
ESS – EXTENSION OF SOCIAL SECURITY

**Universal Basic Income proposals
in light of ILO standards:
Key issues and global costing**

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Abstract

This paper reviews proposals for a Universal Basic Income (UBI) in light of ILO standards. Some UBI proposals have the potential to advance equity and social justice, while others may result in a net welfare loss. The ILO Social Protection Floors Recommendation (No. 202) includes a number of principles which are highly relevant to guide the debate on UBI, namely: (i) adequacy and predictability of UBI benefits to ensure income security, set at least at the national poverty line; (ii) social inclusion, including of persons in the informal economy; (iii) social dialogue and consultation with stakeholders; (iv) enactment of national laws regulating UBI entitlements, including indexation of benefits; (v) coherence with other social, economic and employment policies, and (vi) sustainable and equitable financing. The impact of a UBI on poverty and inequality depends on the level of benefits and the source of funding. Based on these principles, the paper shows that some models of UBI can be in accordance with ILO standards, while others are not.

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Executive summary

Universal Basic Income (UBI) is being proposed as a possible solution to the rise in inequality, job and income insecurity associated with changing forms of work and globalization. There are many UBI proposals. Proposals range from minimal budget-neutral stipends to larger UBI proposals for the advancement of social justice. Few people grasp the differences between UBI proposals aiming at redistribution/equity and neo-liberal or libertarian UBI proposals aiming at replacing the welfare state with a minimalistic safety net, and their respective implications.

The paper reviews key issues in light of ILO standards. The ILO Social Protection Floors Recommendation, 2012 (No. 202) includes a number of principles which are highly relevant to guide the debate on UBI, namely: (i) adequacy and predictability of UBI benefits to ensure income security, set at least at the national poverty line; (ii) social inclusion, including of persons in the informal economy; (iii) social dialogue and consultation with stakeholders; (iv) enactment of national laws regulating UBI entitlements, including indexation of benefits; (v) coherence with other social, economic and employment policies, and (vi) sustainable and equitable financing. Based on these principles, the paper shows that some models of UBI can be in accordance with ILO standards, while others are not.

The impact of a UBI on poverty and inequality depends on the level of benefits and its capacity to meet people's needs, as well as the source of funding. As a UBI should provide a basic standard of living for everyone, including those without any other source of income, the paper assesses the costs of a UBI based on nationally-determined poverty lines, in accordance with ILO recommendations for income security. If we consider that children were to receive half the benefit of an adult person, the cost of UBI would range from 17.9 per cent of GDP in Middle East and North Africa to about 25 per cent of GDP in Asia, Europe and Latin America - the lion's dent share being in Sub-Saharan Africa where a UBI would cost 50.3 per cent of GDP.

To ensure net redistributive impacts, a UBI must use non-regressive sources of funding, which implies that it should not be financed by taxing households or depriving them from other social benefits. Financing options should be progressive and sustainable in time, and could include a mix of the following: (i) re-allocating public expenditures, such as energy subsidies or the gains from lesser administrative costs of UBI as compared to targeted social assistance benefits; (ii) increasing tax revenues, improving compliance and raising new taxes such as on financial transactions or on the gains from technological change; for example, a small set of levies and taxes to financial activity would provide up to 23.2 per cent of GDP in high-income countries to finance UBI; (iii) eliminating illicit financial flows, including tax evasion, money laundering and corruption, estimated at 5 per cent of global GDP; (iv) managing or restructuring existing debt; and (v) aid: while some may say that there is no development aid for UBI, it is a question of priorities; a UBI for low-income countries that would eliminate poverty overnight in those countries would cost only 0.68 per cent of global GDP, this is, 3 per cent of the amount announced by G20 governments to rescue the financial sector in 2009 or one-fifth of the World's military expenditure.

A number of regressive UBI financing proposals are not in line with ILO standards and will lead to further inequalities. Some budget-neutral UBI neoliberal proposals suggest a low-level safety net at the cost of the complete elimination of existing social security systems, including ceasing employer contributions, sometimes also cutting other social expenditures. Replacing public pensions and other social insurance, as well as other public programmes, by a modest UBI accompanied by private insurance, is a net social loss that will exacerbate income and gender inequalities. From a financing perspective, the net winners of regressive UBI proposals tend to be employers, who would not pay social security contributions (the so-called "labour taxes"). For a UBI proposal to be equitable, it needs to

be redistributive, financed by progressive taxation including from corporations, and other sources explained in this paper. While a UBI could possibly replace general social assistance and unemployment benefits, as in the Finnish pilot, UBI should not replace main public social insurance and programmes for those with special needs (e.g. additional support for disability-related costs). A UBI can provide a basic level of income security, to be complemented by higher levels of protection. Forward-looking UBI proposals complement – never displace – the budget for core social security, health, education, active labour market policies and other crucial social services. A UBI by itself is insufficient to provide a stand-alone solution to redress inequalities; to the contrary, unless embedded into a coherent policy framework that takes broader factors into account, a UBI may exacerbate inequality and damage inclusive growth and social justice.

In a nutshell, among the multiplicity of UBI proposals, some have the potential to advance equity and social justice, and others do not. Governments that consider implementing a UBI should carefully examine all options, including the progressivity or regressivity of the proposed measures, the winners and losers, and the potential risks and trade-offs. Measures that are regressive or jeopardize inclusive development should always be avoided. National dialogue with employers and workers as well as civil society, academia, and supported by United Nations agencies and others, is fundamental to generate a broad political consensus for UBI and define an optimal policy mix to reduce inequalities, support inclusive development and advance social justice.

Abbreviations

GDP	Gross Domestic Product
GMI	Guaranteed Minimum Income
ILO	International Labour Office/Organization
IMF	International Monetary Fund
IT	Information Technology
OECD	Organization for Economic Cooperation and Development
PDS	Public Distribution System
SPF	Social Protection Floor
UBI	Universal Basic Income
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNICEF	United Nations Children's Fund
VAT	Value Added Tax

1. Universal Basic Income: A tool for social justice or a strategy to dismantle social security?

Universal Basic Income (UBI) is the most radical social protection scheme: an unconditional cash transfer to all citizens/residents in a country. Contrary to public perception, the idea is not new; a number of philosophers since the sixteenth century had advocated for some type of minimum universal income to reduce social problems and to guarantee social justice, such as Juan Vives (1526) or Thomas Paine (1797).¹ In recent decades, the idea has found supporters on both the left and the right of the political spectrum; some suggesting that a UBI could replace current social security systems.²

Today, UBI approaches are discussed as a possible solution to the rise in job and income insecurity associated with changing forms of work in the context of globalization and other megatrends, challenges arising from growing precariousness and informality of employment, as well as from the emergence of new and non-standard forms of employment, as well as possible job losses in the wake of digitalization and automation³ (ILO, 2017b, 2018).

Those in favour of a UBI argue that it provides a regular and predictable income as a universal and unconditional entitlement, thereby reducing poverty and inequality more effectively than means-tested schemes and buffering the possible displacement of jobs by technology (Standing, 2017; Torry, 2016, 2013; Van Parijs and Vanderborght, 2017). It would promote individuals' dignity and human rights by giving them the space to engage in different forms of work that are not rewarded by the market, such as domestic work and volunteering (Healy et al., 2013). Moreover, it is argued that UBI should increase work incentives by reducing the risk of losing benefit entitlements once entering paid employment, whilst reducing the administrative cost and complexity of existing social protection systems (Hirsch, 2015). Some proponents also state that a decent UBI can strengthen the employees' bargaining power by providing an exit option (Wright, 2002; Standing, 2013). Another stream of support comes from some neoliberal economists, who, concerned about the complexity of modern welfare states and large governments, suggest a guaranteed minimum income, e.g. in form of a negative income tax (Friedman, 1962) or in the form of a cash transfer as a way to streamline and limit government programmes and expenditure (Murray, 2008). More recently, similar proposals have resurfaced in the wake of the discussion on the future of work and the "Fourth industrial revolution" (World Economic Forum, 2016). For example, a "small but reliable annuity, too modest to live comfortably but enough to prevent destitution" is being presented as "VC [venture capital] for the people" (Waldman, 2014).

¹ Juan Vives, in *De Subventionem Pauperum (On Subsidies to the Poor*, 1526), proposed universal subsistence minimum for citizens in cities; Thomas Payne, in *Agrarian Justice* (1797), proposed a one-time payment of £15 to everyone reaching the majority of age at 21 and an annual payment of £10 for persons with disabilities and for those aged 50 and above; it is unclear whether earlier concepts included women or not.

² We use the terms "social protection system" and "social security system" interchangeably, to refer to the set of contributory and non-contributory schemes and programmes that together help to realize the human right to social security (see ILO, 2017a).

³ Estimates on the number and type of jobs displaced by automation and artificial intelligence vary widely from estimates of wide-spread job displacements (e.g. Frey and Osborne, 2013) to more moderate views (e.g. Autor, 2015) who argues that the assertion is greatly exaggerated, as many middle-skills jobs involving non-repetitive tasks that are less susceptible to automation.

Critics of a UBI approach question the economic, political and social feasibility of a UBI and its capacity to reduce poverty and inequality (Hirsch, 2015; Macdonald, 2016; OECD, 2017a; Piachaud, 2016). Critics also emphasize that it is too costly to provide everyone, including the high-income earners, with a basic income (Tanner, 2015; Piachaud, 2016; IMF, 2017) and thus doubt the adequacy of benefit levels (Hirsch, 2015; OECD, 2017a; Browne and Immervoll, 2017). Furthermore, opponents consider that a UBI, by providing a steady stream of income, is less efficient in terms of macro-economic stabilization than unemployment insurance (Vandenbroucke, 2017). Moreover, they fear that it may introduce a disincentive to work by delinking income from labour market participation (Bergmann, 2004). Trade unions have also expressed concern that UBI may be used to dismantle the accumulated rights of workers in social security systems, reduce the need for employers to provide wages that meet the needs of workers and their families, and deflect attention from wider questions around workers' rights and the regulation of the productive sphere. Concerns have been additionally expressed that UBI may be used to dismantle welfare states, privatize social security and public services; further, some argue that "UBI isn't an alternative to neoliberalism, but an ideological capitulation to it" (Zamora, 2017). Last, but not least, critics also contend that a uniform amount of UBI cannot adequately respond to specific needs, such as of persons with disabilities and older persons (Christensen, 2009).

1.1. Potential socio-economic impacts of UBI

In the debate about the merits and dangers of a UBI, its potential impacts are often discussed in a controversial way. Actual real-life experience is sparse, and the existing evidence, as far as it exists, elucidates often only few aspects of its potential impacts, but does not provide a full picture of the social and economic implications of the implementation of a UBI. So far, no country has initiated a full-fledged UBI as a main pillar of income support, whose level would be sufficient to guarantee a national social protection floor. Whilst some variants of guaranteed minimum income experiments for people living in poverty have been tested in some low-and middle-income countries, several high-income countries have begun to debate full-fledged UBI approaches or started partial UBI pilots to assess the impacts of specific UBI models.

There have been a number of UBI pilots and experiments that have demonstrated some positive impacts on poverty, on social development outcomes, on economic activity, on work and employment and on gender equality, yet some of the results are ambiguous, and lack a systematic analysis of the financing side. While a number of studies and simulations show impacts on inequality and GDP growth, they do not offer a systematic scrutiny of the larger macro-economic and employment implications, as well as distributive and redistributive outcomes.

1. *Impacts on poverty and inequality:* The UBI pilots in India and Namibia have generated positive impacts on beneficiaries and their families, namely with regard to improved food and nutrition, health outcomes, school enrolment as well as a marked reduction in child labour (Davalá et al., 2015; NANGOF, 2009; Schjoedt, 2016). It is not surprising to see significant positive impacts of a universal cash transfer to poor individuals and households on a number of development outcomes; comparable effects have been recorded for other cash transfer programmes, taking into account that narrowly targeted programmes tend to generate more limited effects than universal cash transfers (e.g. Bastagli et al., 2016).

However, the net redistributive impacts of UBI varies depending on the benefit level and financing source. In theory, a UBI set at the poverty line level, and financed through appropriate mechanisms, could eradicate (absolute) poverty and reduce inequality. Even with a lower level of benefits, such as 25 per cent of the median income, as estimated by the IMF (2017), Gini coefficients measuring inequality would decrease on average by five points, and poverty would be significantly reduced in developing economies, provided that such a UBI were not to be financed by taxes to households

and/or at the cost of social security. Yet, a budget-neutral UBI as described by the OECD (2017a), assuming the reallocation of current social security and other social expenditures to a UBI, to be spread across all children and people of working age, would worsen poverty and inequality by decreasing the average amount received by benefit recipients under the current system and thus increasing the number of lower-income households living below the poverty line (see box 2 below). Inequality would also increase if employers' contributions to social security were cut, as explained below.

2. *Impacts on growth:* A number of studies have looked at the macroeconomic impacts of UBI, with uneven results. Some studies conclude that a UBI could have a significant impact on GDP growth by increasing household consumption (UNCTAD, 2017). Nikiforos et al. (2017), using the Levy Institute macro-econometric model, found that a UBI providing US\$1,000 per month for all adults were to expand the U.S. economy by 12.56 per cent over the baseline over eight years. However, these results hinge on the financing mechanism: if a UBI were to be financed by increasing taxes on households, the model forecasts no effect on the economy, as it gives to households with one hand what it is takes away with the other. Other studies come to different results, for example, the IMF indicates that UBI has little impact on GDP (IMF, 2017). This divergence is because the IMF uses a general equilibrium model to account for the trade-offs between equity and financing, while the Levy Institute's Keynesian model assumes that aggregate demand is low in large part because household income is low; it also incorporates a series of assumptions based on rigorous empirical studies of the micro and macro effects of unconditional cash transfers, taxation, government net spending and borrowing (Nikiforos et al., 2017).
3. *Impacts on inflation:* Minsky (2013) notes that inflationary pressures may result from basic income transfers increasing the aggregate purchasing power without ensuring accompanying supply increases. The Islamic Republic of Iran experienced inflationary pressures in 2010, at a time the government replaced fuel subsidies by a universal cash transfer to households during the period of economic sanctions. In closed economies working full capacity like Iran, any additional demand (resulting from UBI) may lead to higher prices. Such is the case of closed rural regions of Ethiopia, where Sabates-Wheeler and Devereux (2010) also document inflationary effects of targeted cash transfers as traders were slow to adapt to increased demand, or took advantage of their local monopoly power. These are, however, rather exceptional cases; additionally, IMF analysis shows that the main reasons for Iran's inflation were others (IMF, 2014). Evidence from smaller cash transfer programs around the world show no significant effect on inflation, not even in rural areas; on the contrary, cash transfers have positive impacts on local economies (Bastagli et al. 2016; Davis et al.; ILO 2017a).
4. *Impacts on work and employment:* Another controversy around a UBI centres around its effects on work incentives for paid work. Concerns have been expressed that an unconditional income support could cause individuals to stop seeking paid work. On the positive side, it is argued that a UBI increases the reservation wage in the sense that workers may not be forced to work under bad working conditions (Wright, 2002). On the other hand, UBI may also act as a way to reduce the reservation wage (since wages may become only a secondary and complementary source of income), and leading possibly to a multiplication of low wage jobs to top up workers' incomes.⁴ By providing an exit option, a decent UBI may hence strengthen the employees' bargaining power (Standing, 2011). The pilot experiences conducted in Canada, India and Namibia do not reveal significant effects on employment; in Iran, some UBI recipients actually increased their working hours.

⁴ In fact, it is important to carefully assess the combined effects of labour market institutions and income transfers on inequality (Berg, 2015).

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5. *Impacts on gender equality:* The possible effects of a UBI on gender equality have been debated in a controversial way as well. While some observers argue that a UBI would empower women at the household level because of its individual and unconditional nature and reward unpaid work (e.g. Schulz, 2017; Walter, 1989), others fear that a UBI may reinforce women's traditional roles, cement the gendered division of labour and increase the burden of unpaid work (e.g. Orloff, 1990; Robeyns, 2001). In addition, if the implementation of a UBI were to lead to a privatization of public benefits and services, women would be negatively affected.

1.2. A complex debate

The debate on the merits and shortcomings of a UBI approach is complicated by the fact that there is a multiplicity of different proposals sailing under the UBI label. Few people fully grasp the differences between UBI proposals aiming at empowering individuals to lead a life free of worries about income security as a positive utopia, and neo-liberal or libertarian UBI proposals aiming at replacing the welfare state with a minimalistic safety net, and their respective implications. For example, proposals differ widely in terms of proposed benefit levels, often proposing only a small fraction of the national poverty line (see chapter 2 below). Annex I of this paper includes a table which summarizes different proposals and pilots in a common framework.

The wide variety of approaches discussed under the UBI label differ enormously in terms of objectives, proposed benefit levels and the extent to which they are intended to cover basic needs, prospective recipients, costs and financing mechanisms, administrative arrangements, the benefits and services that such a UBI would replace, as well as the expected economic and social impacts.

Moreover, the concept of a UBI is often confused with other concepts, such as universal social protection, social protection floors and guaranteed minimum income. To start, to avoid confusion, it is important to distinguish different concepts (box 1).

