job loss, reduce wage growth, curtail social protection coverage and widen income inequality.

A strategy for quality jobs and inclusive growth

Globalisation, digitalisation, demographic shifts and climate change are transforming the way economies work, providing new opportunities for growth, but also raising the risk of deeper inequalities if the gains from growth are not evenly shared among people, firms and regions. The focus on stronger productivity growth is necessary, but not sufficient to sustain economic growth over the long-term unless policy design effectively addresses equity issues. The opportunities for growth could be better leveraged through policies that promote broad-based growth that is beneficial to all (Pathways for Prosperity Commission, 2018[20]). Such policies include increased investment in education, in particular investing in skills of children from low-income families, promoting lifelong learning, including reskilling and upskilling displaced workers, and active labour market programmes to match unemployed workers with new job opportunities.

A well-functioning labour market is key to achieving inclusive growth and rising levels of well-being (OECD, 2018[21]). It promotes prosperity by matching workers to productive and rewarding jobs and the functioning of the labour market facilitating the adoption of new technologies and new ways of organising work by providing workers with opportunities to acquire and update relevant skills in a rapidly changing economic environment. A well-functioning labour market further ensures that increased prosperity involves increased well-being and job quality, in both monetary and non-monetary terms, by creating good job opportunities for all, including through facilitating the transition of workers and (small, often one-person) enterprises from the informal to the formal economy, ensuring that productivity gains are transmitted to wages whilst protecting and improving the living standards of the most vulnerable.

Job quality and labour market inclusiveness are an integral part of new OECD Jobs Strategy (Box 2.2). Job quality is an inherently multi-dimensional concept that refers to those job characteristics that contribute to the well-being of workers and the OECD Job Quality Framework is structured around three dimensions that are closely related to people's employment situation: earnings quality, labour market security and quality of the working environment (OECD, 2014[22]). OECD (2015[23]) further developed this framework and adapted it to emerging economies in view of the prevailing data limitations and their labour market characteristics, in particular, the weaknesses of their social protections (inadequacy of benefits and/or limited coverage of social insurance schemes), and the high incidences of informality and working poverty.

Box 2.2. **The new OECD Jobs Strategy (2018)**

The new OECD Jobs Strategy launched in 2018 (OECD, 2018[24]) affirms the links between strong and sustained economic growth and the quantity of jobs, but also recognizes job quality as well as labour market inclusiveness as central policy priorities. The key policy recommendations of the new OECD Jobs strategy are organised around three broad principles: i) Promoting an environment in which high-quality jobs can flourish; ii) Preventing labour market exclusion and protecting individuals against labour market risks; and, iii) Preparing for future opportunities and challenges in a rapidly changing economy and labour market.

In comparison to previous strategies the framework of the new OECD Jobs Strategy has been broadened and now encompasses three over-arching policy objectives that together define good labour market performance and are each necessary for inclusive growth and well-being more generally (OECD, 2018[24]):

- *More and better jobs*. This captures the labour market situation in terms of both the quantity of jobs (e.g. unemployment, labour force participation, working time) as well the quality of jobs by taking account of the three dimensions of the OECD Job Quality Framework that are key for worker's well-being: i) earnings; ii) labour market security; and iii) the quality of the work environment (OECD, 2014[22]). OECD (2015[23]) extended this framework for emerging economies by using the incidence of very long working hours as a proxy measure of the quality of the work environment.
- *Labour market inclusiveness*. This dimension focuses on the distribution of opportunities and outcomes across individuals. Ensuring equal opportunities to succeed in the labour market for all reduces the risk that people are excluded from fully participating in the labour market and fall into poverty. Labour market inclusiveness therefore relates to both dynamic aspects of inequality such as the prospects for social mobility and career advancement, as well as static ones such as the distribution of individual earnings and household incomes, and differences in access to quality jobs between different socio-economic groups.
- *Adaptability and resilience*. This dimension relates to the effectiveness with which individuals, institutions and societies absorb, adapt to, and make the most out of shocks and new opportunities, which arise as a result of economic crises and megatrends (e.g. technological change, including automation and digitalisation, climate and demographic change and globalisation).

Outcomes along these dimensions of labour market performance do not depend on labour market policies alone but also on a range of other policies, including sound macroeconomic and financial policies, productivity-enhancing policies in product, financial, and housing markets, tax policies, entrepreneurship policies, regional policies, as well as the protection of property rights and the rule of law. In turn, labour market policies do not only affect labour market performance but also other dimensions of economic performance, well-being and social progress. Thus, a whole-of-government approach is needed to ensure the effective implementation of any jobs strategy that is an integral part of a policy framework for inclusive growth (OECD, 2018[21]).

Informal employment is widespread in Asia and the Pacific

High and persistent informal employment (Box 2.3) is a major policy concern, which complicates the challenge of promoting strong productivity growth and more inclusive labour markets (OECD, 2018[25]). Informality is associated with low productivity as many informal firms are over-represented in the bottom part of the productivity distribution. Informal workers are often not covered by social protection arrangements or collective labour agreements, and with limited mobility between formal and informal sectors, informality is often tantamount to persistent lack of labour market inclusiveness. As informal firms and workers often pay no or limited taxes, the size of the informal sector limits the tax base and the redistributive nature of national tax/benefit systems.

Box 2.3. **Informal employment, the informal sector and the informal economy**

The term ***informal economy*** encompasses all economic activities by workers or economic units that are – in law or practice – not covered or insufficiently covered by formal arrangements. The definition of ***informal employment*** is based on jobs as observation units and the characteristics of the employment relationship and status in employment. Employees are considered to have informal jobs if their employment relationship is not subject to labour regulation, taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, paid annual or sick leave, etc.). Informality in employment-relationships can concern non-declaration or partial declaration of jobs and earnings (to remain below certain thresholds over which (more) income tax and social security contributions are due), and frequently concerns casual jobs of short-duration, and jobs that involve limited hours per day. However, it also concerns many full-time workers and informal own-account workers who are sub-contracted by companies rather than being hired on basis of a formal employment contract.

All contributing (unpaid) family workers are considered to have informal jobs. Activities of persons engaged in the production of goods for own final use are also considered informal jobs.

Employers and own-account workers are considered to have an informal job when their company (production unit) is informal. ***Informal sector enterprises*** are private unincorporated enterprises which are not registered under specific forms of national legislation, such as factories or commercial acts, tax or social security laws, professional groups' regulatory acts, or similar acts, laws or regulations established by national legislative bodies and/or whose employees are not registered. The ***informal sector*** concerns the outputs of goods and services generated by unregistered and unincorporated enterprises or own-account workers that do not have a complete set of accounts and/or are not registered under national legislation.

For a discussion of methodological concepts and measurement issues regarding informal employment, see (Chen, 2012[26]; Hussmanns, 2004[27]; OECD, 2015[23]; ILO, 2018[28]).

There are strong links between informality and poverty (Jütting and De Laiglesia, 2009[29]). Workers in informal employment are more likely to be poor than workers in formal employment, either because they earn lower incomes or because, they share their income with a high number of economic dependents within the household (ILO, 2016[30]). Informality and poverty have important consequences which include the limited capacity of individuals or low-profit firms to adopt a long-term perspective rather than short-term coping strategies, to raise their productivity and to afford the cost of formalisation.

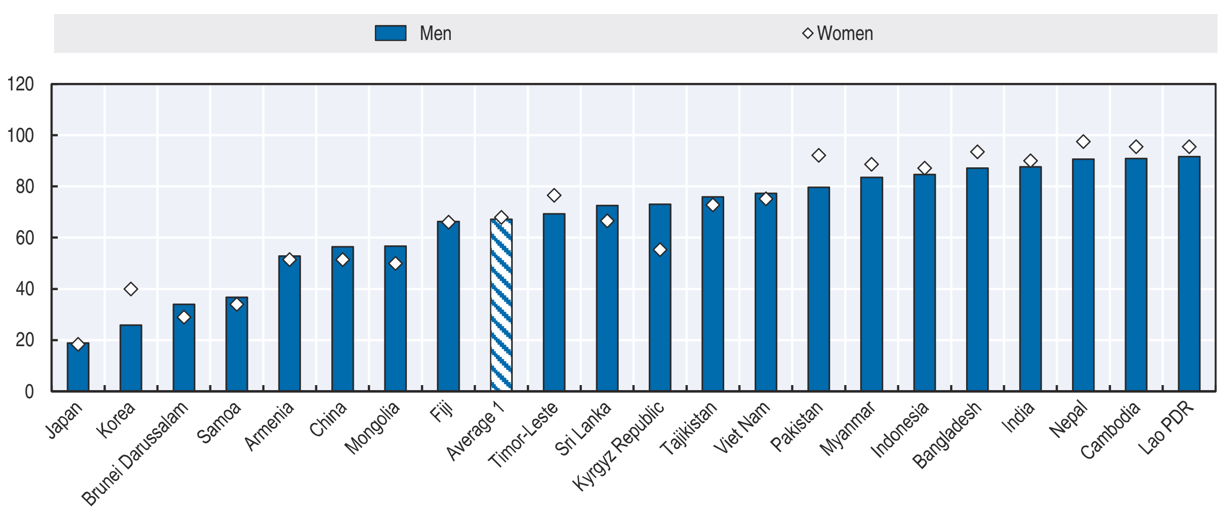
Although difficult to measure by its very nature, the share of informal employment – those workers who are not covered by social protection through their employment contract, is high in emerging economies (OECD, 2018[25]) and is estimated to concern about

60% of total employment around the world (ILO, 2018[28]). It is deemed most common in Africa at over 85% of all employment, but informal employment is widespread in the Asian Pacific region too: the share of informal employment in total employment is high at 68.2% while for employment in the non-agricultural sector this is somewhat lower at 59.2% (ILO, 2018[28]). In other words, the majority of the workers in Asia and the Pacific are in jobs that do not entitle them to social and health supports.

The prevalence of informal employment varies across countries and economic sectors. To start with the latter, almost all workers in the agricultural sector in the Asia/Pacific region are considered to be in informal employment, compared to almost 70% of employment in industry and just over 50% of service sector employment (ILO, 2018[28]). The size of the (subsistence) agricultural sector is one of the key drivers of variation in the prevalence of informal employment across countries. This helps to explain why the share of informal employment in employment is below 20% in an industrialised OECD such a Japan, less than one-third in Brunei Darussalam and Korea, two/thirds or more in relative poor counties (*see Indicator 3.1, GDP per capita)* and over 90% of all employment in Cambodia, Lao PDR and Nepal (Figure 2.5).

