The Global Risks Report 2017
Subject topic: The Future of Social Protection Systems
2.3: The Future of Social Protection Systems

Social protection systems consist of policies and programmes designed to reduce poverty and vulnerability by helping individuals manage key economic and social risks, such as unemployment, exclusion, sickness, disability and old age. Although individuals bore virtually all risk for their own financial well-being during the First Industrial Revolution (beginning in 1784), the introduction of social protections and risk-sharing among individuals, employers and governments became increasingly prevalent in the developed world over the course of the Second (beginning in 1870) and Third (1969) Industrial Revolutions.

The Fourth Industrial Revolution is threatening to bring this evolution full circle: severely underfunded state social systems are at a breaking point, employers are backing away from traditional employment models and social protection contributions, and individuals once again are shoulderining a larger share of the risks. As longevity trends continue to increase and the threat of the automation of jobs becomes very real, the sharing of this risk needs careful rebalancing in order to minimize potential human suffering.

The Future of Work and Other Challenges Impacting Social Protection

The Fourth Industrial Revolution is fundamentally changing the ways that people work and live in three main ways. First, it is un tethering some types of work from a physical location, making it easier to remotely connect workers in one region or country to jobs in another — but also making it less clear which set of employment laws and taxes apply, creating greater global competition for workers, potentially weakening employment protections and draining public social protection coffers.

Second, human labour is being displaced by automation, robotics and artificial intelligence. Opinions differ on the extent of what is possible: Frey and Osborne’s (2013) study found that 47% of US employment is at high risk of being automated over the next two decades, 1 while a 2016 study of 21 Organisation for Economic Co-operation and Development (OECD) countries, using a different methodology, concluded that only 9% of jobs are automatable. 2 In general, lower-skilled workers are more likely to see their jobs disappear to automation, increasing their vulnerability and exacerbating societal inequality. 3

Finally, the nature of the contract between employer and employee is changing, at the same time that the move to a sharing and collaborative economy increases the prevalence of jobs that fall outside the standard employment contract model. The shift has some positive implications for workers, as it potentially offers more control over when and whether to work and opportunities to supplement their incomes — renting out a room through Airbnb, for example, or driving part-time for a service such as Uber.

But this shift also has negative implications: it means workers can expect more volatility in their earnings and leaves them without the employment protections enjoyed by “standard” employees. The rise of zero-hour contracts is one manifestation of this change. Some governments, such as the government of New Zealand, have already banned their use. New employment models also hinder the collection of taxes from both employer and worker, reducing the amount governments have available to fund social protections (see Box 2.3.1).

These three transformations are coinciding with four seismic challenges. First, demographic pressures are further straining formal and informal safety nets. The OECD expects old-age dependency ratios in member countries to double by 2075 as populations age and birth rates fall. 4

Although this is primarily a problem in the developed world, China’s elderly population is projected to almost double by 2030, and its fertility rate has dropped from 5.7 in 1969 to 1.6 today. 5 The result will be a tripling of China’s elderly dependency ratio by 2050. 6 The UN expects improvements in longevity and advances in healthcare treatments to double aggregate expenses of the elderly by 2050. 7 These factors put intense pressure on pension and healthcare systems, and are spurring countries to increase retirement ages and encourage older workers to remain economically active for longer.

Second, persistently low interest rates are eating into pension value and exacerbating the funding gap. Chile’s pension system, for example, currently pays a replacement income of less than 42% for most retirees, while longevity has increased by almost 15 years since 1980. By some calculations, Chileans may need to increase their pension contributions to 18% of salary for men and 14% for women just to maintain the status quo. 8 Without such supplements, increased life expectancy could see future generations’ pensions reduced by almost half.

Note

1 See George and Chattopadhyay 2015.

Box 2.3.1: The “Nonstandard Worker”: A Working Definition

Although there is no agreed-upon definition of a “nonstandard worker”, making it difficult to track and compare numbers globally, the International Labour Organization reports that a vast number of individuals participate in nonstandard work arrangements of one kind or another: one-fifth of China’s workforce holds “temporary” jobs; roughly 11% of the workforce in the OECD countries is in temporary employment; and a significant proportion of the workforce in emerging economies such as the Philippines (42%) and Vietnam (68%) have non-agricultural informal jobs without basic social or legal protections or employment benefits. 1
Third, mass migration of labour poses challenges for social protection. Migration is generally seen as a net economic positive: the OECD estimated that immigration in 17 OECD countries from 2007 to 2009 added 0.35% to GDP on average (0.46% in the United Kingdom). However, large and sudden inflows of people can put additional and unpredictable strain on social systems and resources. In Europe, for example, the influx of over 1 million migrants in 2015 was more than four times the number in 2014. The United Kingdom’s recent Brexit decision has been widely perceived as representing a backlash to the uncontrolled movement of labour. China has started requiring foreign workers to contribute to social security, although the rules on how pension benefits can be “cashed out” remain unclear.