Box 1

Understanding the differences: Universal Basic Income (UBI), Universal Social Protection (USP2030), Social Protection Floors (SPF) and Guaranteed Minimum Income (GMI)

Universal Basic Income (UBI) is a periodic cash payment unconditionally delivered to all citizens/residents, without exclusion, means-test or work requirement. UBI proposals greatly vary in terms of benefit levels, financing mechanisms, the benefits and services they suggest to replace, and other dimensions.

A Social Protection Floor (SPF) is a nationally-defined set of basic social security guarantees that should ensure, as a minimum that, over the life cycle, all in need have access to essential health care and to basic income security, which together secure effective access to goods and services defined as necessary at the national level, as agreed by world governments, employers and workers in ILO Social Protection Floors Recommendation No. 202 (2012), and later included in SDG 1.3 (2015). Based on the principle of **universality of protection** and an outcome-oriented approach, there are many ways to guarantee a social protection floor, including through income support allowances for all children including orphans; maternity benefits for all women with newborns; support for those who are poor or unable to earn sufficient income including for those without jobs, and for persons with disabilities, and universal old-age pensions, as well as access to at least essential health care.

Guaranteed Minimum Income (GMI) usually is understood as means-tested social assistance scheme that provides transfers for poor individuals and households.

Universal Social Protection (USP2030) is a global partnership to achieve universal coverage in social protection, as committed by countries in the Sustainable Development Goal (SDG) 1.3, part of the UN Agenda 2030. Led by the ILO and the World Bank, the partnership was launched at the United Nations in September 2016, showcasing countries that have achieved universal coverage, normally by a combination of tax-based benefits, including social assistance, and public social insurance.

1.3. Overlapping concepts? UBI and social protection floors

The vibrant debate on a UBI strikes a chord with many who are concerned about the increased economic and social insecurity, growing inequalities and the huge gaps in social protection coverage for the majority of the world's population (ILO, 2017a, 2014, 2018). In fact, the resurgence of the UBI debate reaffirms the necessity and importance to provide every member of the society with at least a minimum level of income security which is essential to the realisation of human dignity. The positive effects attributed to a UBI reflect some of the very principles of social security: providing at least a basic level of income security for all, in a way that protects and promotes human dignity and allows people the breathing space to engage in meaningful and decent work and care for their families.

These principles are at the heart of the mandate of the ILO as defined in the Declaration of Philadelphia in 1944, which is part of the ILO's constitution: "the extension of social security measures to provide a basic income to all in need of such protection and comprehensive medical care".⁵ They are also at the heart of social protection floors, as defined by ILO Recommendation No. 202, which guarantee at least a basic level of income security and access to essential health care. In fact, the UN Special Rapporteur on Extreme Poverty and Human Rights Phillip Alston noted that a UBI is not at odds with the social protection floor concept and that the debates on these concepts should be brought together (UN, 2017). Arguably, a UBI would be the most radical form of the income component of a social protection floor.

A social protection floor guarantees, at a minimum, effective access to essential health care and basic income security throughout the life course, to allow life in dignity. Firmly grounded in human rights, it should ensure universality of protection, adequacy and predictability of benefits, entitlements to benefits prescribed by national law, non-discrimination, gender equality and responsiveness to special needs. Social protection floor guarantees should be defined at a national level in a participatory process and established by law, to ensure national ownership, responsibility and accountability. These social protection floor guarantees have been interpreted as representing the "minimum core content" of the human right to social security, as set out in the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights (UN, 2014; ILO, 2017c).

At the same time, Recommendation No. 202 is clear in spelling out that social protection floors only guarantee a basic level of protection, and that States should progressively ensure higher levels of protection through comprehensive social protection systems, with a view of realizing the human right to social security for all, as well as related human rights, ensuring for example access to adequate housing and health care (ILO, 2017a).

Linking the UBI discussion to the broader discussion on social protection floors will raise a range of issues that need to be explored further, such as the level of a UBI, the prospective recipients, the affordability and financing modalities, the distributional effects and the consideration of special needs, as well as its relation to income-related benefits and other basic benefits and the link to wider economic, social, employment and fiscal policies. Exploring these questions will give insight into how realistic and feasible it is to integrate this seemingly simple concept into complex institutional settings and whether it can respond to the social protection needs of the majority of the population.

This paper therefore sets out to analyse UBI proposals through the lens of ILO standards, in particular Recommendation No. 202, which provides an internationally accepted framework for the implementation of basic levels of social protection, together with

⁵ ILO Recommendation No. 202, para. 3, see also Behrendt et al. (2017).

other ILO standards, including the Social Security (Minimum Standards) Convention, 1952 (No. 102).⁶ The scope of the paper however does not allow for a broader discussion of possible implications of the introduction of a UBI on other dimensions of decent work, including the creation of decent jobs, labour market participation, wage levels and wage setting, as well as its impact on the informal economy and the formalisation of informal employment.

As governments, social partners and other stakeholders are discussing UBI approaches, the core principles set out in Recommendation No. 202 can therefore serve as a valuable reference to assess key parameters of UBI proposals, ranging from the adequacy of benefits (chapter 2) over financial, fiscal and economic sustainability and coherence with social, economic and employment policies (chapter 3) to considerations on the possible implementation of a UBI (chapter 4). The conclusion explicitly does not take a position on the social and economic feasibility of a UBI in different contexts, but it offers some considerations based on ILO standards that governments, social partners and other stakeholders may find helpful in their deliberations.

⁶ See also ILO (2017).

2. Benefit levels, adequacy and coverage

One of the key arguments in favour of UBI approaches is their promise to offer a solution to persistent poverty and inequality, especially in developing countries. However, as outlined above, the picture is not as simple as it may seem. The potential impact of a UBI on poverty and inequality hinges on key design parameters with regard to the level of benefits and their capacity to meet people's needs, coverage, as well as on the way how a UBI is financed. A UBI would be able to reduce poverty and inequality only if it provides for adequate benefit levels and coverage, and if it is financed in a sustainable and equitable way (see chapter 3).

The guidance provided by international standards (ILO, 2017c) can provide a useful yardstick to assess key parameters of UBI proposals, including with regard to benefit levels and the adequacy of benefits. Recommendation No. 202 requires that social protection floor guarantees are set at a sufficiently high level to enable individuals to live in dignity and to ensure effective access to essential goods and services.⁷ Possible benchmarks for the monetary value of a set of necessary goods and services may be national poverty lines, income thresholds for social assistance or other comparable thresholds established by national law or practice and may account for regional differences. For children, the recommendation requires that benefit levels should be sufficient to ensure access to nutrition, education, care and other necessary goods and services.

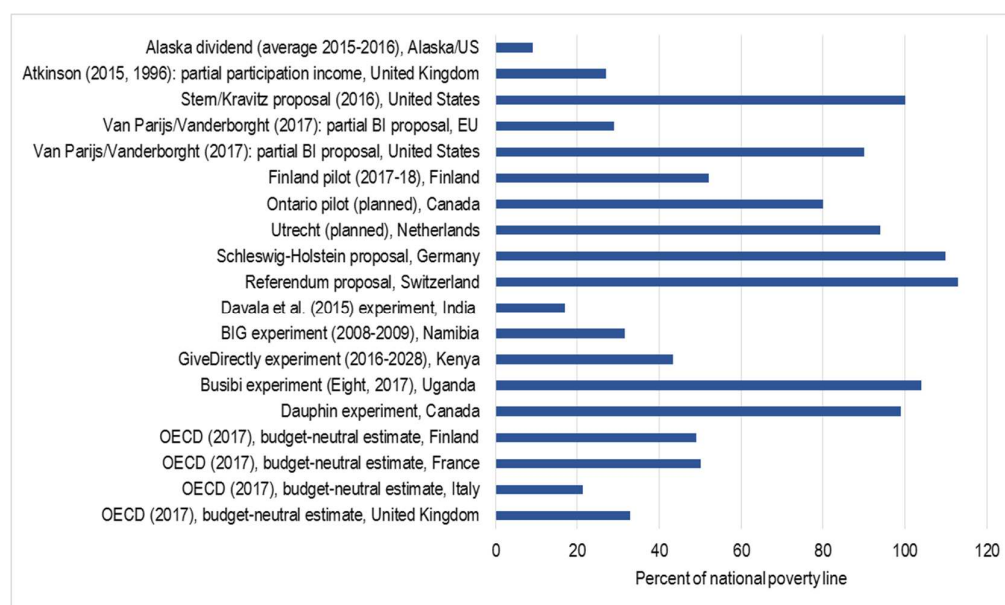
2.1. Setting benefit levels and ensuring adequacy

The determination of benefit levels is obviously critical to the capacity of a UBI to guarantee income security and a decent standard of living. This is certainly the litmus test to distinguish between those UBI proposals predominantly concerned about social justice and poverty reduction, and those more interested in replacing the welfare state by a modest basic income (see Murray, 2008; Zwolinski, 2015). Whilst Van Parijs and Vanderborght (2017) suggest a UBI levels of some 45 per cent of the median disposable income for an adult, others use the thumb rule of 30 per cent of the average income of lower income families (see Davala et al., 2015).

As shown in figure 1, benefit levels vary remarkably. In the Indian pilot, for example, the benefit level equalled about 17 per cent of the national poverty line, while the benefit in the Finnish pilot corresponds to 52 per cent of the poverty line (50 per cent of median equivalent disposable income). Other proposals suggest a UBI level of equivalent to the national poverty line. However, the adequacy of a UBI depends not only on its level, but also on the other benefits and services which would be available alongside the UBI.

⁷ The Recommendation does not offer a universal definition of “essential goods and services”, but it sets a framework their definition at the national level. This framework includes benchmarks both with respect of the level of benefits (allowing life in dignity, avoiding hardship and an increased risk of poverty), as well as with respect to the process (guarantees established by law and regularly reviewed through a transparent procedure with tripartite participation and consultations). For more information, see ILO (2012a) and Behrendt et al. (2017).

Figure 1. UBI benefit levels (per adult) as a proportion of the national poverty line, selected proposals and studies



Note: Where UBI benefit levels are different for adults and children, this figure reflects the rate for adults. Where benefit levels are set by household, the UBI benefit level for an adult is calculated by dividing the household rate by 2.8, applying an equivalence scale with a weight for 1.0 for the head of household, 0.8 for the second adult, and 0.5 for each of the two children, adding to 2.8 for a four-person household (taken as a proxy). Where available, the calculation is based on the official poverty line in the country; where not available it is based on a relative poverty line of 50% of median disposable equivalent income for high-income countries. For more details on poverty lines, see Annex II.

Source: Authors' elaboration, based on detailed sources listed in Annex I.

UBI proposals also vary in the benefit parameters proposed for children. While some of the proposals foresee that children would receive the same amounts as adults, others suggest reduced levels (e.g. 25 per cent of the adult rate in the Swiss proposal), and some do not foresee any benefits for children. It is in fact remarkable that some UBI proposals do not include benefits for children, given that some countries already dispose of what could be considered as a “partial UBI” for children in the form of a universal child grant (ILO, 2017a).

Likewise, some UBI proposals foresee different rules for older persons. For example, Stern and Kravitz (2016) suggest limiting eligibility for a UBI to older persons who do not dispose of an equally high old age pension, which would have implications for their income security in old age. Hence, a careful assessment of UBI proposals also needs to look into their assumptions with regard to coverage and benefit levels for children and older persons, which obviously have major implications for capacity of the proposed UBI to cover the needs of the population.

The large variation of proposed UBI benefit levels calls for a thorough assessment of the overall benefit package that people would receive. As a UBI would replace at least social assistance benefits according to most proposals, the assumed benefit level should be sufficient to ensure at least a basic standard of living for everyone, including those who cannot rely on any other source of income. However, as the relative benefit levels in figure 1 show, many UBI proposals do not come close to guaranteeing the minimum level of consumption set by national poverty lines. This is certainly the case for the Alaska dividend which has been referred to as a model by some, but also for a number of pilots and experiments, as well as analyses of budget-neutral UBI schemes (e.g. OECD, 2017b). If a UBI is to guarantee at least a basic level of income security, as to allow life in dignity, it should be set at a level that allows effective access to a set of necessary goods and services, as set out by Recommendation No. 202 (see chapter 3 below). If benefit levels remain far

below the poverty line, the expected effects of a UBI on the reduction of poverty and inequality, empowerment and economic freedom remain an unfulfilled promise.

Moreover, a uniform amount of UBI cannot adequately respond to special needs and circumstances, such as higher needs due to health conditions or disabilities, depending on whether there are other complementary benefits and schemes in place, or not (UN, 2017). Individuals who receive relatively high benefits under the existing system would substantially lose out under a flat-rate and budget-neutral UBI. These may for example include persons with special needs, such as persons with disabilities, older persons or single parents (Ensor et al., 2017; Macdonald, 2016; OECD, 2017a). So far, only few UBI approaches explicitly address the integration of special needs and circumstances in a UBI: one example is the Ontario pilot which plans to provide beneficiaries with disabilities with an additional uniform payment of up to CAD 500 per month (Withers and Clarke, 2017). Critics, however, doubt the ability of this approach to accommodate the different needs of this heterogeneous group.

Similarly, for those UBI proposals that suggest replacing the entire social security system by a UBI, it remains doubtful whether a uniform benefit would be able to fully meet people's needs for the full range of life-cycle contingencies normally covered by such system, including maternity, sickness, disability, employment injury, unemployment, survivorship and old age, as set out by Convention No. 102, as well as in other relevant standards.⁸ Social protection systems need to be able to provide adequate protection through appropriate mechanisms, based on collective financing and risk-sharing, as to prevent poverty and vulnerability, and contain inequality (ILO, 2018; Behrendt and Nguyen, 2018). From a human rights perspective, it is evident that the introduction of a UBI should by no means leave individuals worse off than with existing social security benefits. This implies that schemes aimed at compensating for special needs, such as disability-related costs, should be retained alongside a UBI. These considerations point to the complexity of integrating a seemingly simple UBI into the existing system and call for further research on its impacts on the prospective recipients. Moreover, such considerations also raise serious concerns regarding UBI proposals that assume that all or most existing social protection benefits could be replaced by a UBI without significant welfare losses.

2.2. Ensuring adequacy over time

While most UBI proposals offer some considerations regarding the setting of the initial UBI benefit level, less attention is given to the question of adjustments to changes in purchasing power and overall standards of living, as to ensure the adequacy of benefits over time. Some proposals appear to assume that initial benefit levels would be carried forward into the future in some way or another, but do not devote much attention to the question of how this can be achieved.

UBI benefit levels would need to be indexed to inflation, wages or a mix of both, increased over time to maintain their real value and purchasing power. Moreover, in a context where the overall living standards were to increase (especially in view of expected productivity gains), how would those who rely only on a UBI benefit from this increase in living standards?

⁸ These include, for example, the Employment Injury Benefits Convention, 1964 (No. 121); the Invalidity, Old Age and Survivors' Benefit Convention, 1967 (No. 128); the Medical Care and Sickness Benefit Convention, 1969; the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168) and the Maternity Protection Convention, 2000 (No. 183). See ILO (2017c) for an overview.

Recommendation No. 202 provides clear guidance on how countries can and should ensure the adequacy of benefits over time. A regular indexation of benefit levels, and a review of the benefit levels through a participatory and transparent procedure that is established by national laws, regulations and practice is therefore fundamental (ILO, 2012b). Such a regular review should be conducted with the participation of social partners, and in consultation with other stakeholders (see section 2.5 below).

2.3. Cash benefits and access to services

The capacity of a UBI to prevent poverty, reduce inequality and promote social justice depend on the question to what extent it fully meets the needs of the population. However, some UBI proposals devote little thought on to what extent cash benefits would need to be complemented by effective access to services, namely in the areas of health, education, care and other basic services, as well as to employment services and active labour market policies. Many observers are concerned that the introduction of a UBI could possibly undermine the provision of such services, in contexts where its fiscal costs were to displace the budget allocations for such services (e.g. Ruckert et al., 2017). This may lead to the privatisation of public services, or a growing divide between underfunded public services, and private services for those who can afford to pay for them (most likely those who can rely on substantial incomes on top of a UBI).

Such consequences may significantly increase inequality, and constrain the access to services for some categories of the population, particularly those who can rely only on a basic income. Recommendation No. 202 emphasises the complementarity of preventive, promotional and active measures, benefits and social services. Effective access to health care, including maternity care, is one of the four guarantees of a national social protection floor. It also highlights the essential complementary role of employment policies, including active labour market policies, which is particularly important for facilitating labour market transitions and re-skilling in the context of rapid economic and technological change. More generally, the Recommendation also stresses the importance of high-quality public services that enhance the delivery of social security systems, including in the areas of health care, education and care, and which play an essential role in promoting effective access to health, education and work, and promoting gender equality.

In view of the significant implications of a possible negative impact on the effective access to health, education, care and other services, a careful analysis of the possible impacts of the introduction of a UBI on access to services is indispensable. The essential role of universal access to services is highlighted in proposals for Universal Basic Services, focusing mainly on housing, food, transport and information/IT to ensure full participation in modern societies (UCL IGP, 2017).