Figure 2.5. **Informal employment concerns over two/thirds of workers in Asia and the Pacific**

The share of informal employment in total employment, 2016 or latest available



1. Average for the countries included in the Figure.

Note: Data are for 2016 for Indonesia and Fiji; 2015 for Armenia, Mongolia, Myanmar, Pakistan and Viet Nam; 2014 for Brunei Darussalam and Korea; 2013 for Bangladesh, China, the Kyrgyz Republic, Sri Lanka and Timor-Leste; 2012 for Cambodia, India and Samoa; 2010 for Japan and Lao PDR; 2009 for Tajikistan and 2008 for Nepal, see Annex A2 of ILO (2018).

Source: ILO (2018), *Women and men in the informal economy: a statistical picture – third edition*, and the Employment and Unemployment Survey for Fiji.

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Overall, the incidence of informal employment does not vary much by gender. Female (67.3%) and male workers (68.0%) appear to be equally likely to engage in informal employment across Asia and the Pacific (Figure 2.5). However, an important difference is that women are much more likely than men to be in the most vulnerable segments of the informal economy as domestic workers, as home-based workers in the lower tiers of global supply chains or as contributing family workers, usually considered as unpaid. Women are also more likely to be in employment for shorter hours. The incidence of short-working hours across Asia and the Pacific region is 10% on average, as 7.5% of male and 14.8% of female informal workers work less than 20 hours per week. All these factors contribute to persistent gender pay gaps.

More than 85% of jobs in rural areas belong to informal employment while less than half of jobs (47.4%) in urban areas are in informal employment. The high exposure of agricultural workers to informality only partially explains the urban/rural differences in informality rates. Other factors include: the institutional and economic environment with limited access to public infrastructure and services; personal and employment characteristics of the rural population (lower levels of education and under-representation of skilled jobs); and traditions and rural actors' perception of laws and regulations and social norms (Jonasson, 2012[31]; Weng, 2015[32]).

Who are the informal workers and what are their employment conditions?

Informal workers in each country have diverse personal profiles of age, sex, education levels, working hours and employment status. Understanding who informal workers are, and where they work is important to address issues around the lack of social protection for informal workers.

There seems to be an u-curve relationship between age and informality. Youth (age 15-24) and elderly workers (over 65 years of age) are most likely to be in informal employment: in both age groups, around 85% of workers are in informal employment across the Asia/Pacific region. By comparison, about 60% of workers aged 35-54 are in informal employment (ILO, 2018[28]).

In most Asian countries, the informal economy absorbs a large share of low-skilled workers. About half of the workers in informal employment Asia and the Pacific have either no education or primary schooling at best, and this concerns two out of three informal workers in Cambodia, India, Indonesia, Myanmar, Nepal, Pakistan and Timor-Leste (ILO, 2018[28]).

There is hardly any difference in the likelihood of engaging in informal employment between those workers who have completed primary education and those who have not. However, the likelihood to be in informal employment decreases sharply – from 94.9% to 58.9% and 30.7%, for workers who have completed secondary and tertiary education, respectively. The effect of education on the probability of being in informal employment is largest for countries in East Asia for which data is available (China, Japan, Korea and Mongolia): 90% of workers without primary education are in informal employment while this is just over 10% for workers with tertiary educational attainment (ILO, 2018[28]).

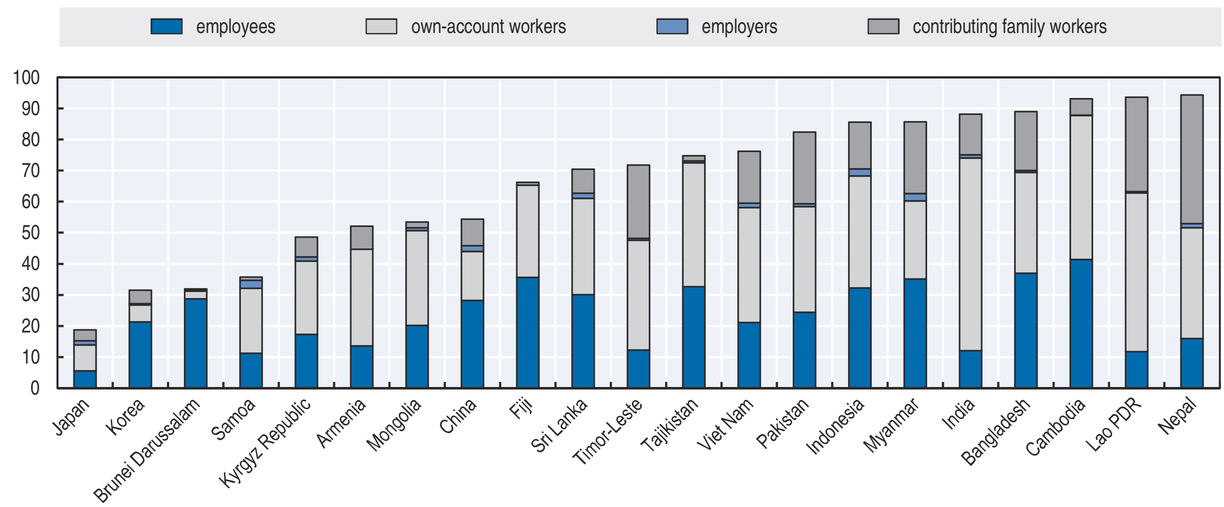
The low level of educational attainment among informal workers in Asia and the Pacific is a key reason of the low productivity of the informal sector. Other factors include the lack of access to markets and key public goods and services, or limited access to credit for self-employed workers.

Most of the workers in informal employment in the region (65 to 90%) are either employees[2] or own-account workers, while the proportion of contributory family workers among informal workers tends to be largest (20 to 40%) among relatively poor countries (Figure 2.6). More than 85% of all workers in informal employment in Asia and the Pacific work in informal sector enterprises, and almost 75% of total informal employment is concentrated in small economic units of less than 10 workers (Bonnet, 2019[33]). However, there are many workers in *informal* employment in the *formal* sector, as for example in

Bangladesh, Brunei Darussalam, Cambodia, Fiji, India, Lao PDR, Timor Leste and Viet Nam (Figure 2.7). In fact, 20% of the workers who are informally employed in the formal sector are in enterprises of 50 workers and over (Bonnet, 2019[33]).

Figure 2.6. **Most informal workers are employees or own-account workers with contributory family workers most prevalent in the poorest countries**

Informal employment as share of total employment by employment status, 2016 or the latest available



Source: ILO (2018), *Women and men in the informal economy: a statistical picture – third edition.*

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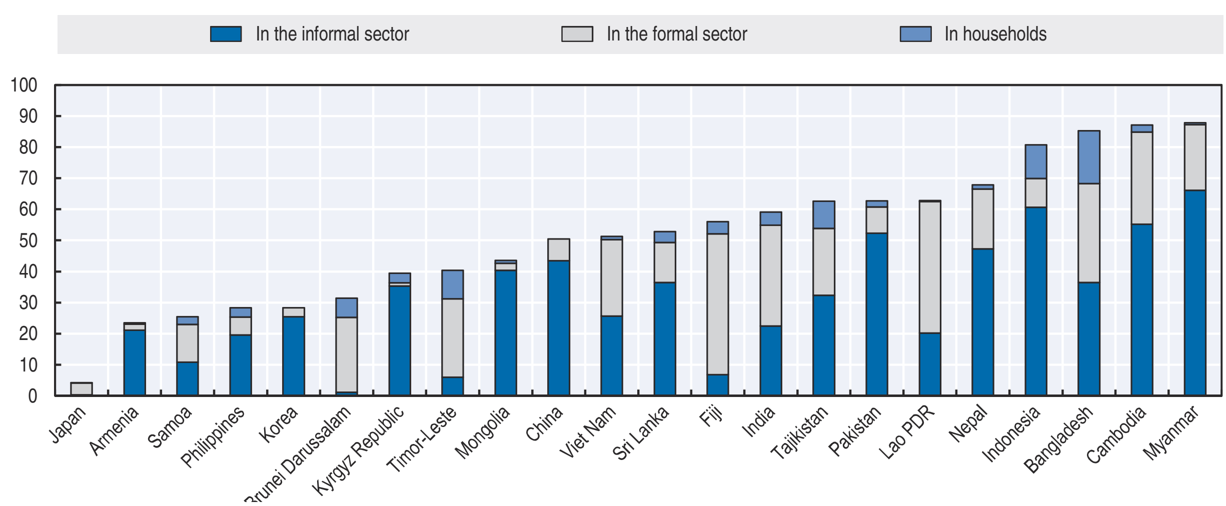
Figure 2.7. **In many Asian countries, the majority of employees is in the informal sector**

Share and composition of informal wage employment (% employees), or the latest available



Source: ILO (2018), *Women and men in the informal economy: a statistical picture – third edition.*

StatLink http://dx.doi.org/10.1787/888933899698

These labour market outcomes have implications for the policy approach towards increasing social protection coverage among informal workers. For own account workers and self-employed workers in the informal sector increasing social protection coverage is linked to formalization of the economic unit in which they are working. This may be promoted for example by financial incentives for registration and straightforward procedures for contributions and benefit delivery by digital means (OECD, 2012). The formalization of informal sector enterprises is also a pre-condition for the formalization of the employment relationship of employees working in these sector enterprises. The formal recognition of the employment relationships as well as improved monitoring and enforcement of labour standards could contribute to increasing social protection coverage among informal employees working in the formal sector and among own-account workers whose employment relationship is disguised through sub-contracting by formal sector enterprises (Bonnet, 2019).

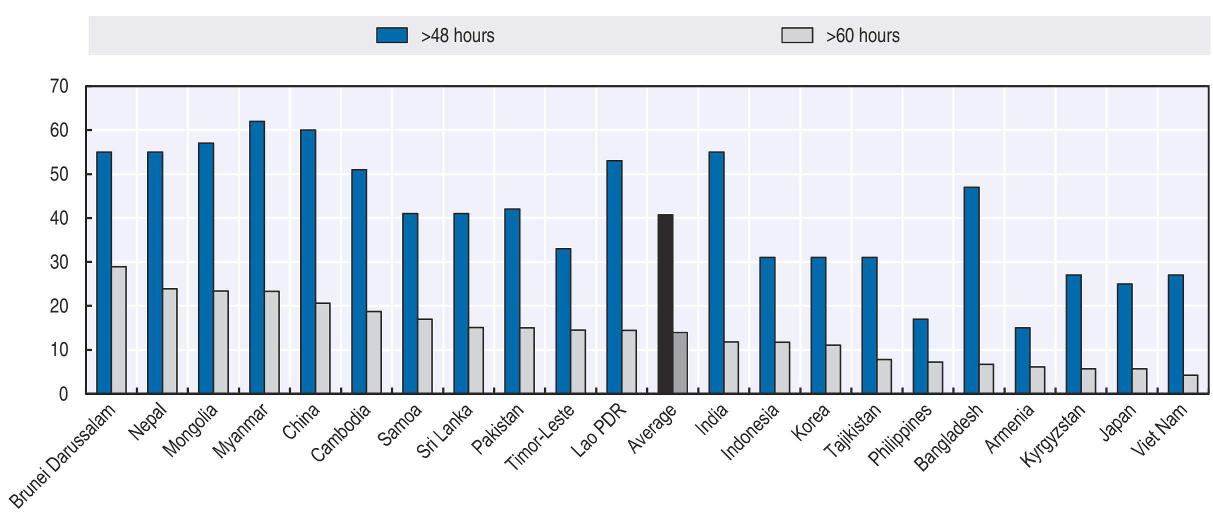
The quality of informal employment

In addition to not being covered by social protection arrangements, the length of the working week can be taken as a proxy for the quality of the working environment (Box 2.3). This is by no means an ideal indicator as evidence on the relationship between very long working hours and life satisfaction is mixed, but otherwise results suggest that working very long hours impairs workers' physical and mental health, particularly when workers have little control over their work schedule and the number of hours (Bassanini and Caroli, 2014[35]; OECD, 2016[36]).