Finally, increasing levels of wealth and income inequality in many countries across the developed and developing world are putting even greater pressure on fragile or inadequate social protections, particularly for vulnerable lower-income groups. In China, the wealthiest 1% of households own a third of the country’s wealth, while in India, the top 1% grew its share of the country’s wealth from almost 37% in 2000 to 53% in 2016. The share of income going to workers performing low-skill jobs is decreasing: in the United States, it declined from 38% to 23% between 1968 and 2013. Inability to address these challenges adequately through social security systems could have explosive impacts on social stability (Box 2.3.2).

Box 2.3.2: Advanced versus Emerging Economies: Differing Challenges and Opportunities

Advanced and emerging economies face different challenges and opportunities for developing social protections that support economic growth and social stability in the context of the Fourth Industrial Revolution.

Advanced economies have had the resources to create layered social safety nets, with costs shared across individuals, employers and government, resulting in many more people than in the developing world enjoying some level of protection today. For example, the US Social Security programme, funded by employers and workers, was providing benefits to 60 million people at the end of 2015, while Medicare and Medicaid covered healthcare for 55 million. But such programmes were not designed for the extreme demographic shifts, chronic healthcare challenges, and the effects of the Fourth Industrial Revolution that are reshaping societies. Advanced economies face the challenge of reforming them without incurring a crippling debt burden.

Many emerging market economies arguably have an opportunity to avoid these pitfalls, potentially leapfrogging their wealthier neighbours by formulating sustainable social protection systems that are responsive to the risks of the Fourth Industrial Revolution. Brazil, for example, has implemented the largest cash transfer programme in the world, the Bolsa Familia, which today reaches 55 million of its poorest citizens, costs 30% less per person than more traditional aid programmes, and has helped lift 36 million people out of extreme poverty.

Nonetheless, the varying demographic profiles of growth economies pose different challenges. Asia Pacific is the world’s fastest ageing region, with a 71% increase in the number of people aged 65 years and above projected by 2030. Singapore’s elderly population will rise from 11% to 20% in the next 15 years; in France, the same shift took 49 years. A rapidly contracting workforce and reallocation of resources towards elderly healthcare weakens these economies’ fiscal position and erodes the adequacy and sustainability of pension and social security systems. Conversely, India has significant potential to reap a demographic dividend, but its limited capacity to create employment poses a serious challenge: between 1991 and 2013 the size of the working-age population increased by 300 million, yet the number of employed only increased by 140 million. By 2017, a staggering 93% of Indians will hold jobs without social security benefits. Solutions are being sought, as the government launches three mega social security schemes – accident coverage, life insurance and pensions.

Sub-Saharan Africa is growing faster than any other region, with an average birth rate of five to seven children per mother and little effective birth control. This scale of growth undermines efforts to reduce poverty or to create jobs, and youth unemployment is high – 50% in South Africa. The ability of nations in Sub-Saharan Africa to create sustainable safety nets will require both political will and economic activity sufficient to create the necessary resources.

Notes
1 Tepperman 2016.
2 Marsh & McLennan Companies’ APRC 2016.
3 UNDP 2016.
4 Waghmare 2016.
5 UNICEF 2014.

New systems will need to address gaps in social protection across typical life events including periods of education, raising families, work including career gaps, retirement, and later elder care (see Figure 2.3.1). Systems will need to provide sufficient flexibility to support individuals following substantially different life and career paths while maintaining some inter-group equity, and bolster individual resilience.

A sustainable social protection system needs to address the changes and challenges described above, ensuring fair payments from employees and employers during times of earning to fund payments that ensure appropriate income support when earnings are not possible. New social protection systems could include a range of approaches, with selected innovations set out below.

1. Untethering health and income protection from individual employers or jobs

Intermittent, part-time and informal employment or self-employment, with frequent career changes, is becoming the norm in developed as well as developing economies, but most pension systems are still built on the model of continued employment throughout life. Health benefits are provided irrespective of employment in most European nations and Canada, but continue to be largely tied to employment in the United States.

Potential responses include creating portable health and pension plans to maintain coverage as workers move geographically and between employers, or between periods of formal employment – by an employer – and periods of unemployment or self-employment; and ensuring that risk and responsibility for social protection continue to be shared by the state, employer and employee. Employers’ contributions to funding social protections could be recast to benefit society as a whole rather than their employees only.

2. Revamping pension models in line with the new realities of work and ageing

Typically, pension systems, whether state or occupational, are diminishing in value because of worsening tax concessions, a lower interest-rate environment,

![Figure 2.3.1: A Whole-of-Life Approach to Social Protection Needs in the Fourth Industrial Revolution Era](image-url)
increasing life expectancy, and increasing regulation and complexity. Compounding the problem is the shortened lifespan of companies, which is undermining the sustainability of funds from company-sponsored pension systems.

One potential response is to introduce simpler and more flexible plans linked to better advice and guidance. Products need to be more accessible and flexible to accommodate unique retiree needs, providing a secure income and the flexibility to access capital when needed for life events other than retirement. They need to incorporate affordable options that allow individuals to manage longevity and provide better information about the need to finance later life, with robo-advice likely to become the norm.

Another response is for employers to provide pensions on an opt-out only basis with default asset allocations, so the default position is that employees’ contribution and investment levels should create sufficient income in later life.