2.4. Coverage

One of the key arguments used to promote a UBI is that an unconditional provision to everyone will help to close coverage gaps and ensure a more efficient administration of benefits. Especially in countries with severe information constraints on targeting, universal cash programmes such as a UBI may be cheaper per unit of poverty reduction than targeted anti-poverty programmes or safety nets. For example, for the case of India, a recent study concluded that a UBI, set at INR 450 per month and covering 75 per cent of the population, could be more effective in reaching the poor than the two largest social assistance programmes, namely the Public Distribution System (PDS) and the Mahatma Gandhi National Rural Employment Guarantee Scheme (Government of India, 2017; see also Dutta

et al., 2014; Ravallion, 2018).⁹ Similarly, the IMF (2017), based on a micro-simulation, finds that a UBI might outperform the PDS in terms of coverage, progressivity, and generosity of benefits.

Whilst universal coverage is one of the key definitional attributes of UBI, this issue is not as clear-cut as it seems. Some UBI proposals assume fully universal coverage (often without specifying its boundaries), others stipulate that UBI entitlements should be restricted in two important ways.

First, as discussed above, some proposals foresee the payment of benefits to adults only, excluding children in some cases, and others apply different rules for older persons. The impact of such rules on the adequacy of benefits has been discussed above in section 3.2. The benchmarks provided by Recommendation No. 202 require that both children and older persons should enjoy at least basic income security, which in the case of children is further specified with regard to their effective access to nutrition, education, care and any other necessary goods and services. It is not clear whether all UBI proposals include adequate mechanisms to guarantee this level of income security for all.

The second restriction concerns the question of whether benefits would be available only to nationals of the country of those with a certain minimum duration of residency, defined as legal or fiscal residency, which is often – explicitly or implicitly – motivated by concerns about setting incentives for migration. These choices have important implications with regard to the capacity of a UBI to ensure adequate protection for all, and are closely related to decisions about financing and benefit levels. Annex 1 includes information on coverage for selected UBI proposals, where available.

Whilst most UBI proposals leave the question open as to whether and how groups such as migrant workers and refugees shall be protected, Recommendation No. 202 provides useful guidance by specifying that national laws shall be subject to the countries' existing international obligations, such as those set out in the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights. The latter lays down the “right of everyone to social security” (Art. 9), reaffirming the States' responsibilities to provide all members of society with adequate social protection.

The principle of universality of protection also lies at the core of the social protection floor concept, stipulating that everyone should enjoy at least a basic level of social security throughout their life course. Recommendation No. 202 requires that, at a minimum, basic income security and access to essential health care should be guaranteed for at least all residents and all children, and subject to the country's existing international obligations. From this perspective, a UBI restricted to nationals or fiscal residents only, or not providing sufficient benefits to meet all children's needs, would be insufficient to provide the required protection.

2.5. Social dialogue and consultation with stakeholders

While many UBI proposals set out detailed parameters regarding benefit design and expected impacts, few proposals elaborate on the question on how policy processes should be designed to generate these results. As outlined above, this concerns in particular the question on how to ensure adequate coverage and benefit levels over time, as well as equitable and sustainable funding mechanisms. Recommendation No. 202 refers specifically to the principle of solidarity of financing, which is closely linked to an “optimal balance between the responsibilities and interests among those who finance and benefit from social security schemes”. In the case of a UBI, the interests of those for whom the benefit

⁹ With regard to financing, the study theoretically assumes a budget-neutral scheme.

constitutes a substantial proportion of their total income would need to be particularly protected.

In order to generate a broad consensus on a UBI, and to ensure its adequacy and sustainability over time, it is essential to ensure the participation of social partners and other relevant stakeholders in a national dialogue process. Recommendation No. 202 highlights tripartite participation with representative organisations of employers and workers, as well as consultation with other relevant and representative organizations of persons concerned for the setting and updating of the range and levels of benefits, and the importance of effective social dialogue and social participation for the formulation and implementation of national social protection strategies.

3. Costs, affordability and financing

If a UBI is to have a measurable impact on the reduction of poverty and inequality, adequate benefit levels and coverage need to be ensured in an equitable and sustainable way. Ensuring adequate benefit levels however comes at a substantial cost, and requires appropriate financing strategies, which are the focus of this chapter.

How much would it cost UBI at adequate benefit levels? The following sections provide a first estimate of the potential cost of a meaningful UBI for 130 countries (section 3.1) and discuss possible financing sources (section 3.2), including a discussion on which UBI financing proposals are not in line with ILO Conventions and Recommendations

3.1. Cost estimates for 130 countries

Based on the principles of Recommendation No. 202, we assess the costs of a UBI that would be sufficiently high to reduce poverty and ensure at least a basic level of income security for all. These cost estimates assume that UBI would be set at the level of the national poverty line,¹⁰ which represents a nationally accepted measure of the level of income necessary to meet basic needs, and reach a minimum standard of living.¹¹

Two scenarios are presented:

- I. A basic income transfer at 100 per cent of the national poverty line for all adults and children.
- II. A basic income transfer at 100 per cent of the national poverty line for adults and 50 per cent to children up to 15 years old.

The cost estimates under both scenarios, expressed as a percentage of GDP, are presented in figures 2 and 3. Table 1 shows average results for regional and income groups. Country-specific results can be found in Annex II.

For most world regions, the average costs of both scenarios are in the range from 20 to 30 per cent of GDP (see figure 2 and table 1). This is the case for the East Asia and the Pacific, Europe and Central Asia, and South Asia. For the Middle East and North Africa, average costs are slightly lower, and for the Americas slightly higher. However, Sub-Saharan Africa stands out with substantially higher average costs. By income category, the average costs of both scenarios are between 20 and 30 percent of GDP for high-income, upper-middle income and lower-middle income countries, but dramatically higher for low-income countries.

¹⁰ National poverty lines are constructed in different ways, and are not entirely comparable. For countries that have more than one poverty line, the calculations are based on the higher poverty line, as it reflects not only food needs, but takes into account other basic necessities. Where poverty lines are available for urban and rural areas, but not a national poverty line, the calculations are based on the poverty line applied to urban areas is not available, but separate poverty lines for urban and rural areas, the former has been used. Where there is no official poverty line, the calculations are based on a relative poverty line of 50 per cent of median equivalent disposable income (applied to forty high-income countries. For more details, see Annexes II and III.

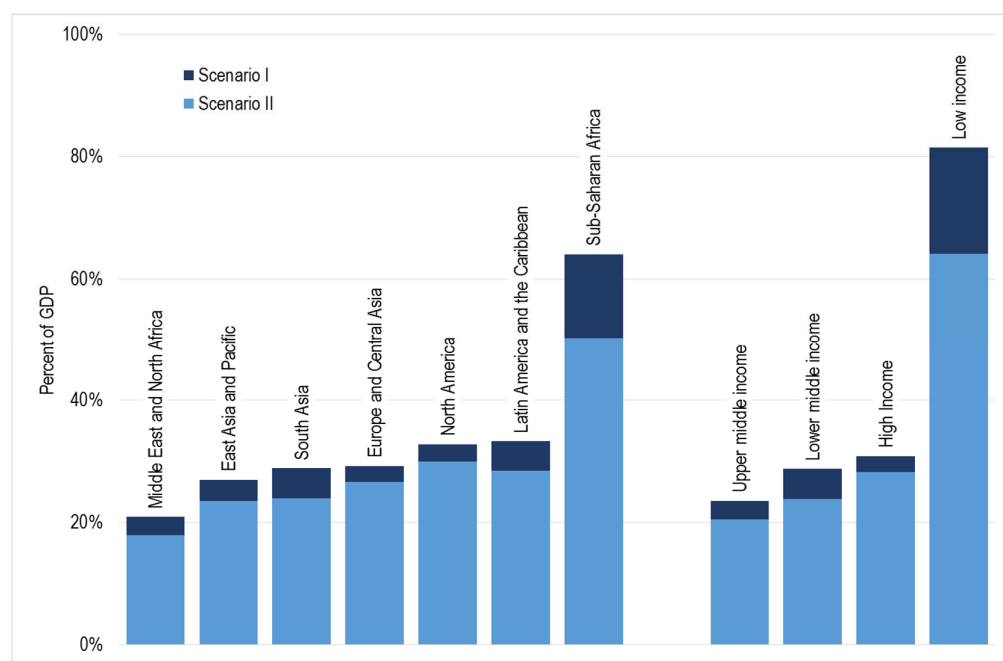
¹¹ It should however be acknowledged that, in many countries, there are debates on the issue to what extent the national poverty lines correctly represent a minimum acceptable standard of living and allow life in dignity. Addressing this question would require a more detailed assessment which cannot be undertaken in the scope of this paper.

The results for scenario I (figure 2 and table 1) show that the cost of a UBI at the level of the national poverty line would reach between 20 and 62 per cent of GDP in the different world regions (17 to 50 per cent for scenario II). In the Middle East and North Africa, about 20 per cent of GDP would be necessary to fund a UBI, whereas in Sub-Saharan Africa, the cost would well more than 60 per cent of GDP.

As expected, Scenario II shows consistently lower costs because of the lower benefit level for children; the cost difference between Scenario I and II is proportional to the ratio of children in the population. Given that the number of children tends to be higher in low-income countries and the regions of South Asia and Sub-Saharan Africa, the difference between Scenario I and II is most pronounced in these regions.

For low income countries, the cost of UBI is clearly too high at 80 per cent of GDP (60 per cent for Scenario II). However, it must be noted that the cost of a UBI that would eradicate poverty in all low-income countries is only 0.66 per cent of global GDP. Results by country (figure 3) show that costs of a UBI can range from 3 per cent of GDP in the case of Mongolia to more than 80 per cent for a small group of countries from Sub-Saharan Africa. This is largely due to the different value of poverty lines (nationally determined) in relation to a country GDP. A geographically diverse group of countries with relatively low costs (below 10 per cent of GDP for Scenario I) include Mongolia, Guyana, Kazakhstan, Philippines, Namibia and Indonesia.

Figure 2. Cost of Universal Basic Income as a percentage of GDP, by world region and income category



Note: Based on nationally-determined poverty lines; administration costs not included. For more detail, see Annexes II and III.

Sources: Own calculations based on UN World Population Prospects, IMF World Economic Outlook, ILO World Social Protection Database, OECD, national sources.

As mentioned above, the region that on average shows the lowest UBI costs is the Middle East and North Africa with close to 20 per cent of GDP (17 per cent in Scenario II), followed by East Asia and the Pacific which on average shows an estimated UBI cost of 26 per cent of DGP (23 per cent in Scenario II), with some countries with costs below 10 per cent as mentioned before and others such as East Timor and Myanmar close to and exceeding 50 per cent respectively.

South Asia, with an average UBI cost of 28 per cent of GDP (23 per cent), is influenced upwards by Bangladesh and Afghanistan, the countries with the higher costs in the region; at the other end is Sri Lanka, with UBI costs just over 10 per cent of the GDP.

The Europe and Central Asia region has Kazakhstan and Kyrgyzstan as outliers, with UBI costing 6.7 per cent and 46.1 per cent of GDP respectively, while the other countries are close to the regional average of 28.4 per cent of GDP (26 per cent in Scenario II).

Latin America and North America, with an average UBI cost of 31.9 per cent and 32.3 per cent of GDP (29 and 28 per cent in Scenario II, the savings of reduced benefits for children make the costs higher in North America than in Latin America in Scenario II while the opposite happens in Scenario I), have a wide disparities, with Honduras and Venezuela as the countries where UBI is most expensive, and countries and Guyana the least expensive.

Sub Saharan Africa is the region where UBI is most costly, reaching 62.1 per cent, of GDP as an average in Scenario I and 48.8 per cent for scenario II, with a number of countries where UBI costs that exceed 100 per cent of the GDP, but also with countries where the cost of UBI is less than 10 per cent, such as Namibia, or just above, like Gabon.

Table 1. Cost of a UBI (as a percentage of GDP), by world region

Region or Income Group	Cost (percentage of GDP)	
	Scenario I (%)	Scenario II (%)
Middle East and North Africa	20.3	17.4
East Asia and Pacific	26.2	22.8
South Asia	28.0	23.3
Europe and Central Asia	28.4	25.9
North America	31.9	29.1
Latin America and the Caribbean	32.3	27.6
Sub-Saharan Africa	62.1	48.8
Low income	79.1	62.3
Lower middle income	28.0	23.1
Upper middle income	22.8	19.8
High income	29.9	27.4
Global average	39.4	32.7

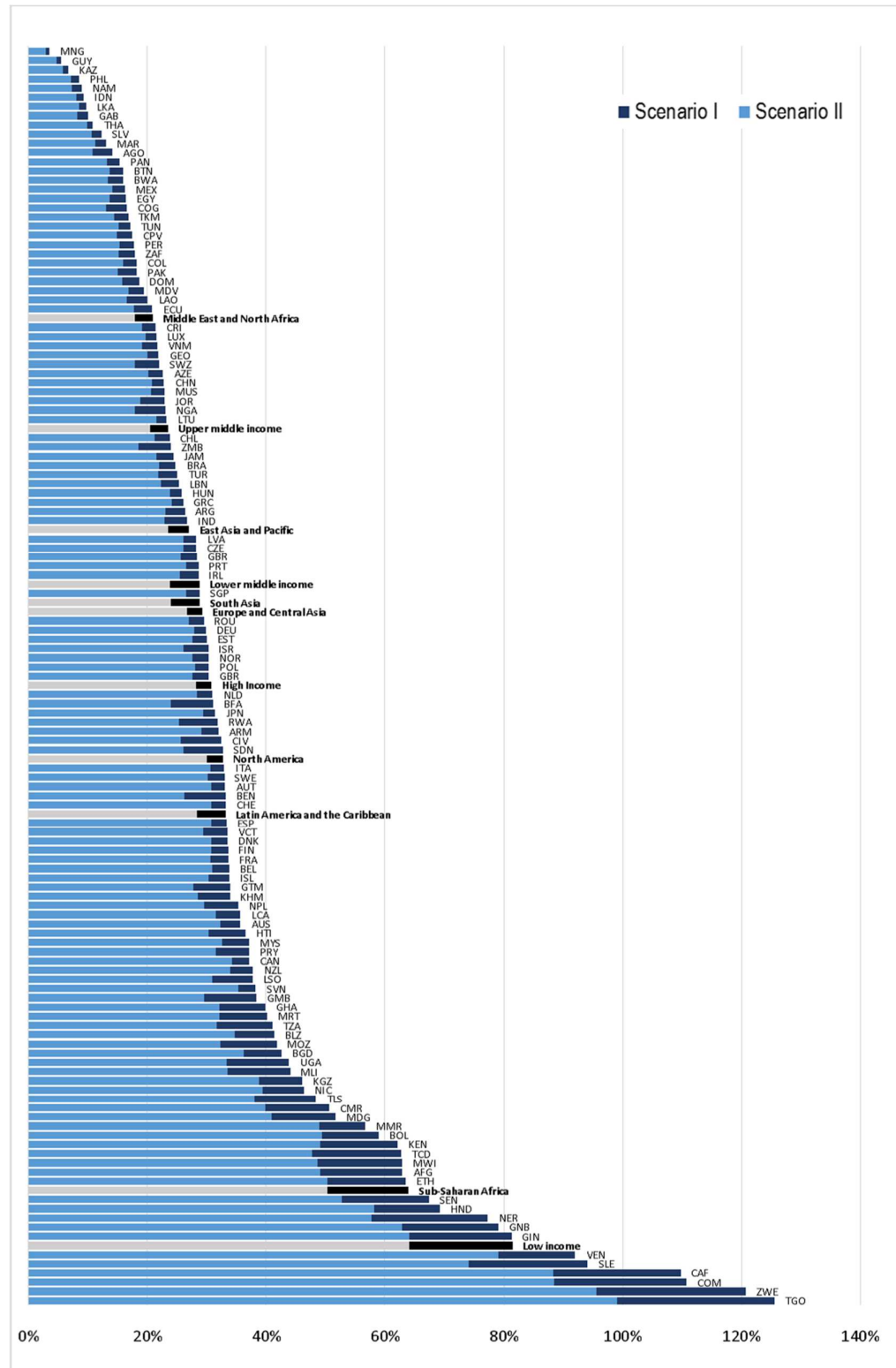
Note: Based on nationally-determined poverty lines; administration costs not included.

Sources: Own calculations based on UN World Population Prospects, IMF World Economic Outlook, ILO World Social Protection Database, OECD, national sources.

The estimated average cost of UBI tends to be higher in high-income countries that in both lower-middle income and upper-middle income countries; the main reason being that in high-income countries poverty lines are mostly defined in a relative way, as a proportion of median income, as opposed to absolute poverty lines that generally only focus on limited basic needs.

However, despite comparatively higher relative poverty lines in high-income countries, it must be noted that the assumed benefit level could be insufficient to reach a meaningful level of income security. The assumed UBI benefit level of €279 per month in Latvia, €242 in Lithuania, €354 in Greece, €337 in Slovakia, €39 in Portugal, €900 in Germany or €911 in France would be considered by many as inadequate for a decent living standard. People therefore would need to rely on income from jobs, pensions or other sources to complement a modest UBI.