Working hours suggest that job quality is low for many informal workers across the region: around one fifth of informal workers in Brunei Darussalam, China, Mongolia, and Nepal work more than 60 hours per week. Just over 40% of the informal workers work 48 hours per week or more and almost 15% of workers put in more than 60 hours per week (Figure 2.8). This is 35% and 12%, respectively, for employees in formal employees, who also frequently work long hours. Gender gaps in working hours exists across Asia and the Pacific, 15.4% of male and 11.7% of female informal workers – work more than 60 hours per week (ILO, 2018[28]).

Figure 2.8. **Informal workers often put in very long hours.**

Percentage of those in informal employment who work more that 48 or 60 hours per week, 2016 or the latest



Note: For years see the note to Figure 2.5.
Source: ILO (2018), *Women and men in the informal economy: a statistical picture – third edition.*

StatLink http://dx.doi.org/10.1787/888933899717

The future of Social Protection in Asia and the Pacific

Social protection (Box 2.1) encompasses a wide range of public and private programmes to protect individuals and their families from predictable life course risks (dependency in childhood, retirement from work, frailty in old age) as well as the unpredictable risks that individuals and their families face during their years of working age (sickness, temporary or long-term disability or other health conditions, accidents at work, personal job loss and general increases in unemployment in recessions, irregular work, and family breakdown). These risks are generally associated with falls in household income and or increased (health-related) expenses and social protection programmes are designed to partly compensate for these income losses and provide services and care that enable people to return to work or other productive activities.

Changes in the nature of work and labour markets potentially pose new challenges to the social protection systems of high-income countries, particularly those relying on contributory social insurance systems. As temporary work and changing forms of employment contracts become more prevalent, the assumption of full-time, permanent formal employment threatens to become less common, potentially undermining welfare state finances as well as the social protection of workers and their families (OECD, 2018[19]).

Changes in the nature of work will also challenge the extension of social insurance in middle and low-income countries in Asia and the Pacific. However, as discussed above, the majority of workers in Asia and the Pacific are already excluded from social protection support. Technological change and new work forms, will merely add to the already huge challenge of extending social protection coverage among existing workers in the region.

Non-contributory systems – such as Australia (Box 2.4) and New Zealand – can also face important challenges, even if they do not require explicit contributions to secure eligibility for coverage of social risks. Social spending does require appropriate levels of taxation in order to be financed. To the extent that changes in future work patterns undermine adequate revenue collection, social protection may be put at risk. A further factor is that the administration of income-testing becomes much more complicated if patterns of work become irregular or other circumstances, such as multiple job holding become common.

Box 2.4. **Social protection and safeguarding minimum employment conditions in Australia**

The Australian social security system differs from the social insurance systems common in other OECD countries. In Australia, most government benefits are flat-rate entitlements financed from general government revenue, and there are no explicit social security contributions required as a condition of eligibility. Most benefits are income tested and asset tested, so that entitlements reduce as resources increase (Whiteford, 2017[37]). Within these income and assets tests, income from self-employment and business resources are treated differently from other employment or unearned income. To a large degree, payments are the responsibility of the Commonwealth (national) government, with eligibility conditions and entitlements being uniform across the country.

There are programmes at the level of Australian state governments – notably compensation for work accidents and motor vehicle accidents – that involve contributions of different sorts and in the case of compensation for accidents or illness arising from work also pay high wage replacement rates. In addition, many public sector employees and some private sector workers also are covered by defined-benefit occupational pension

Box 2.4. **Social protection and safeguarding minimum employment conditions in Australia** *(cont.)*

schemes for retirement (most of these are now closed to new entrants). Since the early 1990s, there has also been a mandatory private pension system – the Superannuation Guarantee – covering most employees, which requires employers to contribute to individual accounts for their employees (currently 9.5%). These can be supplemented by employee contributions, which are supported by extensive tax concessions.

The Australian government income support system is not contributory, and coverage of the population is broad. The main criteria for being covered are: meeting residence requirements; falling into specific eligibility categories; and, satisfying income- and asset tests. Duration of payment is not time limited, with income support payments being paid indefinitely subject to the continued meeting of eligibility criteria. Benefits are legal entitlements and recipients can appeal to administrative and judicial tribunals in case of disagreements about administrative decisions.

Access to the healthcare system and government reimbursement of health-care fees is also based on residence rather than contributions, even though the healthcare system is partly financed by a levy in addition to income tax.

As a result of these design features, formal employment is not required as a condition for receiving social security payments. However, workers may also be entitled to various forms of social protection as part of their employment package.

Australia's statutory minimum wage is the third highest in the OECD in purchasing power terms (OECD Employment Database), and due to the relatively low level of taxes and social security contributions paid by low-income earners (OECD, 2015[38]), the purchasing power of the full-time, after-tax minimum wage is the highest in the OECD (OECD, 2015[39]).

The scope of workplace regulation of pay and conditions has changed significantly over time. The past 30 years or so have witnessed radical changes, with the decentralisation and individualisation of what was "a relatively centralised framework of wages [and conditions] determination" (Wright and Lansbury, 2016[40]). These changes have enabled workplace-level collective negotiation of pay and conditions (agreement is contained in enforceable enterprise agreements) whilst retaining industry/occupation specific legal minima (called "modern awards") which enterprise agreements may diverge from if they leave employees better off overall. Modern awards set minimum wages as well as other working conditions such as overtime payments and leave conditions and the overall contents are specified in the Fair Work Act (FWA) of 2009, Australia's principal employment rights statute.

Apart from high income-replacement – up to full-replacement – rates for accidents at work, a majority of employed people are entitled to paid sick leave and paid carers' leave of up to ten days a year (combined) paid at full wage levels, as well as paid annual and public holidays. Higher rates of wages are payable at for work at weekends and on public holidays. There is a significant group of workers – known as "casuals" in Australia – who are not entitled to paid sick leave or paid holidays, but who are entitled to a higher rate of hourly pay (about 20% higher) to compensate them for the lack of paid leave. The self-employed are not covered by these provisions, and it is therefore financially rewarding for employers if they are able to define employees as self-employed or independent contractors.

Many of the conditions attached to employment do require enforcement, and at the Commonwealth level there are two key agencies:

1. The Fair Work Commission (FWC) is an independent tribunal responsible for maintaining a safety net of minimum wages and employment conditions (Australian Government, 2018[41]).

Box 2.4. **Social protection and safeguarding minimum employment conditions in Australia** *(cont.)*

The Commission sets national minimum wages annually, following consideration of submissions made by employer organization, unions and government. The FWC also reviews and sets each "modern award". Neither modern awards nor enterprise agreements may undercut a yet more limited set of minimum employment conditions contained in the Fair Work Act (Stewart et al., 2016[42]).

2. The Fair Work Ombudsman (FWO) is also an independent agency which enforces compliance with the Fair Work Act 2009 and they also provide advice and education services to employers and employees (Australian Government, 2018[43]). Most breaches of the Act involve civil remedies and can be punished by fines, while some breaches can be criminal offences (e.g. bribery). The FWO is concerned with individual cases of disregard for the law, exploitation of vulnerable workers and complex supply chains or networks where there is a risk of employees being classified as self-employed and therefore not covered by the conditions described above. The FWO can also initiate wider inquiries, e.g. on the procurement of security services by local governments, and reports of these inquiries are publicly available. In 2016-17 the FWO issued 665 infringement notices, 192 compliance notices, 40 enforceable undertakings and initiated 55 civil penalty litigations (Australian Government, 2018[43]).

The challenge of automation

There are widespread concerns about the possible job-losses economies might incur with continued digitalisation. Using advances in Machine Learning (ML) and Mobile Robotics (MR) to categorise occupations according to their susceptibility to computerisation, Frey and Osborne (2013[44]) estimated that about 47% of total US employment is "at risk" of becoming automated over the next one to two decades. This involves mainly routine intensive jobs – in transportation, logistics, the bulk of office and administrative support workers and labour in production. They also conclude that jobs with high wages and requiring high educational attainment are less at risk.

Arntz, Gregory and Zierahn (2016[45]) use a task-based rather than occupation-based approach to estimating the effect of automation. They found that in 21 OECD countries 9% of jobs are at risk of automation, with high-skill and high-paid jobs more likely to be secure.[3] More recent evidence for 32 OECD countries suggests that at the current state of technology 14% of jobs on average across the OECD have a high risk of automation while another 32% of jobs may experience significant change to the manner in which they are carried out (OECD, 2018[18]), with large variance in "automatability" across countries (Nedelkoska and Quintini, 2018[46]).

In some economies in developing Asia, about half of the jobs could be affected by automation: some may disappear altogether while many others will be transformed (ADB, 2018[2]). However, there are a large number of workers in the region who are in the informal sector often in low-productivity jobs. While technically many jobs are "automatable" in emerging economies, it may not be economically attractive to do so because of several factors including relatively low wages and high costs of investment in ICT. So, while there is a risk of job-loss there is also an important risk of increasing labour market and economic inequality.

The projected impact of changes in technology on future work patterns may well be similar to the past impact of "skills-biased technological change" (Card and Dinardo, 2002[47]).

While technological change is certainly not the only factor behind widening wage inequalities in high income countries, it is commonly argued that it can be associated with labour market polarisation, where middle skill jobs are lost and there is a growth in both high-skill and low skill jobs, potentially leading to a hollowing-out of the middle.

The skills and education gradient in the impact of automation projected by (Frey and Osborne, 2013[44]) and also found by (Arntz, Gregory and Zierahn, 2016[45]) suggests that even if the majority of jobs do not disappear, there is the possibility of further labour market polarisation in the future. The response to this challenge is to increase investment in education and training in order to develop the appropriate skills for jobs complementing the new technology (OECD, 2018[48]). A better understanding, valuing and rewarding of skills seen as traditionally female (such as care work) could also lead to reclassifying many jobs into higher skills levels and improve economic well-being.