3. Implementing policies to increase “flexicurity”
The changing needs of businesses and individuals in the Fourth Industrial Revolution require giving employers access to a flexible labour force while providing individuals with the security of a safety net and active help in securing employment.

One way to do this is to increase public spending on active labour market policies (ALMPs) that either reduce the cost of labour or help people find jobs. For example, Denmark brings together more flexible rules for hiring and firing employees and self-employed individuals in the Fourth Industrial Revolution, attracting growing interest around the world. The government of Finland is considering a pilot programme that would guarantee citizens a partial basic income whether or not they work. Other recent experiments include a pilot programme funded by UNICEF in eight villages in Madhya Pradesh, India, in which every man, woman, and child was provided a monthly payment without conditions for 18 months. Improvements in the pilot villages, compared with “control” villages, were seen in the areas of sanitation, access to drinking water, food sufficiency, number of hours worked, children’s nutrition, and enrolment levels in secondary schools, particularly for girls. Among the possible responses from government and employers are providing incentives for deferring retirement, supporting senior job seekers, and allowing for partial pension payments while a worker in retirement works part-time. In Japan, the private sector—hobbled by the country’s severe shortage of young workers—is leading the effort to push back retirement, with Honda raising its retirement age to 65, nine years in advance of the government’s planned countrywide increase. Japan’s government invests in connecting people over 60 to jobs through specially designated job resource centres. The United Kingdom offers government workers the option of increasing their state pension in exchange for deferring retirement, with an increase of almost 6% for each year deferred.

As an ageing workforce brings the challenge of higher disability levels, another response is to make work compatible with increasing levels of disability: the EU Labour Force Survey (2011) found that 48% of those reporting a longstanding health problem were aged 55–64, and only 12% were aged 15–24. In Germany, which faces one of the world’s most rapidly ageing and shrinking populations, employers such as BMW are designing plants with the physical needs and limitations of older workers in mind. In Japan, Toyota is making work more manageable for older workers by reducing the hours of retired re-hires.

and provide personalized pathways through the social protection system rather than offering distinct protections for different types of labour. A battle around this issue is already underway as, for example, Uber drivers challenge their status as self-employed independent contractors in the UK courts.

4. Implementing alternative models of income distribution
There are an increasing number of proposals for fundamentally new models of income distribution, which do not tie welfare benefits to being out of work. These include a negative income tax, in which people earning below a certain threshold receive supplemental pay from the government; wage supplements, in which the government makes up the difference between what a person earns and a recognized minimum income; and a universal basic income paid to all members of society regardless of their means. Such income distribution systems would make it much easier for people to take on part-time work or intermittent work as desired.

Voters in Switzerland recently rejected a proposal for a universal basic income, but the idea is attracting growing interest around the world. The government of Finland is considering a pilot programme that would guarantee citizens a partial basic income whether or not they work. Other recent experiments include a pilot programme funded by UNICEF in eight villages in Madhya Pradesh, India, in which every man, woman, and child was provided a monthly payment without conditions for 18 months. Improvements in the pilot villages, compared with “control” villages, were seen in the areas of sanitation, access to drinking water, food sufficiency, number of hours worked, children’s nutrition, and enrolment levels in secondary schools, particularly for girls.

5. Providing greater support for working into old age
Increasing longevity combined with reduced pensions means that many people will need to work into later life: retirement will become more of a process than an event, with part-time or self-employment continuing possibly well into one’s 80s. Typically, women will be even more financially disadvantaged in retirement than men because women live longer and have accrued lower pensions because of career breaks and unequal pay. Reskilling and lifelong learning opportunities are one policy implication, but social protection systems will also need to be more flexible.

Equalizing rights and benefits for employees and self-employed would incentivize entrepreneurship and provide personalized pathways through the social protection system rather than offering distinct protections for different types of labour. A battle around this issue is already underway as, for example, Uber drivers challenge their status as self-employed independent contractors in the UK courts.
The Time to Act Is Now

As the Fourth Industrial Revolution accelerates, many individuals – including lower-skilled workers more easily displaced by automation, part-time and self-employed workers without access to employer-sponsored protections, and older workers and retirees without sufficient savings or pensions – face a potential crisis. There is an urgent need to develop a comprehensive and interconnected set of options that adapt social protection to new-style employment patterns, reskill workers, and respond to the opportunities and threats posed by increasing longevity.

A failure to take action risks both the deterioration of government finances and the exacerbation of social unrest, especially at this time of slow economic growth and widening inequality. The transition from current to new models will be fragmented and slow, given political and financial challenges, and will require collaboration across all sectors of society – public, private and civil society. That makes it all the more imperative to begin now.

Endnotes

1 Frey and Osborne 2013.
2 Arntz, Gregory, and Zierahn 2016.
3 Arntz, Gregory, and Zierahn 2016.
5 See the UN DESA Population Division of the World Population Prospects, the 2015 Revision, at https://esa.un.org/unpd/wpp/Graphs/DemographicProfiles/
6 Zhai 2015.
8 FIAP 2011.
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