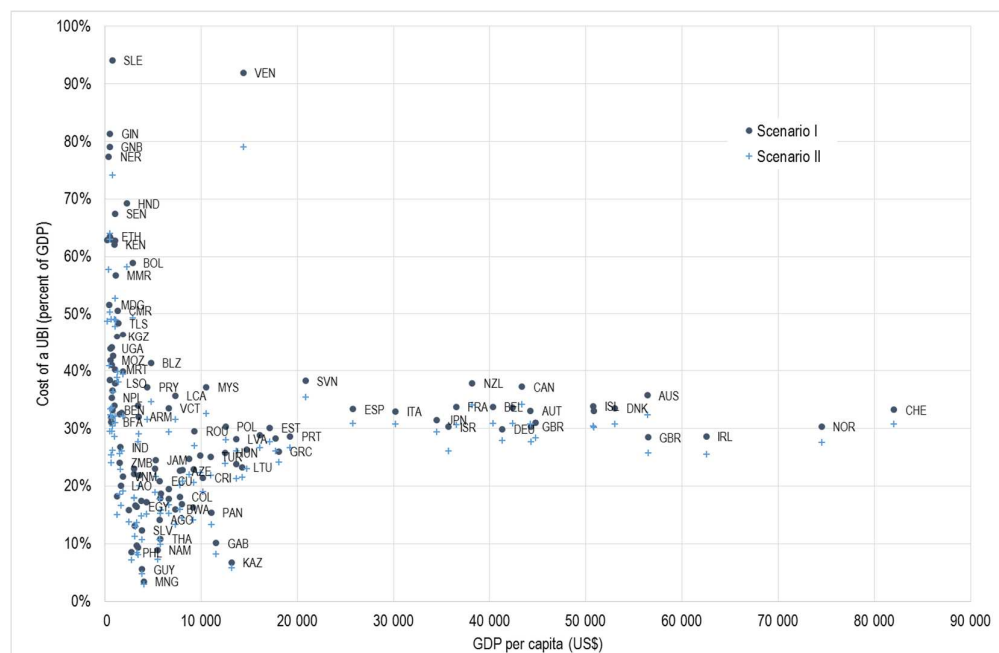
Figure 3. Estimated cost of a UBI (as a percentage of GDP), by country



Note: Based on national poverty lines, administration costs not included.

Sources: Own calculations based on UN World Population Prospects, IMF World Economic Outlook, ILO World Social Protection Database, OECD, national sources.

Figure 4. Cost of a UBI in percentage of GDP and GDP per capita in US\$, 2015



Sources: Calculations based on World Bank Development Indicators, ILO World Social Protection Database.

The potential costs of UBI as percentage of GDP show a vast range of values for countries with low levels of GDP per capita; for example, countries whose GDP per capita is lower than US\$ 1,000 show potential costs in the range of 20 to over 100 per cent of the GDP (figure 4). Above US\$ 1,000 of per capita GDP, the potential costs of UBI are below 40 per cent of GDP, with some exceptions, such as countries showing costs below 5 per cent of GDP. For most countries with GDP per capita over US\$ 15,000, the costs of UBI scenario I and II are around 30 per cent of GDP.

3.2. Affordability and financing

Although being one of the most important factors influencing the feasibility of a UBI, affordability and financing remain less debated. The affordability of UBI depends mostly on the proposed benefit level and the financing sources.

As discussed earlier, many existing UBI proposals and cost estimates assume very low benefit levels, far below national poverty lines, which are one of the possible benchmarks for adequacy supported by Recommendation No. 202. The IMF (2017) estimated that a UBI set at 25 per cent of median per capita income (which represents roughly half of the relative poverty line of 50 per cent of equivalent disposable income commonly used for OECD countries) costs around 6-7 per cent of GDP in advanced economies and 3-4 per cent in emerging and developing economies. Despite the low benefit level, IMF Executive Board Directors considered UBI unfeasible in the current fiscal context.¹²

¹² Though “IMF Directors generally concurred that there may be scope for strengthening means-testing of transfers in many countries and for increasing the progressivity of taxation in some others. Most Directors noted that any consideration of a universal basic income would have to be weighed carefully against a host of country-specific factors—including existing social safety schemes, financing modalities, fiscal cost, and social preferences, as well as its impact on incentives to work—

A meaningful amount of UBI benefits is generally found to be fiscally infeasible (OECD, 2017a; Tanner, 2015; Van Parijs and Vanderborght, 2017). Thus, if governments were to consider the introduction of a UBI at adequate UBI benefit levels that could have a significant impact on the reduction of poverty and inequality, they would need to explore new financing sources.

Proposals include an increase in existing taxes, for example, income, inheritance, capital, corporate, or value added taxes, or the imposition of new taxes on natural resource revenues, financial transactions or robots (Reed and Lansley, 2016). Others have proposed the abolishment of existing tax-free allowances or the taxation of the UBI alongside other incomes to reduce the cost and make it more targeted to low income earners (see OECD, 2017a); such a tax claw back approach would have similar effects to a negative income tax model¹³ – care should be taken with the diminished redistributive effect of some financing proposals.

Given that UBI is proposed to redress growing inequalities caused by corporate globalization and new forms of work, it should be redistributive. UBI should not be financed by regressive methods such as taxing households or depriving them from other social benefits, as this UBI policy would give to households with one hand what it would take away with the other.

The ILO and other UN agencies have pointed to the capacity of national governments to achieve the extension of social protection coverage and benefits by exploring all possible means of expanding fiscal space. There is a wide variety of options to generate resources for social protection, even in the poorest countries. The financing options presented below are supported by policy statements of the international financial institutions and the United Nations. They are described in full in joint work by ILO, UNICEF and UN Women (Ortiz et al., 2017) that presents multiple examples of governments around the world having applied these options for decades. Fiscal space options should be carefully examined at the national level, including their trade-offs, winners and losers, and discussed in open national dialogue.

Options to finance UBI at adequate benefit levels to effectively reduce poverty and inequality include the following:

1. *Re-allocating public expenditures*: this is the most orthodox option, which includes assessing on-going budget allocations, replacing high-cost, low-impact investments with those with larger social impacts, eliminating spending inefficiencies and/or reducing administrative costs. For example, Costa Rica and Thailand have reallocated military expenditures to social protection; Ghana, Indonesia and many other developing countries have reduced or eliminated fuel subsidies and used the proceeds to extend social protection programmes. The lesser administrative costs of UBI as compared to targeted social assistance benefits would also allow more funds to be allocated to UBI benefits. Some social protection schemes (e.g. social assistance, welfare programs, unemployment support) could be retrenched, as in the Finland pilot, however caution needs to be taken with this policy (box 2).

which, in the view of many Directors, raised questions about its attractiveness and practicality. Directors emphasized that improving education and health care is key to reducing inequality and enhancing social mobility over time.” IMF Executive Board’s discussion of the Fiscal Monitor, Global Financial Stability Report, and World Economic Outlook on September 21, 2017.

¹³ The negative income tax model proposed by Friedman (1967) phases out benefits for those with higher incomes. Persons whose incomes fall below a pre-defined threshold for tax liability, receive “negative taxes”, i.e. payments from the tax authority based on the distance to the poverty line. Such a financing mechanism could reduce the net cost of the UBI, yet is challenging in countries where a large part of the workforce is in informal employment.

2. *Increasing tax revenues:* This is the principal channel for generating resources for UBI. It is achieved by altering different types of taxes – e.g. on corporate profits, financial activities, property, inheritance, imports/exports, natural resources, consumption – or by strengthening the efficiency of tax collection methods and overall compliance. In the context of the future of work discussion, some have suggested new taxes on the gains from technological change (Reed and Lansley, 2016), such as taxes on robots, yet it is not fully clear how national governments would be able to tax the highly mobile owners of robots or other productive capital in the context of global tax competition (ILO, 2018). Currently, many countries are increasing taxes for social protection, for example, Bolivia, Mongolia and Zambia are financing universal pensions, child benefits and other schemes from mining and gas taxes. Ghana uses a VAT on alcohol, cigarettes and luxury goods to finance the national health insurance scheme, and, together with Liberia and the Maldives, has introduced taxes on tourism to support social programmes; Algeria, Mauritius and Panama, among others, have complemented social security revenues with high taxes on tobacco; these taxes, however, would deliver small amounts. Brazil introduced a temporary tax on financial transactions to expand social protection coverage, a more promising avenue. Given that the financial sector remains untaxed or with very low taxation, this could be a main source of finance for UBI; a small set of levies and taxes to financial activity would provide between 1.9 and 23.2 per cent of GDP¹⁴ in high-income countries to finance UBI.
3. *Lobbying for aid and transfers:* for low income countries to implement UBI, an option may be to engage with different donor governments or international organizations in order to ramp up North-South transfers. As presented earlier in this paper, the cost of UBI (scenario II) for low-income countries is 0.68 per cent of global GDP, a small amount compared to the cost of UBI to developing countries, as low-income countries in average would need to invest 64.2 per cent of its own GDP to finance it. While some may say there is no ODA for UBI, it is a question of priorities: a UBI for low-income countries that would eliminate poverty overnight would cost only one thirtieth (3 per cent) of the amount announced by G20 governments to rescue the financial sector in 2009¹⁵ or one fifth (20 per cent) of the world's military expenditure.¹⁶
4. *Eliminating illicit financial flows:* Given the vast amount of resources that illegally escape developing countries each year, estimated at ten times total aid received, policymakers should crack down on money laundering, bribery, tax evasion, trade mispricing and other financial crimes are illegal and deprive governments of revenues needed for social protection. Given the large scale of corruption, estimated at more than 5 per cent of global GDP, this could become a main source of finance for UBI.
5. *Using fiscal and central bank foreign exchange reserves:* This includes drawing down fiscal savings and other state revenues stored in special funds, such as sovereign wealth funds, and/or using excess foreign exchange reserves in the central bank for domestic and regional development. Chile and Norway, among others, are tapping into fiscal reserves for social investments; Norway's Government Pension Fund Global is perhaps the best-known case. Over the past decade, the accumulation of foreign exchange

¹⁴ According to the IMF's *Report to the G20 and background material* (Claessens et al., 2010, p. 139).

¹⁵ According to the IMF (Claessens et al., 2010, p. 31), the amount announced by G20 governments to rescue the financial sector in 2009 totals US\$ 9.6 trillion; enough to pay for an adequate UBI for all residents in low-income countries more than 30 times over.

¹⁶ According to the Stockholm International Peace Research Institute (2017), military expenditure by governments around the world was US\$1.686 trillion in 2015.

reserves in Central Banks increased more than six-fold between 2000 and 2013, reaching 17 per cent of global GDP; this strategy of self-insurance has been questioned by many, from the United Nations to the IMF, as some of these excess foreign exchange reserves held in Central Banks could be used for economic and social development.¹⁷

6. *Restructuring existing debt:* For countries under high debt distress, restructuring existing debt may be possible and justifiable if the legitimacy of the debt is questionable and/or the opportunity cost in terms of worsening social deprivations is high. In recent years, more than 60 countries have successfully renegotiated debt and over 20 (such as Ecuador and Iceland) have defaulted on or repudiated public debt, directing debt servicing savings to social protection programmes.

Governments that consider implementing a UBI should carefully examine all options, including the progressivity or regressivity of the proposed measures, the winners and losers, potential risks and trade-offs. Measures that are regressive or jeopardize inclusive development should always be avoided (box 2). National tripartite dialogue with employers and workers as well as civil society, academia, and supported by United Nations agencies and others, is fundamental in generating the political will to exploit all possible fiscal space options in a country, and adopt an optimal mix of public policies for inclusive growth and social protection, including UBI.

Box 2

UBI financing proposals not in line with ILO Conventions and Recommendations

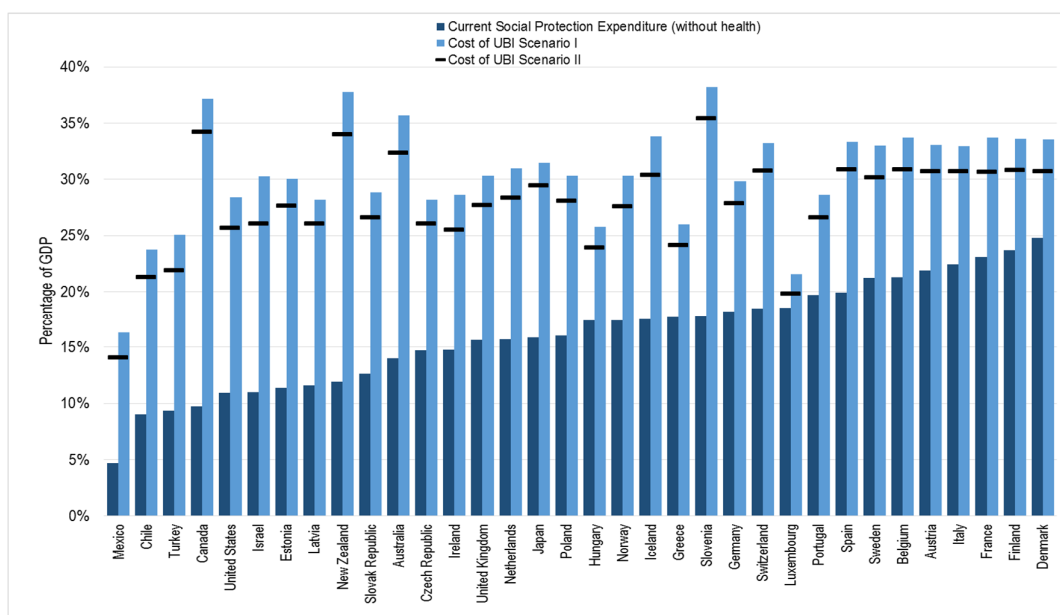
For the advancement of social justice, policy makers should avoid regressive policies that disproportionately benefit the wealthy and cause detriment to the majority of the population, particularly the poor and those on low incomes. Such policies may not only violate human rights principles, but may also be incompatible with ILO Conventions and Recommendations.

For example, some budget-neutral UBI proposals suggest replacing the entire social protection system, including public social insurance financed by employers' and workers' contributions, by a UBI benefit spread out as a uniform rate (see, for instance, Tanner, 2015). The Economist (2016), based on an interactive UBI calculator,¹ shows how much basic income a government could pay out if it scrapped its non-health transfer payments, and spread them evenly across the population in the form of a UBI.

Dividing the existing level of social protection expenditure equally by the total population (including many people currently not receiving benefits) necessarily results in a low UBI benefit level that in most countries remains well below the poverty line (figure 5). For example in Japan, a UBI calculated in this way would come to Y 616,290 per year, which corresponds to only half of the current poverty line for a single adult (Y 1,221,000). Luxembourg would allocate €16,590 euros per individual, still 15 per cent short of the poverty line, although it is the country that were to come closest to the poverty line. If a UBI were to be set at the level of the poverty line, as assumed in Scenarios I and II in this paper, current social security expenditures would be insufficient to finance such a UBI in all high-income countries included in figure 5 – in half of the countries, the necessary financial resources are more than twice as high as the current social protection expenditure.

¹⁷ Many countries exceed the safe level benchmarks, the number of months for which a country could support its current level of imports if all other capital flows were to suddenly stop (3 months benchmark) and the Greenspan-Guidotti rule of thumb that advises countries to hold enough foreign reserves to cover total short-term external debt obligations. For a discussion and list of countries that exceed safe level benchmarks, see Ortiz et al. (2017).

Figure 5. Cost of UBI at poverty line level and current social protection expenditure, selected countries, as a percentage GDP



Source: Authors' calculations based on ILO World Social Protection Database.

Public social insurance systems are redistributive for at least two reasons: (i) social insurance contributions are shared by workers and employers based on the principles of solidarity and risk-pooling, and could therefore be considered as transfers from employers to workers, and (ii) they are traditionally designed to redistribute income from those with higher lifetime earnings to those with lower lifetime earnings, particularly where they include mechanisms to take into consideration periods of care leave and/or to guarantee minimum benefit levels.

Generally, employers' contribution rates tend to be larger than workers'—as a world average, employers contribute 14 per cent and workers 7 per cent of covered earnings. From a financing perspective, the net winners of regressive UBI proposals tend to be employers, who would not pay social security contributions (the so-called "labour taxes"), as discussed in the next chapter. Phasing-out employer contributions to social insurance would release employers from their social responsibilities and shift economic and financial risks to individual workers, hitting hard especially to those with limited earnings and savings capacities, typically women and vulnerable workers, thus generating more inequality. For a UBI proposal to be equitable, it needs to be redistributive, financed by progressive taxation including from corporations, and other sources explained in this paper. Employer contributions need to be preserved and be adequate to ensure higher levels of social protection through public social insurance.

Additionally, eliminating the redistributive components of public social security systems (the transfers from high-income to low-income earners) by limiting public provision to a modest UBI, and promoting individual savings, private insurance and provision for those who can afford it would also exacerbate income and gender inequality and, as women tend to have shorter careers, lower earnings and lesser savings.²

Last but not least, the suggestion to replace the delivery of essential public services, such as health, education and care, with a uniform cash benefit is problematic (UNCTAD, 2017). Cuts in the provision of public services and the privatization of public services do not only undermine the fundamental responsibility of the State to guarantee its citizens effective access to essential services, but is also likely to further exacerbate income and gender inequalities.

ILO Conventions and Recommendations concretize State obligations with regard to promoting social security as a human right, as set out in the Universal Declaration of Human Rights and the International Covenant of Economic, Social and Cultural Rights, including universality of protection, based on social solidarity (ILO Constitution, Recommendation No. 202), solidarity and collective financing (Convention No. 102, Recommendation 202), entitlement to defined benefits prescribed by law (C.102, R.202), adequacy and predictability of benefits (C.102, R.202), non-discrimination, gender equality and responsiveness to special needs (R.202), under the overall and primary responsibility of the State (R.202).