Digital labour markets

With the growing number of digital platforms, two distinct types of jobs and labour markets can be identified (Pesole et al., 2018[49]). The first type of digital labour market can be categorised as electronically transmittable services, or **Online Labour Markets (OLMs)**. Examples include Amazon Mechanical Turk (Limer, 2014[50]), Upwork and Freelancers. These platforms enable work to be requested and provided anywhere in the world and include, for example, the design of websites, advertising campaigns, proof-reading, editing, writing student essays or even following people on Twitter, completing Facebook surveys or loading videos to YouTube.

Offshore call centres are analogous services, even if not necessarily digital. The fact that these jobs can be performed anywhere in the world and delivered via the Internet is seen as creating a "flat world", where people in low income countries – with the appropriate skills – can compete with more highly paid individuals in high-income countries. As well as providing cheaper services than may be available from workers in high-income countries – subject to differences in the quality of the service – employers may benefit from time differences (delivery of services overnight, rather than by the end of their own next working day). In all, there are potential gains for emerging economies in Asia and the Pacific both from digital platforms and also from technological change, particularly in terms of promoting access to social services through online tools (Box 2.5).

The second type of digital labour market also involves digital matching of clients and providers of services, but service-delivery is physical. Pesole et al. (2018[49]) describes these as **mobile labour markets (MLMs)**, and examples of these include Deliveroo, Uber, and Lyft. Delivery of food or taxi services, for example, by definition means that the service provider has to be in the same city or town as the purchaser (Box 2.6). While digital platforms sometimes claim that there are very significant number of people employed in providing these services, Pesole et al (2018[49]), suggest that they involve no more than 1 or 2% of the labour force in the United Kingdom and the United States.

The platform labour market is, however, a subset of what is often called the "gig economy". For example, in the United States it has been estimated that more than a quarter of workers participate in the gig economy in some capacity (ILR School and Future of Work Initiative, 2018[64]), either as their primary income source or as a supplementary source of income. Katz and Krueger (2016[65]) estimated that 15.8% of the American labour force are engaged in independent work as their main job, where this includes temporary,

Box 2.5. **Aadhaar: the use of biometric smartcards in social service delivery in India**

Further increasing access to social protection is an imperative for achieving more inclusive and cohesive societies in the Asia/Pacific region. The challenge facing many economies with a large rural sector or a large urban informal economy is overcoming administrative bottlenecks limiting coverage extension of social protection, not least because of the very limited capacity to register participants in insurance schemes and/or collect contributions from employers and employees. New technologies can represent a great opportunity for governments in the region to track social protection eligibility, to adapt or simplify registration and benefit-award procedures, improved access to information and generally help extend coverage to all those who need social support.

One approach worth considering is India's effort of equipping all its citizens with a digital identity. This initiative, known as "Aadhaar", already covers more than a billion Indians, and those who enrolled in Aadhaar received a unique 12-digit identification number after submitting their fingerprints and retina scans. This large biometric identity database covers welfare and tax payments and access to social services, as for example, making payments to low-income households that are eligible for the "cooking gas subsidy" and "social assistance pensions". Aadhaar can also be used for financial services, such as daily bank transfers, but in a landmark ruling the Indian Constitutional court limited the scope of the Aadhaar scheme, saying it could not be compulsory for bank accounts, mobile connections or school admissions (BBC, 2018[51]).

In a comprehensive RCT-based evaluation of Aadhaar (Muralidharan, Niehaus and Sukhtankar, 2016[52]; 2017[53]) evaluate the impact of the smartcards on beneficiaries of the National Rural Employment Guarantee Scheme (NREGS), the Public Distributions system (the National Food Security Act), and the social assistance pensions (SSP). In the state Andhra Pradesh, Aadhaar made it more difficult for programme staffers to over-report the number of clients and siphon off programme-funds and leakage of this type reduced by 41%, similarly Aadhaar reduced leakage of this type with respect to the SSP pensions programme. However, while Aadhaar may help address identity fraud, by its nature it is more difficult for Aadhaar to address "quantity fraud" when beneficiaries receive only a fraction of their entitlement as with the PDS programme (Banerjee, 2016) The Aadhaar experience can be further improved. For example, the regular and independent collection of representative data on programme access and exclusion error could help identify the share of legally entitled benefits that eligible beneficiaries are receiving. Aadhaar could also enhance customer choice in terms of the form of support (cash or in-kind) and portability across ration shops of PDS distributors.

on call, contracting and freelance work. The "gig economy" data link above also states that only about 1% of the US workforce regularly use online digital platforms to connect with work opportunities, so currently digital labour markets are a relatively small sub-set of the gig economy. It is usually considered that a much greater number of jobs in emerging economies are of this type.

While digital platform jobs are the product of technological innovation, like other "gig economy" jobs, the challenges they raise for the future labour market are regulatory. Some of this work is essentially piece-work. These developments are related to outsourcing (of tasks) and offshoring and reflect changes in the nature of firms. This type of work blurs distinctions between employees and self-employed. Many may involve regulatory "arbitrage" – where the company is able to provide cheaper services because it seeks to avoid to varying degrees the licensing requirements, as well as tax liabilities and employee

Box 2.6. **Employment Accident insurance for drivers of on-line taxi services**

Recent years have seen a rapid expansion of the on-line taxi service market, with most 20% of the world population using such services at least once during 2015/16 (Holmes, 2017[55]; Marciano, 2016[56]). Overall revenue of the market was estimated to be around USD 36 billion in 2016 and may increase eightfold by 2030 (Burgstaller et al., 2017[57]). On-line taxi services play an important role in the emerging economies in South Asia. For example, in Indonesia, where motorbikes are more frequently used than vehicles for taxi-services, the market is estimated to grow from USD 800 million in 2015 to USD 5.6 billion in 2025 (Purnell, 2016[58]).

The GO-JEK company in Indonesia engages in "on-line" service provision including food delivery, courier and domestic cleaning services (Ford and Honan, 2017[59]). In 2011, GO-JEK started its motorbike taxi booking service with a call centre and 20 drivers in; but in 2018 it had about 1 million drivers: these are not employees, but individual "partners" who are self-employed and/or informal workers, without social protection or labour market regulation coverage. GO-JEK drivers – with a registered motorbike can engage in a partnership contract with the GO-JEK company, and receive courses about health and safety. Road safety is a major concerns in emerging economies; traffic accidents caused 38 297 fatalities in Indonesia in 2013 (WHO Global Health Observatory, 2018[60]). Since 2015, GO-JEK provides accident insurance for its partner drivers and passengers. It also provides health insurance to its drives and their families on a voluntary basis (Prabowo, 2018[61]).

In Malaysia, concerns about road safety – about 7 000 fatalities or 23 per 100 000 people (Department Statistics of Malaysia, 2015[62]), contributed to the development of "the Self-Employment Social Security Act" in 2017. This Act stipulates that taxi drivers, of which there are about 83 000 conventional taxi-drivers and "on-line" taxi service drivers from Grab and Uber, have to register with the Employment Injury Scheme. Failure to do so is a legal offense which fines up to RM 10 000 (USD 2 577) and/or two years imprisonment.

Registered drivers can choose their insurance scheme from four options depending on insurable income, renewable every year (Social Security Organisation of Malaysia, 2018[63]). This scheme provides eight different cash and in-kind benefits to insured taxi drivers and their families: medical benefits, free medical treatment of employment injuries or occupational diseases; temporary disability benefit for medically certified periods of leave; permanent disability benefit, up to 90% of estimated insured earnings; attendance allowances for carers of a permanently disabled person (USD 128.87 per month); survivor benefits; funeral benefits; physical or vocational rehabilitation supports; and, education benefits. As June 2018 about 7 000 out of 83 000 drivers had registered with the scheme.

on-costs. Indeed, informality also concerns many of the new jobs that are emerging in the wake of technological change, digitalization, outsourcing and subcontracting, and many of the on-line platform workers face similar challenges in terms of income security, employment conditions and recourse in case of unfair treatment as informal workers in more traditional economic sectors (Berg, 2016[66]; ILO, 2018[67]).

The risks of these types of jobs are that they pay less than the minimum wage (reduced further by the fees charged by the digital platform), and provide no workers compensation or sick leave or superannuation. The maintenance of occupational health and safety standards may also be a concern.

In terms of social protection, as with other informal workers, obvious questions are whether income tax or social insurance contributions where relevant are paid, and whether VAT payments are made. Similarly, many of the relatively low paid tasks advertised on these platforms raise the question of whether the earnings have been declared for social security income tests, where relevant. The evidence suggests that total employment derived from these platforms is a relatively small at present, but to the extent that they grow in future, they will potentially have an impact across a wide range of areas of social protection.

Social protection challenges

There is a very fundamental issue to be considered before deciding whether further reforms are needed to social security arrangements. That is whether it is desirable to adjust the benefit system to deal with irregular work[4] or whether the prevalence of irregular work should be limited through regulation of working conditions – or what is the best middle ground between these approaches.

There is also a link between the adequacy of wages and working conditions and the level of the social security safety net. Reforming a well-developed social security system as in OECD countries to deal with greater instability in working hours or to support temporary workers in times when they are between contracts can be regarded as supporting risk-shifting from employers to government and taxpayers. Should government and workers fill the financial gap that is left by reduced employer contributions for workers who are now working on their own account (OECD, 2018$_{[19]}$)?

In many ways this challenge is similar to the existing policy conundrum on informality. How can existing informal relationships be recognized so that they provide access to social security benefits? How can coverage for (independent) informal workers and their families be extended through existing schemes? Can policy help by extending coverage to low-income groups by partially or fully covering contributions though government subsidies (see, for example the discussion on experiences in Indonesia and Korea below)?

Extending social insurance has direct effects on formalization, the extension of social assistance programmes has not, even though it can be considered as an enabling condition providing more stable and predictable income to workers in the informal economy. In any case, social assistance programmes matter (see, for example Box 2.7. The Benazir Income Support Programme (BISP) in Pakistan): they reduce the poverty gap/headcount and income inequality. Then again, payment rates are often low and many gaps in coverage remain, particularly in low-income countries (World Bank Group, 2018$_{[68]}$). Nevertheless, together with other policies to improve productivity, social assistance programmes could help create in the long run, the necessary conditions for a formalization of employment relationships and amalgamation with social insurance schemes with higher payment rates.

It is widely argued that if the level of benefits in the income support system is too high, then this may give incentives for individuals to reduce their work effort. The logical extension of this is that if the level of benefits are too low or the conditions to satisfy eligibility are too onerous, then workers will put up with unsatisfactory work conditions because the alternative of claiming benefits while looking for a better job is unacceptable. Just as it is difficult to justify adequate social security benefits without an adequate minimum wage, the maintenance of an adequate minimum wage and working conditions also requires an adequate benefit safety net.

There are other major challenges to social protection than those arising from changing work patterns. Population ageing is affecting many countries, particularly in North East Asia, where rapid increases in life expectancy and even more rapid declines in fertility have resulted in the fastest rates of population ageing in history (*see Indicator 3.5, Old-age support ratio*).