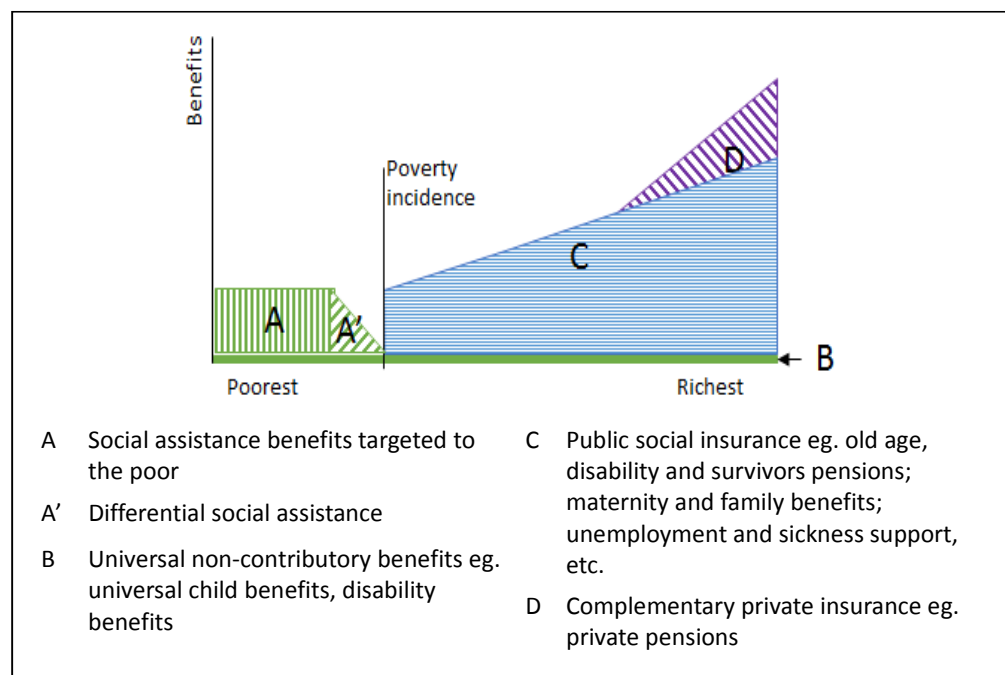
¹ See <https://www.economist.com/blogs/graphicdetail/2016/06/daily-chart-1> [28 June 2018].

² This social contract was broken in some countries with the introduction of individual accounts in the 1980s by the World Bank, the Inter-American Development Bank and the OECD. These institutions forcefully pressed for the introduction of individual accounts, defined contributions (instead of defined benefits) and other reforms, including full or partial privatization of pension and other social insurance schemes, in a number of Eastern European and Latin American countries. While many of these countries have today reversed this trend, these ideas remain in the policy discussions of the international financial institutions.

4. Who would benefit from UBI? Different implementation scenarios

The political economy of UBI implementation requires a careful look at the winners and losers of the different proposals. This section presents three scenarios on the introduction of a UBI. Figure 6 represents the baseline; it sketches out (in a very simplified form) a stylized social protection system in high-income countries, without a UBI. In this baseline case, area A represents the non-contributory (tax financed) social assistance benefits targeted to the poor. Area B represents universal benefits without a means-test, such as universal child or disability benefits for all eligible citizens. Note that many sometimes countries pay social assistance as a differential amount, this is, the difference between the actual income of the household and the minimum income threshold, represented in the area A' where benefits are scaled down to complement earnings received in the household. Area C represents contributory schemes, typically public social insurance with financial participation of workers and employers, in all the branches of social security, including old-age and disability pensions, maternity and family benefits, unemployment, sickness, and work injury. Finally, area D represents complementary private insurance (e.g. private pensions) bought by individuals.

Figure 6. Baseline: Current social protection system in high income countries (without UBI)

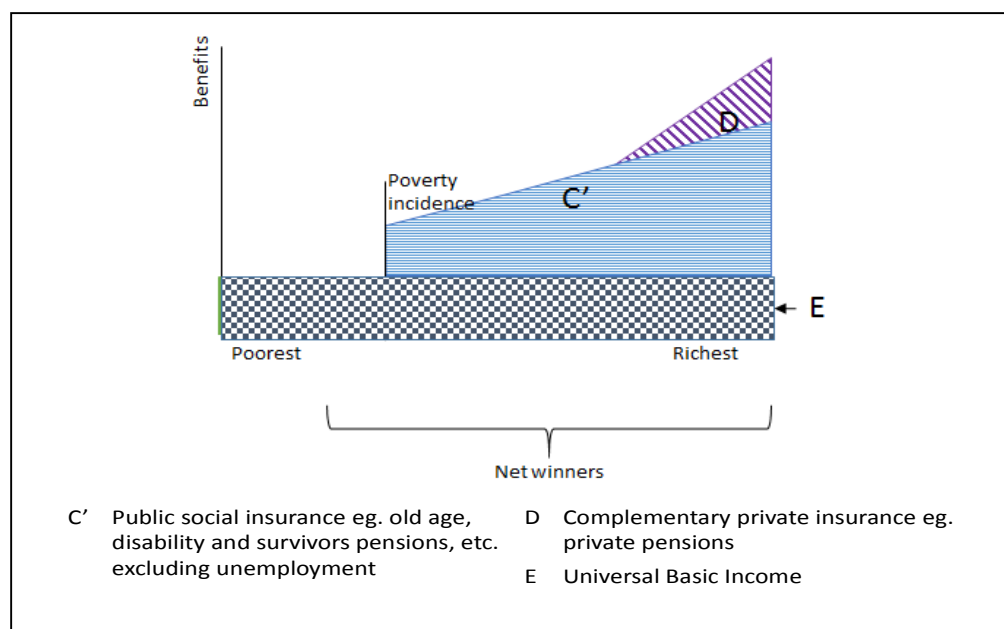


Scenario 1 assumes the introduction of a UBI set at the level of the poverty line (figure 7). The UBI is represented as a new area E that replaces areas A and B (social assistance for the poor and universal non-contributory benefits such as universal child benefits and/or disability benefits). Area C, contributory social insurance, is basically the same as in the baseline scenario, with a small reduction caused by the absorption into UBI of benefits for some contingencies (i.e. unemployment support as in the Finland pilot). Given that the UBI replaces social assistance and most of the poor receive the same level of transfers, this scenario is generally poverty neutral¹⁸, except for those in A' previously receiving social assistance in addition to earned income; with UBI, they will have a higher

¹⁸ Assuming that the minimum income threshold used in the social assistance scheme is equal to the national poverty line.

income as now they will be allowed to keep the full amount of UBI in addition to their earnings. Not considering potentially higher tax payments, the main winners are the majority of citizens in a country, under areas A' and C. For those under area C, they will receive social security benefits plus UBI, though the net impact of the introduction of a UBI depends on the combined effects of additional benefits received, and the levels of taxation required to finance UBI. In addition, it is assumed that non-take-up of benefits would be reduced.¹⁹ Thus, these three groups – the majority of the population – are the net winners, a reason why this UBI scenario would reduce inequality.

Figure 7. Scenario 1: Introduction of a UBI at poverty line level in high income countries

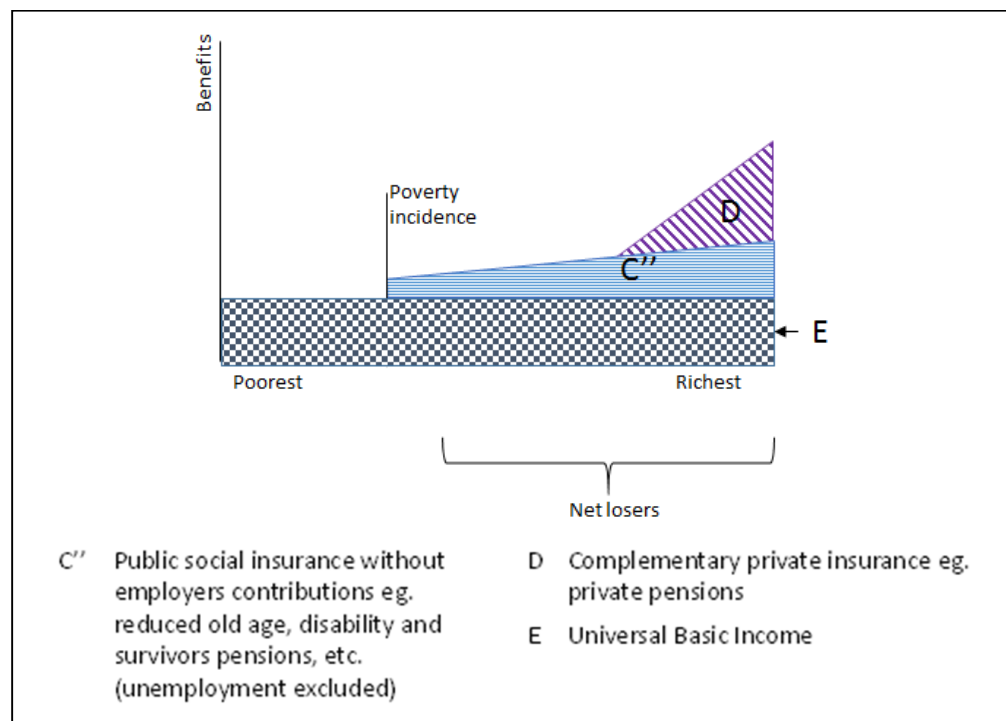


Scenario 2 sketches out the introduction of UBI in exchange for cuts in employers' contributions to social security systems (figure 8). This scenario is not in line with ILO standards, as explained in box 2. Given that, on average, employer contribution rates are double than workers', cutting employers' contributions (sometimes called "labour taxes") would lead to a significant reduction of social protection benefits for those in formal employment, shown here as area C'' that represents one third of the original area C in the baseline and scenario 1. Public social insurance would still exist in a reduced form, financed only from workers contributions, which would reduce its capacity to share risks and to redistribute in a vertical (from high income earners to lower income earners), and horizontal way (e.g. from the healthy to the sick). Even if UBI benefit levels were set at the level of the poverty line, scenario 2 would benefit only a small percentage of the population (those low income in A', plus a number of those previously not contributing or claiming benefits). The net losers would be the large majority of people in formal employment who would lose the higher levels of protection of public social security systems, including low and the middle classes. Even if they were proportionally compensated with higher salaries, this scenario may well lead to increased inequality, as most of the wage increase would go into increased consumption or savings, which is unlikely to provide a comparable level of social protection for the large majority of workers. From the point of view of financing, the net winners would be corporations, given that the reduction in "labour taxes" (employers contributions)

¹⁹ Note that in high-income countries, all citizens are generally covered by the social protection system. Those who are not sufficiently protected by social insurance are usually entitled to social assistance; yet a small proportion of the population do not contribute nor take up benefits for various reasons.

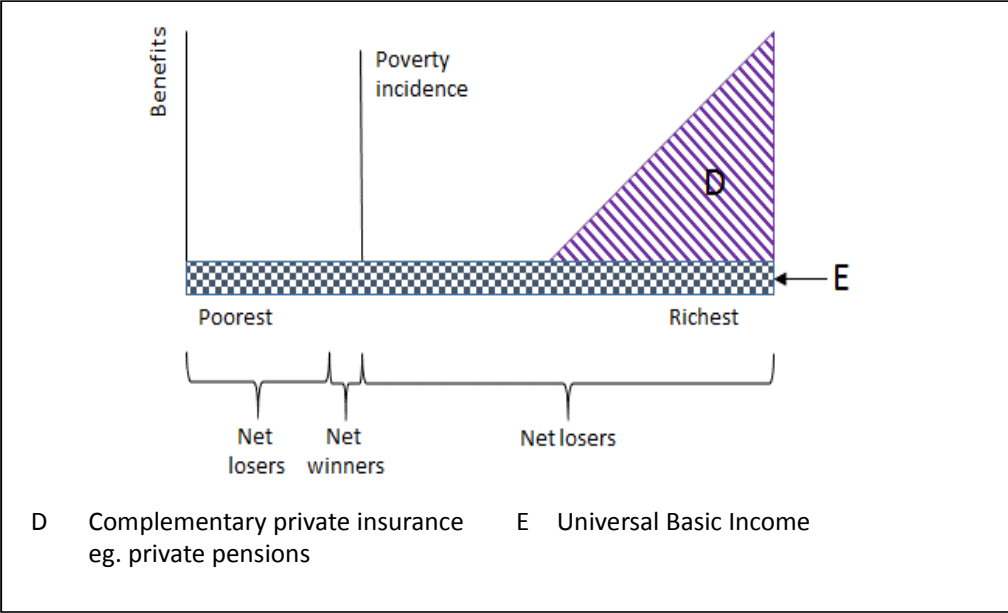
unlikely to be converted into new corporate taxes to finance UBI; on the contrary, the debate usually calls for budget-neutral solutions or, at best, for UBI to be funded from general taxation.

Figure 8. Scenario 2: Introduction of a UBI at poverty line level in high income countries, without employers' contributions



Scenario 3 presents the most radical neoliberal proposal, the introduction of UBI with the complete abolition of public social insurance (figure 9). This scenario is not in line with ILO Conventions and Recommendations (box 2). If citizens were to receive a UBI at the level of the poverty line (e.g. €279 per month in Latvia, €397 in Portugal, or about €900 in France and Germany); many would consider this benefit levels inadequate, and those who can afford it, would have to save in private retirement plans, invest in rents (e.g. real estate) and others. Yet, most neoliberal UBI proposals assume rather meagre benefit levels below the poverty line level (as presented in the graph) which would not be sufficient to eliminate poverty. In this scenario virtually everybody is a net loser; the poorest will not receive anymore social assistance at the poverty line level; the low and middle classes, before covered by a better social protection system, now they will lose their accumulated social protection benefits. Eliminating public social insurance systems by a modest UBI, and promoting individual savings and private provision for those who can afford it, would reduce the potential for both vertical and horizontal redistribution, thereby exacerbating income inequality. In addition, as women tend to have shorter careers, lower earnings and lesser savings, a greater role for private pensions and individual savings is likely to increase gender inequality (Rein and Behrendt, 2004). While the net winners would be a very small group, similar to the ones on scenario 2, this model, as the earlier one, will result in significant increases in inequality, as companies will stop paying social security contributions and UBI be paid from general taxation. Unless taxation would be made significantly more progressive including effective corporate taxes, very unlikely given the current trend of tax cuts, scenarios 2 and 3 imply a net social loss and lead to larger income inequality.

Figure 9. Scenario 3: Introduction of a UBI in high income countries (below poverty line level), replacing social insurance by individual savings



5. Conclusion: Universal Basic Income in light of ILO standards

UBI approaches are being discussed as a tool to reduce inequalities and address job losses, precariousness and informality of employment resulting from changing forms of work, automation and globalization. Proponents and detractors are engaged in a complex debate that has led to multiple proposals. This paper intends to contribute to the debate by looking at UBI in light of ILO standards. As outlined earlier, some UBI proposals are in accordance with ILO Conventions and Recommendations, and others are not.

The UBI debate reaffirms the necessity and importance to provide every member of the society with at least a minimum level of income security which is essential to the realisation of human dignity - the very principles of social security. Indeed, UBI could be the most radical form of the income component of a national social protection floor, an important tool for the advancement of inclusive development and social justice. UBI on its own cannot be considered a panacea to existing and future income security and social protection challenges, but can potentially help to close coverage gaps and provide a basic level of income security.

Recommendation No. 202 provides important guidance and core principles regarding coverage, adequacy, financing and other aspects, and the need to complement a basic level of social protection with provision for higher levels on the one hand, as well as a set of other policies, namely labour market, employment, wage, tax, health, education, care and other social policies.

In discussions on possible implementation of a UBI, careful consideration should be given particularly with respect to the following design issues:

The adequacy of benefits needs to be ensured such that UBI effectively reduces poverty and inequality:

- UBI benefit levels would need to be set at a level that is adequate to ensure at least a basic level of income security, including for persons who do not have any other source of income. The guidance provided by Recommendation No. 202 suggests that such a level could correspond to the level of the national poverty line, or similar minimum thresholds reflecting the cost of essential goods and services. UBI benefit levels would need to be indexed on a regular basis to inflation (preferably), wages or a mix of both, in order to maintain their real value and purchasing power.
- The nature and level of benefits should ensure non-discrimination and responsiveness to special needs. This implies that the benefits guarantee that those with special needs, e.g. persons with disabilities, are adequately covered through additional benefits in cash and in kind, with a view to preventing vulnerability and to realizing the human right to social security for all.
- Contributory mechanisms, and in particular public social insurance, should continue to play a key role in ensuring higher levels of protection for as many people as possible. Even if a UBI benefit is set at the poverty line, many will consider this very low income and will aim to have higher levels of protection through public social insurance, as it is redistributive and can guarantee higher living standards for larger number of people than private insurance. If a UBI is not complemented by public social insurance, higher levels of protection will only be available to those who can afford to seek them through personal savings and private insurance, thereby undermining solidarity and social cohesion. Neoliberal or libertarian UBI proposals that suggest eliminating public social insurance, ceasing employers' contributions and cuts in social services, replacing them by a meagre safety net, will exacerbate inequalities and are not in line with ILO standards. In order to fully meet people's social security needs, UBI should be

supplemented by higher levels of protection through public contributory schemes, ensuring wider scope and higher levels of protection with redistribution. For this reason, a combination of contributory and non-contributory elements will remain key to building a comprehensive social security system with a strong social protection floor, in line with ILO Recommendation No. 202, as well as with Convention No. 102 and other social security standards.

- As basic income security is not sufficient to ensure effective access to basic services, a UBI would need to be combined with effective policies that ensure universal access to health care, education and other social services. With respect to health care, the principle of adequacy requires States to provide everyone with access to essential health care, including maternity care, which meets the criteria of availability, accessibility, acceptability and quality, as well as to ensure that those in need of health care do not face financial difficulties due to seeking and accessing health care.

Non-regressive financing mechanisms are essential for ensuring equity and sustainability:

- The net distributive effect of UBI depends on the benefit level and the source of financing. Recommendation No. 202 and Convention No. 102 point to the need of solidarity in financing social protection. Particular attention needs to be given to ensuring the progressivity of financing sources. UBI should not be financed by regressive methods such as taxing households or depriving them from other social benefits, as this UBI policy would give to households with one hand what it would take away with the other. Given that UBI is proposed to redress growing inequalities caused by globalization and new forms of work, it must be redistributive.
- Budget-neutral UBI proposals are not in line with ILO standards. Dividing the existing level of social protection expenditure equally by the total population necessarily results in a low UBI benefit level, in most countries well below the poverty line, generating further poverty and inequalities. Replacing the entire social protection system – including public social insurance financed by employers’ and workers’ contributions – and other social expenditures, by a UBI benefit spread out as a uniform rate would result in a net welfare loss. From the point of view of financing, the net winners would be employers and corporations, given the reduction in “labour taxes” (employers’ contributions). Even if workers were proportionally compensated with higher salaries, it may well lead to increased inequality, as most of the wage increase would go into increased consumption or savings, which is unlikely to provide a comparable level of social protection for the large majority of people, including for low and middle classes. Further, given that UBI is proposed to amend inequalities, including those resulting from corporate globalization, it would be important that corporations additionally contribute to UBI; however, the debate often ignores these points. Phasing-out employer contributions would release employers from their social responsibilities and shift economic and financial risks to individual workers, hitting hard especially those with limited earnings and savings capacities, typically women and vulnerable workers, thus generating more inequality.
- For a UBI proposal to be progressive, it needs to be redistributive, financed by progressive taxation and other sources explained in this paper. Employer contributions need to be preserved and be adequate to ensure higher levels of social protection through public social insurance. The financing of a UBI will need to be carefully considered in order to avoid adverse effects on inclusive growth and development, and compromise the sustainability and equity of the social protection system including a UBI.

Progressive realization, including by setting targets and time frames:

- Countries that desire moving forward towards a UBI, but without sufficient resources to implement a UBI today may consider phasing-in UBI progressively. Universal benefits for broad groups of the population, such as universal old age pensions or universal child grants, constitute possible policy options for strengthening universal social protection, which require less resources and hence may be more realistic and feasible in many countries as a step forward towards UBI.²⁰ Progressive realization requires including objectives in national development strategies and plans, setting targets and timeframes.

A legal framework and effective governance and administration:

- A UBI would need to be anchored in a sound legal and institutional framework that clearly defines the level and range of benefit as well as its duration; the qualifying conditions and the financing modalities.²¹ This would contribute to facilitating the adequate delivery of a UBI and to designing the administration in a sound, transparent and accountable manner that ensures financial sustainability in the long-run. Such frameworks should regulate the setting of benefit levels as well as their regular adjustment to changing costs of living, eligibility criteria, rights of appeal and grievance mechanisms, and accountability mechanisms.

Social dialogue is key for ensuring the participation of key stakeholders and building broad societal consensus:

- A UBI would need to be agreed through legitimate national dialogue, including government, workers and employers' organisations, as well as other stakeholders such as civil society. Institutionalized social dialogue mechanisms are essential for ensuring the participation of all stakeholders.

Ensuring gender equality will require a careful and comprehensive analysis of the various implications of a UBI for women's rights and their empowerment:

- While the introduction of a UBI may have positive immediate effects on ensuring at least a basic level of income security for women, it is important to also understand other impacts in the short- and the long run. For example, if the introduction of a UBI is associated with the privatization of benefits and services, women will likely be negatively affected. Regressive UBI budget-neutral proposals that suggest the replacement of public social insurance systems by a modest UBI, promoting individual savings and private insurance for those who can afford it, are not in line with ILO standards and would have negative impacts on women, as women tend to have shorter careers, lower earnings and lesser savings. Further, the privatization of public services does not only undermine the fundamental responsibility of the State to guarantee its citizens effective access to income security and essential services, but is also likely to further exacerbate inequalities.
- The introduction of a UBI should also take into account the need to consider complementary gender-sensitive policies, such as employment and labour market

²⁰ Even the IMF includes the options of universal child benefits and universal pensions in its estimates and suggests that "a gradual approach to reform would be desirable, possibly focusing first on universal coverage of subgroups of the population, such as children and the elderly" (IMF, 2017, p. 29).

²¹ Only few of the existing UBI pilots established the entitlement to UBI by law. For example, the bill on the Finnish pilot was adopted by the Parliament, whilst the Dutch experiments are currently still on hold due to pending approvals by the government.

policies, wage policies, as well as parental leave and care policies, so as to prevent negative effects on women. This close coordination of a UBI with other policies is also essential for ensuring effective access to social protection for women and men, including through a strong social protection floor.

Systematically assessing implications for the broader policy context is essential for a UBI to positively contribute to social justice and inclusive development:

- The implications of the possible introduction of a UBI on social and economic outcomes requires a more thorough consideration of the wider policy context, including with respect to employment, macro-economic, fiscal as well as health, education and care policies. Close coordination of a UBI with other social, employment and economic policies, as requested by Recommendation No. 202, is essential. This includes policies that enhance education, literacy, vocational training, skills and employability. The link between income security and employment policies is particularly important to enable individuals to integrate more decent and productive employment, avoid long-term dependency and encourage labour market participation. Policies including public procurement, government credit provisions, or labour market policies may also be useful complements to promote formal employment and productive economic activity.
- Complementary policies, such as wage policies would also be key to set an appropriate regulatory framework. For example, effective minimum wage policies along the lines of ILO Conventions No. 131 or No. 26 could potentially offset a possible wage freeze or cut induced by a UBI, which may function as a wage subsidy. Minimum wage policies could also avoid that a UBI based on citizenship perpetuates the economic insecurity of certain groups such as guest workers or irregular migrants. Likewise, effective policies to regulate labour markets and employment are critical to avoid possible unintended consequences of a UBI to subsidize precarious employment.
- Effective labour market institutions are necessary to ensure decent work for all in a rapidly changing environment. The World Economic Forum (2017) recognizes that a UBI cannot substitute labour market institutions, such as active labour market policies and policies aimed at ensuring equal access to quality basic education or equal opportunities for women. Similarly, the implications of a UBI on other labour market institutions, such as wage setting mechanisms and collective bargaining, are not yet fully understood. In addition, the interaction of a possible UBI with vocational training and other policies to support life-long learning would need to be more fully explored, given their importance for preparing the future of work. Furthermore, high quality public services that would complement a UBI are essential for ensuring universal access to quality health, education, care and other services.
- In order to foster inclusive growth and yield better distributive outcomes from macroeconomic, growth and income distributional benefits, a UBI would need to be complemented by other universal provisions, as well as by macro-economic, employment, wage, tax and other policies that address the distribution of primary incomes in order to supplement its potential redistributive impact. A UBI by itself is insufficient to provide a stand-alone solution to redress an ever more unequal primary distribution of incomes; to the contrary, unless embedded into a coherent policy framework that takes these broader factors into account, a UBI may exacerbate inequality and damage inclusive growth and social justice.

The multiplicity of UBI proposals requires a better understanding of issues regarding benefit adequacy, costs and financing sources, impacts on poverty, inequality and gender, among others. As discussed in this paper, some UBI proposals have the potential to advance equity and social justice, while other proposals may result in a net welfare loss.

It is important to carefully examine all issues within a UBI proposal, including the progressivity or regressivity of the proposed measures, the winners and losers, potential risks and trade-offs. Measures that are regressive or jeopardize inclusive development should always be avoided. National social dialogue is fundamental to generate a broad political consensus for UBI and define an optimal policy mix to reduce inequalities, support inclusive development and advance social justice.

Governments considering the implementation of a UBI can rely on the guidance provided by ILO standards and should carefully reflect on an effective way to embed the UBI in the social protection system, combined with well-designed public social insurance and other social protection benefits, as well as effective measures to guarantee effective access to high-quality public services, including health, education, care and other social services. Such a careful assessment should also include ways to ensure sustainable and equitable financing mechanisms, as well as broader macro-economic, labour market, employment and tax policies. The momentum gathering behind the idea of a UBI can help to spur a discussion on how to respond to existing economic and social changes in a more effective and empowering way based on social solidarity and while ensuring social justice outcomes for all.

Annex I. Key parameters of selected universal basic income proposals, cost estimates and pilots

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
UBI proposals					
Van Parijs and Vanderborght (2017): partial basic income that is designed to guarantee a “floor”	USD 1163/month in the United States, USD 1670/month in Switzerland, USD 33/month in India for adults (~45% of median disposable income or 90% of the national poverty line)	BI to be supplemented by social assistance and social insurance top-ups	Fiscal residents	Income tax	<i>Expected results:</i> BI as an instrument to achieve social justice, understood as a fair distribution of real freedom
Van Parijs and Vanderborght (2017): partial basic income throughout the European Union (or Eurozone)	On average, EUR 200/month for adults (~14% of median disposable or 29% of the poverty line in the EU). Benefits would vary according to the living cost in each of the countries.	National social security systems remain intact.	EU citizens (gradual phasing in, e.g. starting with a specific age group)	Different options: Money creation by the European Central Bank, financial transaction tax (Tobin tax), carbon tax, capital tax; most promising option: value added tax	<i>Expected results:</i> BI as a means to reduce the pressure weighing on national redistribution systems resulting from the single market as well as selective immigration and emigration, and to secure the European social model
Stern and Kravitz (2016)	US federal poverty line (2015), US\$ 1000/month for a single person, US\$ 2000/month for a family of four (US\$12,000 respectively US\$ 24,000 per year).	UBI should not displace social security or public services, however it should replace current welfare programs (social assistance)	Adults 18-64 and older persons 65+ who do not receive at least US\$ 1,000 per month	Reallocation of funds from 126 US welfare programmes (social assistance), adjustments to health system, taxation and increased revenue from new sources of finance	<i>Expected results:</i> Raise the income floor, eliminate poverty, and reinvigorate the economy
Switzerland: national referendum on unconditional basic income (2016) (BIEN, 2018)	CHF 2,500/month for adults (~56% of the median disposable income or 113% of the national poverty line) CHF 625/ month for children (~14% of the median disposable income or 28% of the national poverty line)	Not specified	All residents	Not specified	The referendum was rejected by a majority of 76.9 per cent of the electorate.

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
Davala, Jhabvala, Standing and Mehta (2015): unconditional basic income for India	Standing, as an advisor to the government of India, used the thumb rule of 30% of the income of lower-income families (~8% of median disposable income or 17% of the national poverty line). A low level of BI should be built up gradually (Standing, 2017).	Replaces means tested benefits.	All residents in a given community, province or country	Four options: elimination of “regressive subsidies”, tax increases, establishment of sovereign wealth funds, funding by donors	<i>Expected results:</i> BI as a means to provide basic security more effectively than means-tested schemes, remove the poverty and precarity trap and buffer the possible technological disruption of the labour market
Atkinson (2015, 1996): basic participation income (PI), with a prospect of an EU-wide child basic income	No specified level of PI for adults; GBP 200/month for children (~13% of the median disposable income or 27% of the national poverty line)	PI replaces income tax allowances and child benefits. Existing insurance-based social protection and pension schemes remain intact. PI complements existing social protection schemes.	The PI payment is limited only to those who are either in paid work, job-seekers, those engaged in some kind of socially useful activity (e.g. caring, volunteering, education or training) and those who are unable to participate due to disability and sickness.	Proposed tax reforms: Taxation of income above certain amount of earnings	<i>Expected results:</i> 1) reduction of the number of people dependent on means-tested benefits by half a million; 2) 57% of families would gain under a PI, 33% would lose out
Schleswig-Holstein/ Germany (proposed by Federal State Government)	EUR 1,000/month for adults (~55% of the median disposable income or 110% of the national poverty line) EUR 500/ month for children (~27.5% of the median disposable income or 55% of the national poverty line)	BI would replace social assistance benefits, child benefits and BAföG benefits (state-sponsored student grants and loans)	All residents	Not specified	Not specified
Paine (1779): unconditional ground-rent lump sum for adults, plus annual pension for older persons and persons with disabilities	Single lump sum for individuals aged 21-50; annual pension to each person over the age of 50 and to persons with disabilities	Replaces social redistribution.	All citizens.	Funded by ground-rents, paid by landowners. Death duties amount to no more than 10 per cent of the value of estates or 20 per cent in the absence of an heir.	<i>Expected results:</i> ground-rent as a means to reduce poverty by compensating the landless and guarantee social justice

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
BI pilots					
Finland: a BI pilot, implemented within the social security system (2017-18) (KELA, 2016)	EUR 560/month for adults (~26% of the median disposable income or 52% of the national poverty line)	BI replaces some basic social security benefits, including the basic unemployment benefit, the sickness benefit, as well as some parental benefits and rehabilitation benefits. Most of the earnings-related benefits are retained. The BI will be deducted from the after-tax amount of the earnings-related unemployment allowance.	2,000 randomly selected recipients of unemployment benefits between 25 and 58 years	Cost-neutral, financed by replacing existing benefits for the target group	<i>Objectives:</i> to assess the effectiveness of UBI to 1) promote labour market participation and provide work incentives, 2) reduce bureaucracy and simplify the benefit system. <i>No results yet.</i>
Ontario/ Canada: three-year BI pilots in three regions (planned) (Segal, 2016; Government of Ontario, 2018)	CAD 1,415.75/ month for adults (~40% of the median disposable income or 80% of the national poverty line); CAD 2,002.25/ month for couples. In addition, up to CAD 500/month for persons with disabilities. The level of basic income is reduced by CAD 0.50 for every additionally earned dollar.	BI replaces Ontario Works and Ontario Disability Support Program. Child, disability and old age security benefits are retained. Income from other schemes such as the Canada pension Plan and Employment Insurance decreases the amount of basic income by CAD 1 for every dollar.	4,000 low-income residents between 18 and 64 years	Financed by replacing existing benefits for the target group	<i>Objectives:</i> to assess the effectiveness of a UBI to improve health and education outcomes as well as job prospects for low-income individuals. <i>No results yet.</i>
Utrecht/ Netherlands: BI pilot (delayed by the Dutch Ministry of Social Affairs and Employment). Meanwhile, similar experiments proposed in Tilburg, Wageningen, and Groningen are reviewed (BIEN, 2018)	EUR 972/month for individuals (~47% of the median disposable income or 94% of the national poverty line); EUR 1,389/ month for couples	Not specified	Randomly selected recipients of social assistance benefits	Not specified	<i>Objectives:</i> to assess the effectiveness of different policy options to stimulate labour market participation. <i>No results yet.</i>
Islamic Republic of Iran: universal cash transfer programme introduced in 2010 as replacement for energy subsidies (IMF, 2014)	USD 45/month per head of household (no data on the median disposable income)	Not specified	All residents	Fuel subsidy	<i>Measured results:</i> Some UBI recipients increased their working hours

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
UBI experiments (conducted by institutions other than the government)					
India: three BI experiments, coordinated by the Self Employed Women's Association (SEWA), UNICEF and UNDP (2009-13) (BIEN, 2018)	INR 200/month (~USD 4) for adults; in the 2nd year: INR 300 (~8% of median disposable income or 17% of the national poverty line); INR 100/month for children (~4% of median disposable income); in the 2nd year: INR 150	Not linked to existing schemes and programmes	6,000 randomly selected individuals from nine rural villages	Experiment financed by external grant from UNDP and, more substantially, from UNICEF. Financing options were not part of experiment.	<i>Measured</i> positive impact on financial inclusion, food sufficiency and nutrition levels, health, school enrolment levels, productive activity and participation of women in household decision making, reduction in child labour.
Namibia: Basic Income Grant (BIG) experiment (2008-09) (NANGOF, 2009)	NAD 100/month (~USD 12) for adults until the age of 60. After the end of the project, a monthly allowance of NAD 80 was paid to all participants	Complementing other programmes including universal old age pension of then NAD 500/month	1,000 individuals registered living in the Otjivero-Omitara settlement below the age of 60.	Experiment financed from donations from individuals, churches, organizations and donors, organized through Basic Income Grant Coalition Namibia. Financing options were not part of experiment.	<i>Measured</i> positive impact on economic activity, households' purchasing power, children's nutrition and enrolment rates and women's empowerment
Kenya: NGO-run BI pilot (2016-2028) (Give Directly, 2018)	USD 23/month, unconditional benefits. Payments through mobile money system.	Not specified	6,000 residents of a randomly selected village A large-scale experiment covering 200 villages with about 26,000 individuals is planned for 2017.	Experiment financed by Give Directly and donations, for example from Omidyar Network. Financing options not part of experiment.	<i>Objectives:</i> assess the impacts of a UBI with respect to economic status, time use, risk-taking, gender relations Long-term UBI is compared to a short-term UBI, lump sum payments and to a situation with no scheme in place.
United States: BI experiment conducted by a private investor in two US States for 3-5 years (planned) (Y Combinator, 2017)	USD 1,000/month	Still in design phase	1,000 randomly selected individuals between the age of 21 and 40	Experiment financed by external grant from private investor (Y Combinator). Financing options not part of experiment.	Objectives: assess the impacts of a UBI with respect to economic, social, and physiological self-sufficiency and well-being, use of time and money and on the recipients' children and those in their networks. <i>No results yet.</i>