The speed of change can provide challenges in its own right, partly to the extent that it is associated with social changes such as increases in family breakdown and the weakening of traditional family ties. A further factor is that rapid income and wage growth can mean wide gaps emerge between the retired and those working in the newer and more prosperous economy. Related to this are widening income and wealth inequalities in rapidly growing economies, as some areas of the country or some social groups do not share in the increased prosperity of those who prosper as a result of economic growth.

Population ageing and its associated implications for health care and age care will also affect the types of jobs that will be needed in the future. It is projected that the fastest growing area of employment will be "health care and social assistance", comprising both some of the highest paid and the lowest paid occupations, a factor that may further contribute to a polarised labour force.

Another area where challenges to existing systems of social protection may be growing is in relation to international migration and temporary migrant workers. In addition, to contributions and income-testing, one of the most important criteria for eligibility to various forms of social protection is citizenship or permanent residence. Migrants may have limited access to social security and health care. International evidence attests to their vulnerability to exploitation through employer evasion of work standards.

Options for social security protection

Table 2.1 shows the spectrum of income maintenance programmes ranging from conditional cash transfers, other tightly income-tested social assistance schemes, through Negative Income Taxes, demogrants, pilot schemes of Basic Income programmes (OECD, 2017[69]) – none of which actually exist on a national basis (see note to Table 2.1) – earnings-

Table 2.1. **A spectrum of possible income maintenance programmes**

Type of programme	Examples	Coverage/Eligibility
Conditional cash transfers	Brazil, Mexico, Indonesia, the Philippines	Income-tested, conditional on behaviour (school attendance, immunization)
Social Assistance	Most OECD countries, China Special Benefit – Australia	Citizens/residents; Income and assets-tested
Refundable Tax Credit	Canada GST/HST Tax Credit United States EITC	Citizens, taxpayers; May be income-tested
Negative Income Tax	Categorical – Australia General – UK Universal Credit	Citizens/residents; Income-tested
Demogrant[1]	New Zealand Superannuation Child benefits Alaska Fund Dividend	Age group/citizens State/residents
Universal Basic Income[2]	Pilot programmes, such as in Finland or the Netherlands, but no national schemes	Citizenship
Social insurance schemes, including old-age, disability and survivor pensions, and unemployment benefits	The vast majority of OECD countries, but also e.g. the notionally defined pension scheme in China	Contributions
Mandatory Private Pensions, and mandatory sick-pay	Superannuation – Australia; continued (partial) wage payments in case of illness in Germany	Contributions; employees
Voluntary private pensions and other employer-benefits;	Occupational and company pensions, employer paid parental leave benefits (various countries)	Contributions; employees
Individual Savings Accounts	Central Provident Fund Singapore	Contributions

1. A "demogrant" is a universal (non-income-tested) payment made to specified demographic groups – for example, to the aged (e.g. pensions in Canada and New Zealand) or in respect of children (child benefits) in a number of OECD countries.
2. In recent years, there has been renewed attention to the idea of a Universal Basic Income (UBI), in part because of ongoing labour market difficulties since the Global Financial Crisis and in part in anticipation of the impact of technological change. One of the essential aspects of the concept is that a UBI would involve some degree of integration of the system of cash transfers and the income tax system.

related social insurance systems with benefits for the working age population, and public or private pension schemes.

In considering possible responses to the risks discussed above, it is important to emphasise that different forms of social security will be more relevant in different national circumstances and to different groups of informal workers. In a sense, welfare state institutions, employment structures, wage-setting institutions and the regulation of employment conditions and the structure and level of taxation are "co-produced" both historically and institutionally.

To take examples from high income countries, a programme like the Earned Income Tax Credit in the United States is required to "make work pay" under conditions where minimum wages are low and the social security contributions workers make for their retirement and disability are not progressive but reduce the meagre wages of low paid workers. In many countries of Asia and the Pacific, consideration will need to be given to programmes that are relevant to countries where there a high level of agricultural workers.

Examples of reform avenues

Public social spending in many Asia/Pacific countries is low, and a rapid expansion of social programmes is unlikely to materialise, if only because of short-term budget constraints. Given this, it is imperative that countries use the existing social policy infrastructure – e.g. existing social insurance schemes, to the extent possible and target social expenditures towards the most vulnerable is required.

Non-contributory social assistance benefits will not contribute directly to the formalization of workers in informal employment, but can make a potentially important contribution to alleviating financial hardship in emerging economies since they can be targeted at those who need them most, including informal workers. In practice, however, the effectiveness of social assistance in rolling back poverty is often limited, due to a combination of insufficient resources, resulting in benefits that are not sufficiently high to lift families out of poverty, and as well as poor targeting, due to the difficulty of means-testing in emerging economies.

Extending social insurance in China and Korea

Given rapid population ageing in many Asian countries, pension coverage – the number of people in the labour force and/or the working age population who contribute to a mandatory pension system – is a key policy issue. Many Asian countries have a long-term pension coverage problem in that less than 20% of the working age population contribute to a pension: This proportion is higher in China (28%), Malaysia (39%), Singapore (45%), Korea (54%) and Japan (75%), while across the OECD almost two/thirds of the working age population makes contributions to mandatory pension schemes (*see Indicator* 5.3, Pensions: Coverage and replacement rates). This means that many Asian citizens will not be entitled to a pension, which contributes to a high risk of old-age poverty, particularly in low-income countries.

Among Asian countries, **China** has arguably been most successful in extending pension coverage among its population. Over the past decades, China has substantially increased coverage through the development of a multi-pillar pension system that includes:

- The Civil Service and Public Service Unit (PSU) scheme for civil servants and government employees;

- The Basic Urban Workers Pension (BUWP) scheme for urban workers (Salditt, Whiteford and Adema, 2008[70]) with a coverage rate (the number of participants relative to the number of workers) that increased from 60% in 2005 to 88% in 2015 (Queisser, Reilly and Hu, 2016[71]); and,
- The Basic National Resident Pension (BNRP) scheme for those not protected by the previous two schemes which in 2015 covered 505 million people (Queisser, Reilly and Hu, 2016[71]).

In all, pension coverage of these three schemes more than doubled from 360 million in 2010 to 858 million in 2015 (Zhu and Walker, 2018[72]).

The expansion of the old-age pension system in China has been attributed to several factors including rapid economic growth, firm political will and innovations in programme design that facilitated easier access (Zhu and Walker, 2018[72]). In particular, access to the BNPR scheme was enhanced by allowing those above retirement age (60 for men 55 for women) who had not met the minimum contributory requirement of 15 years of contributions to make lump-sum contributions to obtain pension rights. In addition, those who do not have the means to make the necessary lump-sum payments, can avail of a low flat-rate benefit if their working-age child(ren) contribute(s) to the pension scheme (ILO, 2017[9]).

One of the main challenges to Korea's social policy is to overcome the sharp dichotomy in the labour market between regular workers and non-regular workers (OECD, 2000[73]; OECD, 2017[74]). Regular employees generally have long-term employment contracts, seniority based wage- and career progression, access to employer-provided fringe benefits and social insurance coverage. By contrast, non-regular workers often work on renewable one-year contracts, have limited career opportunities so that pay gaps with regular workers increase markedly with age, and they have no or limited access to employment-related fringe benefits or social insurance. Similarly, the many self-employed, as well as domestic workers and workers in small agricultural and fishery workplaces are not covered. Civil servants, military officials and teachers are also not covered by National Pension and Employment insurance but they have access to occupational pension schemes.

To help reduce this social protection coverage gap between regular and non-regular and/or informal workers, the Korean government in 2012 initiated the "Duru Nuri Social Insurance Support Programme" to encourage low-income workers in workplaces with less than 10 employees to join pension and employment insurance by offering fiscal incentives (OECD, 2017[74]). In August 2012, 33.5% and 33.8% of workers were not covered by pension and unemployment insurance schemes respectively, and this had fallen somewhat to 31% and 28.8% workers by August 2107 (Statistics Korea, 2017[75]). However, to what extent this decline is directly related to the introduction of the Duru Nuri programme is not clear, and the debate on policies measures to extend coverage among non-regular workers is ongoing.

Social security and healthcare reform in Indonesia

While existing social protection systems in Indonesia tend to be fragmented, significant progress is being made towards provisions that are more comprehensive and with improved coverage. The progressive implementation of Law No. 40/2004, also known as the National Social Security Reform Act (SJSN) involves a very ambitious programme of reform and implementation. By 2019, the system is intended to cover the entire population of more than 250 million people.

Starting in 2014, Indonesia's government launched a project to establish a compulsory national health insurance system with the aim of making basic care available to all (including foreign residents after six months of work) under a single health care system by 2019. The scheme, Jaminan Kesehatan Nasional (JKN), was implemented by the newly-formed Healthcare Social Security Agency, Badan Penyelenggara Jaminan Sosial Kesehatan (BPJS Kesehatan).[5] The system is intended to cover all employees and residents. Under JKN, the objective is that all Indonesian citizens will be able to access a wide range of health services provided by public facilities, as well as services from a few private organisations that have opted to join the scheme as providers. JKN care aims to be comprehensive, covering treatment for everyday concerns such as flu through to open-heart surgery, dialysis and chemotherapy. Private insurance continues to play a role by providing for excess or additional coverage of services not included in JKN.

In addition, in July 2015, the Workers' Social Security Agency – BPJS Ketenagakerjaan,[6] was launched with the aim of providing universal social security for Indonesian workers. Based on the principles of social insurance and compulsory savings, the programme aims to maintain decent basic living standards when participants encounter income loss or decrease resulting from workplace injuries, old age, retirement or death. BPJS Ketenagakerjaan administers employment benefits, which include elderly care, workplace accident insurance and death insurance and pensions.

For health and medical protection there is a sliding scale of contributions ranging from RP 22 500 to RP 55 000 per month (USD 2.25 to USD 4.50). The government covers medical benefits of the poor. For social security coverage, the total contribution by the employer and the employee is projected to be around 19% of earnings.[7]

The National Social Security System is part of a broader set of antipoverty programmes and government subsidies, including social assistance programmes to assist the poorest and most vulnerable. Indonesia has implemented a series of cash transfer programs since the Asian Financial Crisis. At that time, Indonesia implemented emergency social relief programmes for the poor that were later incorporated into the so called social safety net programmes (for example, the Program Jaring Pengaman Sosial) in 1999. Subsequently, unconditional cash transfers (UCTs) (Bantuan Langsung Tunai – BLT) and conditional cash transfers (CCTs) (Program Keluarga Harapan – PKH) were introduced in 2005 and 2007, respectively.

Overall, Indonesian government debt is sustainable but additional spending on health and social assistance is limited by low revenues. Additional resources must be found through greater efficiency and the raising of tax revenue which is low in comparison with other emerging economies (OECD, 2018[76]).