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
Busibi/ Uganda : BI experiment (2017-) (Eight.World, 2018)	USD 18.25/ month for adults; USD 9.13/ month for children (no available data on median disposable income)	Not specified	All residents of the village Busibi (56 adults and 88 children)	Experiment financed by Eight (charitable organization) Financing options not part of experiment..	Not specified
Variants of UBI (including negative income tax and annual dividend models)					
Friedman (1967) : negative income tax proposal (similar to BI).	Benefits would vary inversely with family income according to a negative tax rate schedule (payment at household level)	Negative income tax replaces all other welfare and social assistance programmes	Fiscal residents who would be net recipients under a BI	Negative income tax	<i>Expected results</i> : 1) lower costs and reduced bureaucracy; 2) more support to the poor; 3) more personal freedom; 4) increased work incentives
Alaska/USA : Permanent Fund distributes part of the state's oil revenues to all residents (State Alaska, 2018)	Variable annual dividend, equivalent to USD 172/ month (2015), USD 85/ month (2016) (respectively 6 % and 3% of the median disposable income and 12% and 6% of the national poverty line)	In the month of disbursement of the dividend, support from means-tested social assistance programmes drops out To compensate the temporal loss, a "hold harmless" programme was introduced	All permanent residents, including children (minimum requirement: one year)	Natural resource dividends	<i>Measured results</i> : 1) about one third of dividend income was used for debt reduction, 2) no significant impact on labour supply
UBI analysis and cost estimates					
OECD (2017) ; Browne and Immervoll (2017)	At the guaranteed minimum-income (GMI) level, which is below poverty lines, and at lower benefit levels	Replaces social insurance and social assistance, may also replace all social spending for the age group	All children and working age adults	Budget-neutral UBI proposal, thus using current social security and other social expenditures (spreading them among all children and working age people), abolishing tax-free allowances.	<i>Expected results</i> : Because of low benefit levels, overall poverty rates would increase significantly. From an economic perspective, UBI does not act as an automatic stabilizer as it does not go up or down in a downturn.

Description	Level of basic income ^a	Relationship to other benefits	Target group	Financing	Objectives and (expected) results
IMF (2017)	25 percent of median per capita income; the fiscal cost would be about 6–7 percent of GDP in advanced economies and 3–4 percent in emerging markets and developing economies	Replaces social assistance and subsidies	A cash transfer of an equal amount to all individuals in a country	Financing options that are budget neutral can involve any combination of cutting spending (e.g. welfare) or increasing direct or indirect taxes. Other sources of revenue could include elimination of energy and other subsidies	<i>Expected results.</i> Depending on financing options, substantive impact on inequality (Gini decreasing on average by five points); also significant reduction of poverty in developing economies. Net redistributive impact will depend on financing mechanisms.
Nikiforos, Steinbaum and Zezza, Roosevelt Institute (2017)	Simulations on economic growth using different benefit levels: US\$1000 or US\$500 for each adult/month	Replaces social assistance but UBI is an income supplement that does not displace Social Security or public services.	For all adults	Paid from the national budget but not taxing individuals, if paying for UBI by increasing taxes on households, the Levy model forecasts no effect on the economy	<i>Expected results:</i> Using the Levy Institute macro-econometric model, a UBI providing \$1,000 per month for all adults expands the economy by 12.56 per cent over the baseline after eight years.
This paper	At the national poverty line level, estimations provided for 130 countries	UBI replaces main social assistance and unemployment support, but not social insurance or programmes for those with special needs (e.g. to compensate for disability-related costs). If phasing-in UBI, a first step are social protection floors.	All residents	Financing options: Re-allocating public expenditures (e.g. defence, subsidies); increasing tax revenues (e.g.; corporate and financial sector taxes); eliminating illicit financial flows and corruption; managing/ restructuring debt; and others.	Expected results: Eradication of poverty globally, reduction of inequality, including gender inequalities. Thus it is an instrument of social justice while also increasing consumption, economic activity and growth.
Note: ^a Monthly median disposable income data were calculated based on annual median disposable income data from the OECD in national currency, at current prices and for the year 2014 and from Eurostat, 2017: http://ec.europa.eu/eurostat/web/income-and-living-conditions/data/database ; http://ec.europa.eu/eurostat/web/gdp-and-beyond/quality-of-life/median-income . For Dauphin, data for 1979 were used. Poverty lines are defined as 50% of the median equivalised disposable income.					
Sources: As indicated in the table.					

Annex II. Universal basic income: global costing estimates

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
Afghanistan	AFG	Low income	South Asia	44.0	23,932	Absolute	38,034	62.9	49.1
Angola	AGO	Upper middle income	Sub-Saharan Africa	47.7	118,429	Absolute	837,988	14.1	10.8
Argentina	ARG	Upper middle income	Latin America and the Caribbean	25.2	27,312	Absolute	103,759	26.3	23.0
Armenia	ARM	Lower middle income	Europe and Central Asia	18.4	500,033	Absolute	1,561,933	32.0	29.1
Australia	AUS	High income	East Asia and Pacific	18.8	24,269	Relative	67,967	35.7	32.3
Austria	AUT	High income	Europe and Central Asia	14.1	12,891	Relative	38,982	33.1	30.7
Azerbaijan	AZE	Upper middle income	Europe and Central Asia	21.9	1,657	Absolute	7,320	22.6	20.2
Bangladesh	BGD	Low income	South Asia	29.4	33,230	Absolute	78,065	42.6	36.3
Belgium	BEL	High income	Europe and Central Asia	17.0	12,120	Relative	35,923	33.7	30.9
Belize	BLZ	Upper middle income	Latin America and the Caribbean	32.5	3,948	Absolute	9,540	41.4	34.7
Benin	BEN	Low income	Sub-Saharan Africa	42.2	140,808	Absolute	424,522	33.2	26.2
Bhutan	BTN	Lower middle income	South Asia	26.9	23,458	Absolute	147,749	15.9	13.7
Bolivia, Plurinational State of	BOL	Lower middle income	Latin America and the Caribbean	32.4	10,760	Absolute	18,264	58.9	49.4
Botswana	BWA	Upper middle income	Sub-Saharan Africa	32.0	14,586	Absolute	91,533	15.9	13.4
Brazil	BRA	Upper middle income	Latin America and Caribbean	22.5	6,567	Relative	26,521	24.8	22.0
Burkina Faso	BFA	Low income	Sub-Saharan Africa	45.6	119,742	Absolute	385,153	31.1	24.0
Burundi	BDI	Low income	Sub-Saharan Africa	44.8	674,700	Absolute	424,975	158.8	123.2

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
Cambodia	KHM	Low income	East Asia and Pacific	31.6	1,763,131	Absolute	5,193,484	33.9	28.6
Cameroon	CMR	Lower middle income	Sub-Saharan Africa	42.5	343,539	Absolute	679,142	50.6	39.8
Canada	CAN	High income	North America	16.0	20,749	Relative	55,792	37.2	34.2
Cape Verde	CPV	Lower middle income	Sub-Saharan Africa	29.7	64,285	Absolute	369,158	17.4	14.8
Central African Republic	CAF	Low income	Sub-Saharan Africa	39.1	308,243	Absolute	280,862	109.7	88.3
Chad	TCD	Low income	Sub-Saharan Africa	47.7	297,000	Absolute	473,222	62.8	47.8
Chile	CHL	High income	Latin America and Caribbean	20.8	2,088,054	Relative	8,791,324	23.8	21.3
China (People's Republic of)	CHN	Upper middle income	East Asia and Pacific	17.7	9,984	Relative	43,745	22.8	20.8
Colombia	COL	Upper middle income	Latin America and the Caribbean	24.3	2,964,324	Absolute	16,316,834	18.2	16.0
Comoros	COM	Low income	Sub-Saharan Africa	40.3	420,602	Absolute	379,916	110.7	88.4
Congo	COG	Lower middle income	Sub-Saharan Africa	42.6	312,932	Absolute	1,887,574	16.6	13.0
Costa Rica	CRI	Upper middle income	Latin America and the Caribbean	22.3	1,287,516	Absolute	6,001,604	21.5	19.1
Côte d'Ivoire	CIV	Lower middle income	Sub-Saharan Africa	42.5	269,075	Absolute	827,757	32.5	25.6
Czech Republic	CZE	High income	Europe and Central Asia	15.1	115,552	Relative	409,870	28.2	26.1
Democratic Republic of the Congo	COD	Low income	Sub-Saharan Africa	46.0	1,115,343	Absolute	322,598	345.7	266.2
Denmark	DNK	High income	Europe and Central Asia	16.8	117,512	Relative	350,391	33.5	30.7
Dominican Republic	DOM	Upper middle income	Latin America and the Caribbean	30.0	56,327	Absolute	302,286	18.6	15.8
Ecuador	ECU	Upper middle income	Latin America and the Caribbean	29.0	1,042	Absolute	4,998	20.8	17.8

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
Egypt	EGY	Lower middle income	Middle East and North Africa	33.2	4,428	Absolute	26,954	16.4	13.7
El Salvador	SLV	Lower middle income	Latin America and the Caribbean	27.0	611	Absolute	4,950	12.3	10.7
Eritrea	ERI	Low income	Sub-Saharan Africa	42.8	16,499	Absolute	10,987	150.2	118.0
Estonia	EST	High income	Europe and Central Asia	16.1	4,518	Relative	15,022	30.1	27.6
Ethiopia	ETH	Low income	Sub-Saharan Africa	41.4	6,121	Absolute	9,649	63.4	50.3
Finland	FIN	High income	Europe and Central Asia	16.4	12,847	Relative	38,241	33.6	30.8
France	FRA	High income	Europe and Central Asia	18.3	10,930	Relative	32,397	33.7	30.7
Gabon	GAB	Upper middle income	Sub-Saharan Africa	37.1	554,889	Absolute	5,491,489	10.1	8.2
Gambia	GMB	Low income	Sub-Saharan Africa	46.2	9,065	Absolute	23,611	38.4	29.5
Georgia	GEO	Lower middle income	Europe and Central Asia	17.3	1,762	Absolute	8,039	21.9	20.0
Germany	DEU	High income	Europe and Central Asia	13.1	10,804	Relative	36,211	29.8	27.9
Ghana	GHA	Lower middle income	Sub-Saharan Africa	38.8	1,511	Absolute	3,793	39.8	32.1
Greece	GRC	High income	Europe and Central Asia	14.5	4,251	Relative	16,336	26.0	24.1
Guatemala	GTM	Lower middle income	Latin America and the Caribbean	36.6	10,652	Absolute	31,389	33.9	27.7
Guinea	GIN	Low income	Sub-Saharan Africa	42.5	3,910,954	Absolute	4,809,712	81.3	64.0
Guinea-Bissau	GNB	Low income	Sub-Saharan Africa	40.8	248,504	Absolute	314,394	79.0	62.9
Guyana	GUY	Lower middle income	Latin America and the Caribbean	28.8	50,063	Absolute	899,974	5.6	4.8
Haiti	HTI	Low income	Latin America and the Caribbean	33.7	17,794	Absolute	48,671	36.6	30.4

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
Honduras	HND	Lower middle income	Latin America and the Caribbean	31.8	40,181	Absolute	58,066	69.2	58.2
Hungary	HUN	High income	Europe and Central Asia	14.4	850,807	Relative	3,303,281	25.8	23.9
Iceland	ISL	High income	Europe and Central Asia	20.3	2,072,348	Relative	6,127,072	33.8	30.4
India	IND	Lower middle income	South Asia	28.7	18,898	Relative	70,729	26.7	22.9
Indonesia	IDN	Lower middle income	East Asia and Pacific	27.7	4,276,296	Absolute	45,728,103	9.4	8.1
Ireland	IRL	High income	Europe and Central Asia	21.7	12,075	Relative	42,155	28.6	25.5
Israel	ISR	High income	Middle East and North Africa	27.9	42,008	Relative	138,775	30.3	26.1
Italy	ITA	High income	Europe and Central Asia	13.7	8,796	Relative	26,680	33.0	30.7
Jamaica	JAM	Upper middle income	Latin America and the Caribbean	23.6	163,597	Absolute	667,745	24.5	21.6
Japan	JPN	High income	East Asia and Pacific	13.0	1,221,000	Relative	3,880,435	31.5	29.4
Jordan	JOR	Upper middle income	Middle East and North Africa	35.5	996	Absolute	4,338	23.0	18.9
Kazakhstan	KAZ	Upper middle income	Europe and Central Asia	26.7	153,128	Absolute	2,281,037	6.7	5.8
Kenya	KEN	Low income	Sub-Saharan Africa	41.9	62,625	Absolute	100,896	62.1	49.1
Kyrgyzstan	KGZ	Lower middle income	Europe and Central Asia	31.4	32,256	Absolute	70,035	46.1	38.8
Lao People's Democratic Republic	LAO	Lower middle income	East Asia and Pacific	34.8	2,614,712	Absolute	13,025,267	20.1	16.6
Latvia	LVA	High income	Europe and Central Asia	15.1	3,340	Relative	11,850	28.2	26.1
Lebanon	LBN	Upper middle income	Middle East and North Africa	24.0	5,045,136	Absolute	19,912,838	25.3	22.3
Lesotho	LSO	Lower middle income	Sub-Saharan Africa	36.1	3,684	Absolute	9,745	37.8	31.0

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
Liberia	LBR	Low income	Sub-Saharan Africa	42.3	66,112	Absolute	33,505	197.3	155.6
Lithuania	LTU	High income	Europe and Central Asia	14.6	2,903	Relative	12,478	23.3	21.6
Luxembourg	LUX	High income	Europe and Central Asia	16.4	19,306	Relative	89,541	21.6	19.8
Madagascar	MDG	Low income	Sub-Saharan Africa	41.7	639,563	Absolute	1,238,566	51.6	40.9
Malawi	MWI	Low income	Sub-Saharan Africa	45.2	47,417	Absolute	75,389	62.9	48.7
Malaysia	MYS	Upper middle income	East Asia and Pacific	24.5	13,606	Absolute	36,644	37.1	32.6
Maldives	MDV	Upper middle income	South Asia	27.5	19,541	Absolute	100,446	19.5	16.8
Mali	MLI	Low income	Sub-Saharan Africa	47.5	192,257	Absolute	436,588	44.0	33.6
Mauritania	MRT	Lower middle income	Sub-Saharan Africa	40.0	188,215	Absolute	468,058	40.2	32.2
Mauritius	MUS	Upper middle income	Sub-Saharan Africa	19.3	80,883	Absolute	353,748	22.9	20.7
Mexico	MEX	Upper middle income	Latin America and Caribbean	27.5	23,479	Relative	143,819	16.3	14.1
Mongolia	MNG	Lower middle income	East Asia and Pacific	28.2	268,974	Absolute	7,736,613	3.5	3.0
Morocco	MAR	Lower middle income	Middle East and North Africa	27.2	4,362	Absolute	33,328	13.1	11.3
Mozambique	MOZ	Low income	Sub-Saharan Africa	45.3	11,530	Absolute	27,600	41.8	32.3
Myanmar	MMR	Low income	East Asia and Pacific	27.6	553,763	Absolute	976,116	56.7	48.9
Namibia	NAM	Upper middle income	Sub-Saharan Africa	36.7	5,893	Absolute	65,896	8.9	7.3
Nepal	NPL	Low income	South Asia	32.7	24,275	Absolute	68,763	35.3	29.5
Netherlands	NLD	High income	Europe and Central Asia	16.8	12,500	Relative	40,365	31.0	28.4

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
New Zealand	NZL	High income	East Asia and Pacific	20.0	20,165	Relative	53,359	37.8	34.0
Nicaragua	NIC	Lower middle income	Latin America and the Caribbean	30.0	18,202	Absolute	39,297	46.3	39.4
Niger	NER	Low income	Sub-Saharan Africa	50.5	197,691	Absolute	255,759	77.3	57.8
Nigeria	NGA	Lower middle income	Sub-Saharan Africa	44.0	84,484	Absolute	366,800	23.0	18.0
Norway	NOR	High income	Europe and Central Asia	18.0	185,727	Relative	612,549	30.3	27.6
Pakistan	PAK	Lower middle income	South Asia	35.0	30,453	Absolute	167,520	18.2	15.0
Panama	PAN	Upper middle income	Latin America and the Caribbean	27.2	1,686	Absolute	10,976	15.4	13.3
Paraguay	PRY	Lower middle income	Latin America and the Caribbean	30.1	7,615,272	Absolute	20,507,861	37.1	31.5
Peru	PER	Upper middle income	Latin America and the Caribbean	27.9	3,633	Absolute	20,471	17.7	15.3
Philippines	PHL	Lower middle income	East Asia and Pacific	31.9	10,969	Absolute	128,890	8.5	7.2
Poland	POL	High income	Europe and Central Asia	14.9	13,551	Relative	44,686	30.3	28.1
Portugal	PRT	High income	Europe and Central Asia	14.1	4,763	Relative	16,640	28.6	26.6
Russia	ROU	Upper middle income	Europe and Central Asia	16.8	124,451	Relative	421,672	29.5	27.0
Rwanda	RWA	Low income	Sub-Saharan Africa	41.1	167,344	Absolute	524,558	31.9	25.4
Senegal	SEN	Lower middle income	Sub-Saharan Africa	43.8	413,030	Absolute	612,364	67.4	52.7
Sierra Leone	SLE	Low income	Sub-Saharan Africa	42.4	2,119,138	Absolute	2,252,786	94.1	74.1
Slovak Republic	SGP	High income	Europe and Central Asia	15.3	4,048	Relative	14,042	28.8	26.6
Slovenia	SVN	High income	Europe and Central Asia	14.7	6,971	Relative	18,244	38.2	35.4

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
South Africa	ZAF	Upper middle income	Sub-Saharan Africa	29.3	13,197	Relative	73,907	17.9	15.2
Spain	ESP	High income	Europe and Central Asia	14.9	7,448	Relative	22,340	33.3	30.9
Sri Lanka	LKA	Lower middle income	South Asia	24.6	48,403	Absolute	500,441	9.7	8.5
St. Lucia	LCA	Upper middle income	Latin America and the Caribbean	23.1	6,735	Absolute	18,877	35.7	31.6
St. Vincent and the Grenadines	VCT	Upper middle income	Latin America and the Caribbean	24.5	6,535	Absolute	19,513	33.5	29.4
Sudan	SDN	Lower middle income	Sub-Saharan Africa	40.5	2,143	Absolute	6,548	32.7	26.1
Swaziland	SWZ	Lower middle income	Sub-Saharan Africa	37.4	7,352	Absolute	33,328	22.1	17.9
Sweden	SWE	High income	Europe and Central Asia	17.3	134,104	Relative	406,023	33.0	30.2
Switzerland	CHE	High income	Europe and Central Asia	14.8	26,345	Relative	79,344	33.2	30.7
Tanzania, United Republic of	TZA	Low income	Sub-Saharan Africa	45.2	507,751	Absolute	1,237,450	41.0	31.8
Thailand	THA	Upper middle income	East Asia and Pacific	17.7	23,522	Absolute	217,410	10.8	9.9
Timor-Leste	TLS	Lower middle income	East Asia and Pacific	42.4	490	Absolute	1,013	48.3	38.1
Togo	TGO	Low income	Sub-Saharan Africa	42.2	351,015	Absolute	279,672	125.5	99.0
Tunisia	TUN	Upper middle income	Middle East and North Africa	23.4	1,501	Absolute	8,716	17.2	15.2
Turkey	TUR	Upper middle income	Europe and Central Asia	25.6	6,692	Relative	26,684	25.1	21.9
Turkmenistan	TKM	Upper middle income	Europe and Central Asia	28.2	4,677	Absolute	27,817	16.8	14.4
Uganda	UGA	Low income	Sub-Saharan Africa	48.1	682,471	Absolute	1,555,812	43.9	33.3
United Kingdom	GBR	High income	Europe and Central Asia	17.6	8,804	Relative	29,008	30.3	27.7

Country	Code	Classification	Region	Children in total pop. (%)	Poverty line, adult(LCU)	Relative or absolute	GDP per capita (LCU)	Cost Scenario I (%)	Cost Scenario II (%)
United States	GBR	High income	North America	19.2	16,038	Relative	56,420	28.4	25.7
Venezuela, Bolivarian Republic of	VEN	Upper middle income	Latin America and the Caribbean	28.1	95,241	Absolute	103,584	91.9	79.0
Viet Nam	VNM	Lower middle income	East Asia and Pacific	23.1	9,544,290	Absolute	44,078,168	21.7	19.2
Zambia	ZMB	Lower middle income	Sub-Saharan Africa	45.9	2,366,020	Absolute	9,841,243	24.0	18.5
Zimbabwe	ZWE	Low income	Sub-Saharan Africa	41.6	1,160	Absolute	961	120.7	95.6

Note: The national poverty lines in this table refer to either relative poverty lines (for high-income countries) or to absolute poverty lines. Relative poverty lines correspond to 50 per cent of the median equivalent disposable income. Absolute poverty lines reflect poverty lines used in official national reports; in local currency units (LCU) per adult, per year, updated to the year 2015, using the respective CPI change. Absolute poverty lines are aimed to all basic needs, meaning they are different (higher) than the food poverty line. Where no national poverty line was available, but only urban and rural poverty lines, the former is used.

Sources: Own calculations based on UN World Population Prospects, IMF World Economic Outlook, ILO World Social Protection Database, OECD, national sources.

Annex III. Costing Methodology

Methodology

The approach to estimate the level of resources to be mobilized by a basic income scheme consists in calculating the Benefit Cost (Direct cost) multiplying the basic transfer amount times the target population. As in the basic income the target population is the full population, their projection consists of the national population prospects.

$$BC_t = POP_t * ben_t$$

For this, BC_t is the direct cost of the benefit for a given year, POP_t the total population for the same year (measured at the middle of the year) and ben_t is the total annual benefit for the same year in the currency used to express the BC_t .

Over time the Cost of the Benefit will change according to the behaviour of some variables:

$$\begin{aligned}\Delta BC_t &= \Delta POP_t * ben_t + POP_t * \Delta ben_t + \Delta POP_t * \Delta ben_t \\ \frac{\Delta BC_t}{BC_t} &= \frac{\Delta POP_t * ben_t + POP_t * \Delta ben_t + \Delta POP_t * \Delta ben_t}{POP_t * ben_t} \\ &= \frac{\Delta POP}{POP} + \frac{\Delta ben_t}{ben_t} + \frac{\Delta POP}{POP} \frac{\Delta ben_t}{ben_t}\end{aligned}$$

The relative change in the cost is the sum of the relative growth of population, the relative growth of benefits and the product of both.

The absolute or relative change in benefit amount could be defined in the rules of the benefit or adjusted in an ad hoc basis, or in any rule that could be modelled for calculation purposes.

The relative change in the population instead is more complex to assess. The population of year t is composed by the population of each age (x for male, y for female), single age population in a given year is represented as $pop_{x,t}$, hence Total Population is:

$$POP_t = \sum_{x,y=0}^{\bar{X}} (pop_{x,t} + pop_{y,t})$$

Here \bar{X} is the maximum age of the population.

For all ages but zero, the population of the next year (in a very simplified model) is the surviving population of the year before (the possibility of not surviving in the country a year at a given age x is $q_{x,t}$) plus the immigrants of the given age ($Imm_{x,t}$), minus the emigrants ($Em_{x,t}$). Hence $pop_{x+1,t+1} = pop_{x,t}(1 - q_{x,t}) + Imm_{x,t} - Em_{x,t}$.

For the age zero, the expected population of a year is the expected numbers of births plus the immigrants at age 0 subtracting the emigrants. The expected number of births is the sum of the expected births from female of each age. The expected number of births of female of a given age is the number of female at that age times the fertility rate of that age. The sum of the fertility rates of all ages is the Total Fertility Rate and can be interpreted as the expected number of children a female will expect to have in the country. From this:

$pop_{0,t+1} = \sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t} + Imm_{0,t} - Em_{0,t}$, here $fr_{y,t}$ is the fertility rate for age y at year t , for all ages before and after the fertile age it is equal to zero. Using masculinity rates the newborns can be allocated as male or female.

The Population for the year $t+1$ would be:

$$POP_{t+1} = \sum_{x,y=0}^{\bar{x}} (pop_{x+1,t+1} + pop_{y+1,t+1})$$

$$POP_{t+1} = \sum_{x,y=1}^{\bar{x}} (pop_{x,t}(1 - q_{x,t}) + Imm_{x,t} - Em_{x,t} + pop_{y,t}(1 - q_{y,t}) + Imm_{y,t} + Em_{y,t}) + \sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t} + Imm_{0,t} - Em_{0,t}$$

$$POP_{t+1} = \sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t} + \sum_{x,y=0}^{\bar{x}} (Imm_{x,t} + Imm_{y,t} - Em_{x,t} - Em_{y,t}) + \sum_{x,y=1}^{\bar{x}} (pop_{x,t}(1 - q_{x,t}) + pop_{y,t}(1 - q_{y,t}))$$

Subtracting the population of the previous year:

$$\Delta POP_t = POP_{t+1} - POP_t$$

$$= \sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t} + \sum_{x,y=0}^{\bar{x}} (Imm_{x,t} + Imm_{y,t} - Em_{x,t} - Em_{y,t}) - \sum_{x,y=0}^{\bar{x}} (pop_{x,t} * q_{x,t} + pop_{y,t} * q_{y,t})$$

The absolute change has three components, the newborns, the net migration (NM_t) and the deaths. The relative change is:

$$\frac{\Delta POP_t}{POP_t} = \frac{\sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t}}{POP_t} + \frac{NM_t}{POP_t} - \frac{\sum_{x,y=0}^{\bar{x}} (pop_{x,t} * q_{x,t} + pop_{y,t} * q_{y,t})}{POP_t}$$

The relative change is composed by the Crude Birth Rate, the relative Net Migration and the Death Rate. The first and last component are highly dependent of the age distribution of the population (exposition to risk) as to the mortality or fertility. For example, two countries with the same life expectancy and life table will differ in the death rate given their population are distributed in different ways over ages.

The precise impact of changes in fertility rates and life expectancy is difficult to estimate, nevertheless, the population growth (and cost of the Universal Basic Income) will be higher when: fertility and life expectancy are higher and net migration is positive (and higher). How much higher will depend in the initial age distribution of the population.

We can also estimate the cost of the scheme as a proportion of the GDP, there we can call it bc_t in lower case to identify it. Additionally, GDP_t is the nominal GDP for the year, and gdp_t the nominal GDP per capita.

$$bc_t = \frac{BC_t}{GDP_t} = \frac{POP_t * ben_t}{GDP_t} = \frac{POP_t * ben_t}{gdp_t * POP_t} = \frac{ben_t}{gdp_t}$$

For a flat Universal Basic Income, the cost as percentage of GDP will be the proportion of the benefit to the GDP per capita. From this result we can notice that the cost as percentage of the GDP will grow if the benefit grows faster than the per capita production and diminish otherwise.

$$\begin{aligned} \Delta bc_t &= \frac{gdp_t * \Delta ben_t - ben_t * \Delta gdp_t}{gdp_t^2} = \frac{\Delta ben_t}{gdp_t} - bc_t \frac{\Delta gdp_t}{gdp_t} \\ &= \frac{\Delta ben_t}{gdp_t} * \frac{ben_t}{ben_t} - bc_t \frac{\Delta gdp_t}{gdp_t} = \left(\frac{\Delta ben_t}{ben_t} - \frac{\Delta gdp_t}{gdp_t} \right) bc_t \end{aligned}$$

The change in the costs as proportion of the GDP is the initial cost as percentage of the GDP multiplied by the difference between the relative change of benefit and per capita GDP.

The use of costs as proportion to the GDP helps in the understanding of many trends without explicitly evaluate the population dynamics, nevertheless the GDP per capita is directly affected by population.

Some UBI proposals also consider benefit levels differentiated by age instead of a uniform benefit level. For such proposals, the main task becomes the identification and projection of the different groups to multiply them by their respective benefit.

$$BC_t = \sum_i Pop_{i,t} ben_{i,t}$$

Where $Pop_{i,t}$ represents a population group and $POP_t = \sum_i Pop_{i,t}$

$$BC_t = POP_t \sum_i \frac{Pop_{i,t}}{POP_t} ben_{i,t}$$

$$BC_t = POP_t \overline{ben}_t$$

Here, \overline{ben}_t is the average benefit amount and equals: $\frac{\sum_i Pop_{i,t} ben_{i,t}}{POP_t}$

The change in the amount can be calculated as:

$$\Delta BC_t = \Delta POP_t * \overline{ben}_t + POP_t * \Delta \overline{ben}_t + \Delta POP_t * \Delta \overline{ben}_t$$

In relative terms:

$$\frac{\Delta BC_t}{BC_t} = \frac{\Delta POP_t}{POP_t} + \frac{\Delta \overline{ben}_t}{\overline{ben}_t} + \frac{\Delta POP_t}{POP_t} \frac{\Delta \overline{ben}_t}{\overline{ben}_t}$$

The relative change in the Benefit Cost is the sum of the relative change in population, the relative change in average benefit and the product of both.

As the change in population is the sum of the changes in population.

$$\Delta POP_t = \sum_i \Delta Pop_{i,t}$$

The relative change is equal to the sum of the relative changes in the groups, times its relative size in the population.

$$\frac{\Delta POP_t}{POP_t} = \sum_i \frac{\Delta Pop_{i,t}}{Pop_{i,t}} \frac{Pop_{i,t}}{POP_t}$$

The relative change in benefits equals the change in each benefit relative to the average benefit weighted by the demographic importance of the benefit recipients, the change in population of the group compared to the total population weighted by the relative size of the benefit compared to the average, subtracting the relative change weighted by population and benefit relative importance.

$$\frac{\Delta \overline{ben}_t}{\overline{ben}_t} = \sum_i \frac{Pop_{i,t}}{POP_t} \frac{\Delta ben_{i,t}}{\overline{ben}_t} + \sum_i \frac{\Delta Pop_{i,t}}{POP_t} \frac{ben_{i,t}}{\overline{ben}_t} - \sum_i \frac{\Delta Pop_{i,t}}{POP_t} \frac{Pop_{i,t}}{POP_t} \frac{ben_{i,t}}{\overline{ben}_t}$$

The main conclusion from the dynamic changes in such a scheme is the importance that movement of population between groups with different benefits will have into the scheme and the higher the change in the most populated groups the higher the impact.

For the initial group (the one including age 0,) the growth rate is the net between the Crude Birth rate adjusted for the group, the relative exits and the crude death rate of the group

$$\frac{\Delta Pop_{i,t}}{Pop_{i,t}} = \frac{\sum_{y=0}^{\bar{y}} pop_{y,t} * fr_{y,t}}{POP_t} \frac{POP_t}{Pop_{i,t}} - \frac{pop_{x_{\bar{i}}}}{Pop_{i,t}} - \frac{\sum_{x=0}^{x_{\bar{i}}-1} (pop_{x,t} * q_{x,t})}{Pop_{i,t}}$$

The dynamics of the last group of age assuming the migration is relatively irrelevant is:

$$\begin{aligned} \frac{\Delta Pop_{i,t}}{Pop_{i,t}} &= \frac{\sum_{x=x_{\bar{i}}-1}^{\bar{x}} (pop_{x,t} * (1 - q_{x,t}))}{Pop_{i,t}} \\ &= \frac{pop_{x_{\bar{i}}-1,t} * (1 - q_{x,t}) - \sum_{x=x_{\bar{i}}}^{\bar{x}} (pop_{x,t} * q_{x,t})}{Pop_{i,t}} \\ \frac{\Delta Pop_{i,t}}{Pop_{i,t}} &= \frac{pop_{x_{\bar{i}}-1,t} * (1 - q_{x,t})}{Pop_{i,t}} - \frac{\sum_{x=x_{\bar{i}}}^{\bar{x}} (pop_{x,t} * q_{x,t})}{Pop_{i,t}} \end{aligned}$$

The relative change in the group is the difference between the relative size of the new entrants from younger groups and the crude death rate of the group.

For all other groups (groups that do not include age 0 nor the highest age) this relative change is:

$$\frac{\Delta Pop_{i,t}}{Pop_{i,t}} = \frac{pop_{x_{\bar{i}}-1,t} * (1 - q_{x,t}) - pop_{x_{\bar{i}}}}{Pop_{i,t}} - \frac{\sum_{x=x_{\bar{i}}}^{x_{\bar{i}}-1} (pop_{x,t} * q_{x,t})}{Pop_{i,t}}$$

The difference between the net of entries and exits in the group as proportion of the population and the crude death rate.

For all previous formulas: $x_{\underline{i}}$ is the lower age bound of the group i , $x_{\bar{i}}$ is the higher age bound of the group i .

From, the flat general benefit we know that the relative change of the cost as percentage of GDP is:

$$\frac{\Delta bc_t}{bc_t} = \left(\frac{\Delta ben_t}{ben_t} - \frac{\Delta gdp_t}{gdp_t} \right)$$

For a general income which is different for different groups, we include the change of the average income instead of the change of the flat income, but we must consider that the latter is basically unaffected by demographics while the former is very responsive to them.

$$\frac{\Delta bc_t}{bc_t} = \left(\frac{\Delta \overline{ben}_t}{\overline{ben}_t} - \frac{\Delta gdp_t}{gdp_t} \right)$$

Sensitivity considerations

The main sources of sensitivity in the results of a Universal Basic Income include: possible variability in total population and groups population projections (different mortality and fertility behaviour), different levels of operational expenses and mainly deviations in the projected value of benefits.

The rules of the scheme could contain adjustment factors for the benefit value creating the need to project the parameters accordingly. In cases when the benefit value changes in an ad hoc basis, the sensitivity to the decisions must be clearly highlighted in the projection report and high and low scenarios of benefit values must be presented.

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