Extending health insurance in India

Under a programme launched nationwide in September 2018, half a billion Indian citizens will be covered by what local media outlets have dubbed "Modicare" but whose official name means "Long Life India." The health-care plan is targeted at the poorest 40% of the Indian population.

The programme gives poor families insurance coverage for expenses up to USD 6 950 in hospitals. For primary care, the government plans to open 150 000 "health and wellness" centres, staffed by nurses, traditional medicine healers and other health workers by 2020. The cost to central and state governments is estimated to be around USD 1.6 billion (Guardian, 2018[77]).

The health plan is focused on reducing "catastrophic spending" – when families have to spend more than a quarter of their incomes on health-care costs. In poor families that usually happens when a patient is hospitalized. According to a 2010 study, more than 63 million Indians – about 3-5% of the population – fall below the poverty line every year because of health-care costs. In most states, government-funded hospitals are understaffed and ill-equipped, so many people end up paying for expensive private care. Rural households source more than a quarter of their health expenses by borrowing or selling assets.

The plan will rely on partnerships with private hospitals and will promote traditional ideas of holistic health care. Nurses and practitioners of traditional Indian medicine will take "bridge courses" to enable them to provide services that include diagnosing some cancers and tuberculosis. When diagnoses are complicated, health-care workers can video-call a doctor for advice. Government-backed awareness drives and "people movements" on health issues such as nutrition will be added to existing services.

The government will pay public and private hospitals fixed rates for treating people covered under the programme. So far, 15 000 hospitals – a mix of government and private – have applied for government certification. The government has indicated that this is only a first step toward extending affordable care. It currently spends a little over 1% of GDP on public healthcare.

The most significant challenge is implementation. Federal healthcare schemes and similar publicly-funded medical insurance schemes do not have a strong record in India. Nine of 13 studies assessing such schemes reported no reduction in out-of-pocket expenses by people covered by insurance (Prinja et al., 2017[78]).

Non-contributory social support to the most vulnerable

Other Asia/Pacific countries may not have already put a social insurance infrastructure in place and in order to rapidly address prevailing poverty and associated health and education issues, may choose to opt for developing and upscaling of non-contributory social support programmes. There is a wide range of such social support programmes, with different possible categorisations, e.g. Barrientos (2016[79]). In the Asia/Pacific region, such programmes include, unconditional cash and/or in-kind supports, conditional cash transfers, and labour market programmes. OECD (2018[25]) discusses the employment and work incentives of conditional and unconditional transfers but generally finds that these programmes do not generate negative employment effects in developing countries (also see Banerjee et al., (2017[80])).[8]

- Unconditional cash transfers (UCT), usually targeted to poor households with older household members. Examples include the Mongolian Child Money Programme (ILO, 2016[81]; OECD, 2017[74]), the Benazir Income Support programme (Box 2.7), the Public Distributions System of food supports in cash or in-kind in India under the National Food Security Act (Puri, 2017[82]) or the Chinese *Urban Di Bao* system which seeks to provide a guaranteed minimum income for all households. At peak this social assistance programme that was introduced in 1993 served 7.6 million households and 23 million people in 2009, while by 2015 this covered 5.5 million households and 17 million people (University of Manchester, 2018[83]). In some other Asian countries, a significant proportion of senior citizens now receive a "non-contributory old age allowance" which cover about 33% of senior citizens in Bangladesh, around 50% of elderly citizens in Nepal and around three-quarters of the elderly in Hong Kong, China and Thailand (OECD, 2017[74]; ILO, 2018[84]). Payment rates of these social assistance pensions may be low (OECD, 2011[85]), but they nevertheless play an important role in reducing poverty: the proliferation of these non-contributory pensions help address some of the consequences of high levels of informality in economies (ILO, 2018[84]).

- Conditional cash transfer (CCT) programmes, which provide income support to poor households that comply with certain behavioural requirements in relation to education or health (e.g. school attendance, vaccinations, health clinic visits). Apart from reducing poverty, CCTs also seek to promote equal opportunities and long-term economic growth by investing in the education and health of children. Examples includes the Benazir Income Support programme that has a conditional cash transfer component to enhance participation in education (Box 2.7).
- The Mahatma Gandhi National Rural Employment Guarantee Act (GNRES) provides Indian citizens with the right to participate in unskilled manual labour, such as building roads, canals, ponds and wells, for 100 days every fiscal year are guaranteed to all rural households (Dutta et al., 2014). The scheme promotes labour market inclusivity, gender equal pay for work of equal value and the provision of childcare facilities (Sonalde, Vashishtha and Joshi, 2015[86]; Breitkreuz et al., 2017[87]). Nevertheless, overall the role of labour market programmes is limited in the Asia Pacific region *(refs to forthcoming ADB SPI reports on Asia and Pacific)*.

In addition to these programmes, OECD policy reform evidence suggests that effective anti-poverty programmes combine income support to the poor with a range of interventions that seek to address the structural causes of poverty. Such strategies involve a multi-faceted approach to tackling the barriers to moving out of poverty, and one of the best known examples of such a policy is *Chile Solidario* which combines identification of the clients and associated income support with personal counselling and access to social services, e.g. education, employment, healthcare, housing and justice (OECD, 2009[88]).

Box 2.7. **The Benazir Income Support Programme (BISP) in Pakistan**

The Planning Commission of Pakistan adopted the country's first National Social Protection Strategy (NSPS) in 2007. In 2008, the BISP was launched as the flagship national social safety net, financed for one/third by the Pakistani government with the remainder covered by international donors.

To identify eligible households, a "poverty scorecard (PSC) method of targeting" was developed by the World Bank using the Pakistan Social and Living Standards Measurement (PSLM-4) survey data of 2005-06 (Nayab and Farooq, 2014[89]). The PSC is based on key indicators such as household size, education, child status, agricultural landholding, housing and toilet facilities, and livestock ownership. The PSC data was acquired by conducting a house-to-house survey in 2010-11. On completion of the survey, a proxy means test (PMT) formula was applied to the PSC to generate a welfare status score for every household on a scale of 0 to 100. Any household which was at a scale of 16.17 or less was considered eligible for a BISP cash transfer. Initially payments were made by post, but currently 90% of the beneficiaries receive the cash transfers through the BISP debit card.

Total cash transfers of the programme increased from 0.22% to 0.36% of GDP from 2009 to 2015, which contributed to the increase in coverage of the programme from 9.1% to 22.6% of the population of Pakistan from 2009 to 2015 (Mumtaz and Whiteford, 2017[90]).

Based on the national poverty line set by the Pakistan Bureau of Statistics, different categories of the poor population can be identified on basis of the distance of their incomes to the poverty line: ultra-poor, poor, vulnerable, quasi non-poor, and non-poor. A decrease

Box 2.7. **The Benazir Income Support Programme (BISP) in Pakistan** *(cont.)*

from 66% to 35% is observed among BISP beneficiary households in the ultra-poor and poor categories from 2011 to 2014. Out of this 31% decline in poverty, 7% of the beneficiary households moved to the vulnerable category, and 24% moved to the quasi non-poor and non-poor categories (Mumtaz and Whiteford, 2017[90]).

The primary objective of the BISP programme is to reduce the adverse impacts of the financial, food and fuel crises on the poor while the secondary objective was to increase household investments in education and health and safeguarding the vulnerable population against transient and chronic poverty. Cheema et al. (2016[91]) found evidence that the BISP is leading to an increase in per adult equivalent monthly food consumption and contributed to a reduction of wasting among girls (*see Indicator 6.3, Child Malnutrition*). The unconditional cash transfer did not affect participation in education, but it was complemented in 2012 by a conditional cash transfer which linked participation in schooling of children aged 4-12 to benefit payments "Waseela-e-Taleem (WeT)", which did increase enrolment rates (Cheema et al., 2016[92]). There are other financial supports to help clients become financially independent, including small business development and start-up supports, but their overall impact is not yet clear.

Concluding remarks

The challenges facing the development of social protection in Asia and the Pacific are manifold. In many cases current social protection spending is very low. Public social spending in Asia and the Pacific is about one-third of the OECD average and in a significant number of countries is less than one quarter or one-fifth of the OECD average. This reflects gaps in the types of programmes provided as well as gaps in coverage of existing programmes. For example, systems of support for families are lacking in many countries. Moreover, at present, most social spending is through social insurance schemes that cover (former) workers in formal employment who are comparatively well-off.

The share of informal employment in total employment varies across countries, but almost 70% of workers in the Asia/Pacific region are in informal employment, often self-employed without employees (own-account workers) and/or contributory family workers (especially in low-income countries), often working long hours for little money and in jobs that are not covered by social protection and health insurance. Youth (age 15-24) and elderly workers (over age 65) are most likely to be in informal employment. Only 30% of those with tertiary education work informally, and across Asia and the Pacific, the informal economy absorbs a large share of low-skilled workers, partly explaining its low overall level of productivity.

The already considerable challenge of extending social protection coverage to informal workers is exacerbated by changes in the nature of work and labour markets. In some economies in developing Asia about half of the jobs could be affected by automation. Many of the low-productivity jobs in Asia and the Pacific are technically "automatable" but automation may not be economically attractive given relatively low wages and high costs of investment in ICT. However, as automation will increase the demand for higher skills there is a real possibility of further labour market polarisation and increased economic inequality in the future. The response to this challenge is to increase investment in education and training in order to develop the appropriate skills for jobs complementing the new technology.

Developments in technology and automation also provide new opportunities for the extension of social protection as they can help overcome some of the administrative barriers to the receipt of benefit, payment of taxes and social security contributions. Advances in technology have at least the potential to contribute to a reduction in informality and the improvement of benefit delivery. This is important for the countries in Asia such as Bangladesh, China, India, Indonesia and Pakistan with very large populations as well as countries in the Pacific with very small populations, as in both cases natural environments pose challenges to the development, implementation and administration of social programmes.

Population ageing is an another important policy challenge, particularly in North East Asia, where rapid increases in life expectancy and even more rapid declines in fertility have resulted in the fastest rates of population ageing in history. At the same time, traditional family ties are weakening, leaving gaps in social protection that need to be addressed quickly. A further factor is that rapid income and wage growth can lead to wide gaps emerging between the retired and those working in the newer and more prosperous economy.

At present, social protection systems in the Asia Pacific are underdeveloped and mainly focused on formal workers. More should be done to protect poor families from poverty. This includes scaling up investment in social-support systems, better targeting of supports, and where possible link with existing education, health and employment support mechanisms. Countries should build on the social protection infrastructure, but given the low level of spending and taxation overall, widening the tax base and greater progressivity in taxation and financing of social insurance schemes would be important contributory factors to a greater effectiveness of national tax/benefit systems in combating poverty.

Notes

1. Employment in the manufacturing sector fell in many high-income economies over the past decades, but except for some countries in east Asia, employment in the manufacturing sector did not grow or even declined in the rest of the world – "premature deindustrialization" (Rodrik, 2015[6]).
2. Informal employees are also more likely than formal employees to engage in non-standard forms of employment: In Asia on average, 21% of employees in full-time employment hold informal jobs, but this is 60% among part-time employees, and higher still for temporary workers (ILO, 2018[25]).
3. Arntz et al. (2016[34]) also highlighted the need to take account of offsetting macro-economic adjustments, including the development of jobs that complement these new technologies, as well as the development of new jobs in the industries that actually produce the new labour-saving technologies and the associated increase in demand for these new products. Hence, the overall employment impact of future technological change may well be less than the smaller estimates.
4. It is also not entirely clear how responsive payments should be to changes in earnings or other circumstances. A more responsive system could offset short-term fluctuations in earnings, but there is evidence that low-income households may prefer to have at least one of their income sources that is predictable (Millar, 2017), and around which they can plan how to deal with other fluctuating components of their incomes.
5. All healthcare coverage under Askes (for civil servants), Jamsostek (for the private sector) and Asabri (for the police and army) were transferred to BPJS Health Care on 1 January 2014.
6. BPJS Ketenagakerjaan supersedes previous social security institutions that respectively provided old-age benefits (saving schemes and pensions) for 1) the armed forces, police personnel and civil servants employed in Military and Police Offices, 2) civil servants, 3) private employees and voluntary schemes for employees in the informal economy, and 4) healthcare and maternity benefits for civil servants, government pensioners, military and police pensioners and veterans.
7. This is built up as follows: occupational accidents – an employer-paid contribution between 0.24% and 1.74% depending on the type of business; death benefit – 0.3% paid by employers; old-age

benefit scheme 5.7% (3.7% paid by the employer; and 2% by the employee); healthcare protection scheme 5% (4% paid by employer, 1% paid by employee); and, a pension scheme 8% (4% paid by the employee and 4% by the employer).

8. There are concerns that targeted cash transfer programmes may discourage work. Banerjee et al. (2017[59]) re-analysed the data from seven randomized controlled trials of government-run cash transfer programmes in six developing countries throughout the world, and found no systematic evidence that cash transfer programmes discourage work.

References

ADB (2018), *Asian Development Outlook (ADO) 2018: How technology Affects Jobs.*, Asian Development Bank, Manila, *www.adb.org/publications/asian-development-outlook-2018-how-technology-affects-jobs* (accessed on 02 August 2018). [2]

ADB (2016), *Social Protection for Informal Workers in Asia*, Asian Development Bank, Manila, *www.adb.org/sites/default/files/publication/203891/sp-informalworkers-asia.pdf* (accessed on 10 August 2018). [12]

ADB (forthcoming), *The Social Protection Indicator – Results for Asia and the Pacific in 2015*, ADB, *https://spi.adb.org/spidmz/*. [15]

Adema, W., P. Fron and M. Ladaique (2014), "How much do OECD countries spend on social protection and how redistributive are their tax/benefit systems?", *International Social Security Review*, Vol. 67/1, pp. 1-25, *http://dx.doi.org/10.1111/issr.12028*. [14]

Adema, W., P. Fron and M. Ladaique (2011), "Is the European Welfare State Really More Expensive?: Indicators on Social Spending, 1980-2012; and a Manual to the OECD Social Expenditure Database (SOCX)", *OECD Social, Employment and Migration Working Papers*, No. 124, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kg2d2d4pbf0-en*. [5]

Arntz, M., T. Gregory and U. Zierahn (2016), "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis", *OECD Social, Employment and Migration Working Papers*, No. 189, OECD Publishing, Paris, *https://dx.doi.org/10.1787/5jlz9h56dvq7-en*. [45]

Australian Government (2018), *Fair Work Commission | Australia's national workplace relations tribunal*, *www.fwc.gov.au/* (accessed on 24 September 2018). [41]

Australian Government (2018), *Fair Work Ombudsman*, *www.fairwork.gov.au/* (accessed on 24 September 2018). [43]

Banerjee, A. et al. (2017), "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs", *The World Bank Research Observer*, Vol. 32/2, pp. 155-184, *http://dx.doi.org/10.1093/wbro/lkx002*. [80]

Banerjee, S. (2016), *Digital Dividends Aadhaar: Digital Inclusion and Public Services in India*, *http://pubdocs.worldbank.org/en/655801461250682317/WDR16-BP-Aadhaar-Paper-Banerjee.pdf* (accessed on 20 August 2018). [54]

Barrientos, A. (2016), *Social assistance in developing countries.*, Cambridge Univ Press, *http://admin.cambridge.org/sb/academic/subjects/politics-international-relations/political-economy/social-assistance-developing-countries* (accessed on 23 August 2018). [79]

Bassanini, A. and E. Caroli (2014), "Is Work Bad for Health? The Role of Constraint vs Choice", *IZA Disussion Papers*, No. 7891, Forschungsinstitut zur Zukunft der Arbeit, *https://basepub.dauphine.fr/bitstream/handle/123456789/12483/dp7891.pdf?sequence=3&isAllowed=y* (accessed on 04 September 2018). [35]

BBC (2018), *Aadhaar: India top court upholds world's largest biometric scheme – BBC News*, *www.bbc.com/news/world-asia-india-44777787* (accessed on 27 September 2018). [51]

Berg, J. (2016), "Income security in the on-demand economy: Findings and policy lessons from a survey of crowdworkers", *Conditions of Work and Employment Series* , No. 74, ILO, *www.ilo.org/publns* (accessed on 23 October 2018). [66]

Bonnet, F. (2019), *Facts on Business Informality*, ILO. [33]

Breitkreuz, R. et al. (2017), "The Mahatma Gandhi National Rural Employment Guarantee Scheme: A Policy Solution to Rural Poverty in India?", *Development Policy Review*, *http://dx.doi.org/10.1111/dpr.12220*. [87]

Burgstaller, S. et al. (2017), "*Rethinking Mobility: The 'pay as you go' car: Ride hailing just the start*", Goldman Sachs, *www.gs.com/research/hedge.html* (accessed on 28 September 2018). [57]

Card, D. and J. Dinardo (2002), "Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles", *Journal of Labor Economics*, Vol. 20/4, *http://davidcard.berkeley.edu/papers/skill-tech-change.pdf* (accessed on 25 September 2018). [47]

Cheema, I. et al. (2016), *Evaluation of the Waseela-e-Taleem Conditional Cash Transfer Programme 2016 Benazir Income Support Programme*, Oxford Policy Management, *http://bisp.gov.pk/wp-content/uploads/2017/02/WET-Report.pdf* (accessed on 22 November 2018). [92]

Cheema, I. et al. (2016), *Benazir Income Support Programme Final Impact Evaluation Report,* Oxford Policy Management, *www.opml.co.uk* (accessed on 22 November 2018). [91]

Chen, M. (2012), "The Informal Economy: Definitions, Theories and Policies WIEGO Working Papers", *WIEGO Working Paper,* No. 1, Women in Informal Employment: Globalizing and Organizing (WIEGO), *www.wiego.org/sites/default/files/publications/files/Chen_WIEGO_WP1.pdf* (accessed on 07 August 2018). [26]

Department Statistics of Malaysia (2015), *Road Injury statistics*, *www.miros.gov.my/1/page.php?id=17*. [62]

Eurostat (2016), *European system of integrated social protection statistics – ESSPROS*, Publications Office of the European Union, Luxembourg, *http://ec.europa.eu/eurostat/documents/3859598/7766647/KS-GQ-16-010-EN-N.pdf/3fe2216e-13b0-4ba1-b84f-a7d5b091235f* (accessed on 09 December 2017). [7]

Ford, M. and V. Honan (2017), "The Go-Jek Effect", in Jurriens, E. and Tapsell, R. (ed.), *Digital Indonesia: Connectivity and Divergence*. [59]

Frey, C. and M. Osborne (2013), "The Future of Employment", Oxford Martin School, University of Oxford, *www.oxfordmartin.ox.ac.uk/downloads/academic/future-of-employment.pdf* (accessed on 24 September 2018). [44]

Guardian, T. (2018), *"Modicare": India's PM promises free health care for poorest citizens, World news, The Guardian*, *www.theguardian.com/world/2018/sep/24/modicare-indias-pm-promises-free-health-care-for-half-a-billion-people* (accessed on 01 October 2018). [77]

Holmes, A. (2017), *How big is the transport sharing economy?*, *https://daliaresearch.com/how-big-is-the-transport-sharing-economy/* (accessed on 28 September 2018). [55]

Hussmanns, R. (2004), "Measuring the informal economy: From employment in the informal sector to informal employment", *ILO Working Paper*, No. 53, International Labour Office, Geneva, *www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_079142.pdf* (accessed on 07 August 2018). [27]

ILO (2018), *Informality and non-standard forms of employment*, ILO, *www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_646040.pdf* (accessed on 27 November 2018). [67]

ILO (2018), *Social protection for older persons: Policy trends and statistics 2017-19*, ILO, Geneva, *www.ilo.org/publns* (accessed on 28 September 2018). [84]

ILO (2018), *Women and men in the informal economy: a statistical picture – third edition*, International Labour office, Geneva, *www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf* (accessed on 07 August 2018). [28]

ILO (2017), *World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals*, International Labour Organization, Geneva, *www.social-protection.org/gimi/gess/RessourcePDF.action?ressource.ressourceId=54887* (accessed on 03 September 2018). [9]

ILO (2016), *Child Money Programme Mongolia,* ILO, Geneva, *www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-beijing/documents/publication/wcms_534930.pdf* (accessed on 28 September 2018). [81]

ILO (2016), *World Employment and Social Outlook 2016: Transforming jobs to end poverty*, ILO, Geneva, *www.ilo.org/global/research/global-reports/weso/2016-transforming-jobs/WCMS_481534/lang--en/index.htm* (accessed on 27 November 2018). [30]

ILO (2005), *ILO Social Security Inquiry*, *www.socialsecurityextension.org/gimi/gess/RessourcePDF.do?ressource. ressourceId=6622* (accessed on 09 December 2017). [8]

ILR School and Future of Work Initiative (2018), *Gig Economy Data Hub*, Cornell University. Industrial and Labor Relations School, The Aspen Institute, Future of Work Initiative, *www.gigeconomydata.org/* (accessed on 27 September 2018). [64]

Jonasson, E. (2012), "Government Effectiveness and Regional Variation in Informal Employment", *Journal of Development Studies*, Vol. 48/4, pp. 481-497, *http://dx.doi.org/10.1080/00220388.2011.615922*. [31]

Jütting, J. and J. De Laiglesia (2009), *Is Informal Normal? Towards More and Better Jobs in Developing Countries*, *www.oecd.org/publishing/corrigenda* (accessed on 22 November 2018). [29]

Katz, L. and A. Krueger (2016), "The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015", *NBER Working Paper*, No. 22667, National Bureau of Economic Research, Cambridge, MA, *http://dx.doi.org/10.3386/w22667*. [65]

Limer, E. (2014), *My Brief and Curious Life As a Mechanical Turk, https://gizmodo.com/my-brief-and-curious-life-as-a-mechanical-turk-1587864671* (accessed on 27 September 2018). [50]

Marciano, J. (2016), *Who Runs the World? Uber!*, *www.similarweb.com/blog/worldwide-ride-hailing-apps*. [56]

Mumtaz, Z. and P. Whiteford (2017), "Social safety nets in the development of a welfare system in Pakistan: An analysis of the Benazir Income Support Programme", *Asia Pacific Journal of Public Administration*, Vol. 39/1, pp. 16-38, *http://dx.doi.org/10.1080/23276665.2017.1290902*. [90]

Muralidharan, K., P. Niehaus and S. Sukhtankar (2017), *Direct Benefits Transfer in Food Results from One Year of Process Monitoring in Union Territories*, UC San Diego, *http://econweb.ucsd.edu/~kamurali/papers/Other%20Writing/20170905_UT_DBT_Report.pdf* (accessed on 20 August 2018). [53]

Muralidharan, K., P. Niehaus and S. Sukhtankar (2016), "Building State Capacity: Evidence from Biometric Smartcards in India†", *American Economic Review*, Vol. 106/10, pp. 2895-2929, *http://dx.doi.org/10.1257/aer.20141346*. [52]

Nayab, D. and S. Farooq (2014), "Effectiveness of Cash Transfer Programmes for Household Welfare in Pakistan: The Case of the Benazir Income Support Programme", *The Pakistan Development Review*, Vol. 53/2, pp. 145-174, *www.pide.org.pk/pdf/PDR/2014/Volume2/145-174.pdf* (accessed on 01 October 2018). [89]

Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, No. 202, OECD Publishing, Paris, *http://dx.doi.org/10.1787/2e2f4eea-en*. [46]

OECD (2019), *The Social Expenditure Database (SOCX) Manual – 2019 Edition*, *www.oecd.org/social/expenditure.htm*. [6]

OECD (2018), *Economic Outlook for Southeast Asia, China and India 2018 Fostering Growth Through Digitalisation*, OECD Publishing, Paris, *http://dx.doi.org/10/9789264286184-en*. [3]

OECD (2018), *Good Jobs for all in a Changing World of Work: The OECD Jobs Strategy – Meeting of the OECD Council at Ministerial Level,* OECD, Paris, *www.oecd.org/mcm/documents/C-MIN-2018-7-EN.pdf* (accessed on 06 August 2018). [24]

OECD (2018), *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy,* OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264308817-en*. [25]

OECD (2018), *OECD Economic Outlook, Volume 2018, Issue 1,* OECD Publishing, Paris, *https://dx.doi.org/10.1787/eco_outlook-v2018-1-en*. [1]

OECD (2018), *OECD Economic Surveys: Indonesia 2018,* OECD Publishing, Paris, *https://dx.doi.org/10.1787/eco_surveys-idn-2018-en*. [76]

OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264301665-en*. [21]

OECD (2018), *Putting faces to the jobs at risk of automation, www.oecd.org/employment/future-of-work.htm* (accessed on 06 August 2018). [18]

OECD (2018), *Revenue Statistics 2018,* OECD Publishing, Paris, *https://dx.doi.org/10.1787/rev_stats-2018-en*. [10]

OECD (2018), *Revenue Statistics in Asian and Pacific Economies*, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264308091-en*. [11]

OECD (2018), *The Future of Social Protection: What works for non-standard workers?*, OECD Policy Brief on the Future of Work, Paris, *www.oecd.org/employment/future-of-work.htm* (accessed on 24 September 2018). [19]

OECD (2018), *The Future of Social Protection: What Works for Non-standard Workers?*, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264306943-en*. [48]

OECD (2017), *A Decade of Social Protection Development in Selected Asian Countries*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264272262-en*. [74]

OECD (2017), *Basic income as a policy option: Can it add up?*, OECD, Paris, *www.oecd.org/social/Basic-Income-Policy-Option-2017.pdf* (accessed on 20 November 2018). [69]

OECD (2017), *Future of Work and Skills*, OECD, Paris, *www.oecd.org/els/emp/wcms_556984.pdf* (accessed on 06 November 2018). [17]

OECD (2017), *Revenue Statistics in Asian Countries 2017: Trends in Indonesia, Japan, Kazakhstan, Korea, Malaysia, the Philippines and Singapore*, OECD Publishing, Paris, *https://dx.doi.org/10.1787/9789264278943-en*. [13]

OECD (2016), *OECD Employment Outlook 2016*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/empl_outlook-2016-en*. [36]

OECD (2015), *Focus on – Minimum wages after the crisis: Making them pay*, *www.oecd.org/social/Focus-on-Minimum-Wages-after-the-crisis-2015.pdf* (accessed on 25 September 2018). [39]

OECD (2015), *In It Together: Why Less Inequality Benefits All*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264235120-en*. [38]

OECD (2015), *OECD Employment Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/empl_outlook-2015-en*. [23]

OECD (2014), *OECD Employment Outlook 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/empl_outlook-2014-en*. [22]

OECD (2012), *Reducing opportunities for tax non-compliance in the underground economy*, OECD, Paris, *www.oecd.org/tax/forum-on-tax-administration/publications-and-products/sme/49427993.pdf* (accessed on 22 November 2018). [34]

OECD (2011), *OECD Employment Outlook 2011*, OECD Publishing, Paris, *https://doi.org/10.1787/19991266*. [85]

OECD (2009), *OECD Reviews of Labour Market and Social Policies: Chile 2009*, OECD Reviews of Labour Market and Social Policies, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264060616-en*. [88]

OECD (2000), *Pushing Ahead with Reform in Korea*, OECD Publishing, Paris, *www.oecd.org* (accessed on 28 September 2018). [73]

Pathways for Prosperity Commission (2018), *Charting Pathways for Inclusive Growth – From Paralysis to Preparation*, *www.click.co.uk* (accessed on 15 October 2018). [20]

Pesole, A. et al. (2018), *Platform Workers in Europe Evidence from the COLLEEM Survey*, European Union, Joint Research Centre, *http://dx.doi.org/10.2760/742789*. [49]

Prabowo, Y. (2018), *Uber, Go-Jek, Grab: What do People in Indonesia Actually Want from Ride-Hailing Apps?*, ecommerceIQ, *https://ecommerceiq.asia/cp-ride-hailing-apps-in-indonesia/* (accessed on 27 September 2018). [61]

Prinja, S. et al. (2017), "Impact of Publicly Financed Health Insurance Schemes on Healthcare Utilization and Financial Risk Protection in India: A Systematic Review", *PLOS ONE*, Vol. 12/2, pp. e0170996, *http://dx.doi.org/10.1371/journal.pone.0170996*. [78]

Puri, R. (2017), "India's National Food Security Act (NFSA): Early Experiences", *Lansa Working Paper Series*, No. 14, *www.lansasouthasia.org* (accessed on 01 October 2018). [82]

Purnell, N. (2016), *Uber Rival Grab Gains Ground in Southeast Asia*, wall Street Journal, *www.wsj.com/articles/uber-rival-grab-seizes-lead-in-southeast-asia-146762050*. [58]

Queisser, M., A. Reilly and Y. Hu (2016), "China's pension system and reform: An OECD perspective", *Economic and Political Studies*, Vol. 4/4, pp. 345-367, *http://dx.doi.org/10.1080/20954816.2016.1251134*. [71]

Rodrik, D. (2015), "Premature Deindustrialization", *NBER Working Paper Series*, No. 20935, National Bureau of Economic Research, *www.nber.org/papers/w20935* (accessed on 22 October 2018). [16]

Salditt, F., P. Whiteford and W. Adema (2008), "Pension reform in China", *International Social Security Review*, Vol. 61/3, pp. 47-71, *http://dx.doi.org/10.1111/j.1468-246X.2008.00316.x*. [70]

Social Security Organisation of Malaysia (2018), *Self-Employed Employment Injury Scheme*, *www.perkeso.gov.my/index.php/en/our-services/benefits/self-employed-employment-injury-scheme-taxi* (accessed on 27 September 2018). [63]

Sonalde, D., P. Vashishtha and O. Joshi (2015), *Majatma Gandhi National Rural Employment Guarantee Act: A Catalysus for Rural Transformation*, *www.esocialsciences.org/Articles/show_Article.aspx?qs=ebKFqzOKbXo7se0+tFTcFgB/Qg9lMx8H7EcQyowRRVbAjv2BNHkaakHzcZy9fkFLyG2jMM/EOSe03zMtemCj/anx+TrNLBXx/i6DN60i0h8=*. [86]

Statistics Korea (2017), *Statistics Korea Portal*, *www.index.go.kr/main.do?cate=7* (accessed on 16 December 2017). [75]

Stewart, A. et al. (2016), *Creighton and Stewart's labour law*, The Federation Press, *www.federationpress.com.au/bookstore/book.asp?isbn=9781760020552*. [42]

University of Manchester (2018), *Social Assistance Explorer*, *www.social-assistance.manchester.ac.uk/* (accessed on 28 September 2018). [83]

Weng, X. (2015), "The rural informal economy – Understanding drivers and livelihood impacts in agriculture, timber and mining", *IIED Working Paper*, International Institute for Environment [32] and Development, *www.iied.org@iiedwww.facebook.com/theIIEDhttp://pubs.iied.org/16590IIED* (accessed on 23 October 2018).

Whiteford, P. (2017), *Social security and welfare spending in Australia: Assessing long-term trends*, Australian National University, Crawford School of Public Policy TTPI Tax and Transfer Policy Institute, *www.anu.edu.au* (accessed on 25 September 2018). [37]

WHO Global Health Observatory (2018), *Road traffic injuries*, WHO, *www.who.int/violence_injury_prevention/road_traffic/en/* (accessed on 27 September 2018). [60]

World Bank Group (2018), *The State of Social Safety Nets*, World Bank Group, *https://openknowledge.worldbank.org/bitstream/handle/10986/29115/9781464812545.pdf?sequence=5&isAllowed=y* (accessed on 15 October 2018). [68]

World Bank Group (2018), *World Development Report 2019: The Changing Nature of Work.*, Washington, DC, World Bank Group, *https://openknowledge.worldbank.org/handle/10986/30435* (accessed on 06 November 2018). [4]

Wright, C. and R. Lansbury (2016), "Employment relations in Australia --", in Bamber G.J., Lansbury R.D., W. (ed.), *International and comparative employment relations: National regulation, global changes*, Allen & Unwin/Sage, London. [40]

Zhu, H. and A. Walker (2018), "Pension system reform in China: Who gets what pensions?", *Social Policy & Administration*, *http://dx.doi.org/10.1111/spol.12368*. [72]

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