Unconditional Basic Income

Thomas Straubhaar

Universal Basic Income – New Answers to New Questions for the German Welfare State in the 21st Century

Thomas Straubhaar
University of Hamburg

The universal basic income (UBI) is a new answer to the main challenges for the welfare state in the 21st century. Even if long term forecasts have become more difficult to make than ever before due to the disruptive processes that structurally deform economies and societies, some long-term trends are highly predictable:

– Globalisation, digitisation and individualization will fundamentally change how and with whom people will spend their life time, and how and where they want to live, work and earn their living.
– Additionally, increasing geographical, professional and social mobility and flexibility and (ab)use of big data will completely transform the relationship between public policies and individual responsibilities to protect people against uncertainty and insecurity. This also applies to topics that are so important for individual economic success and social status like health and education. Lifelong education will become indispensable. But investments in personal health and (further) education require both free time and available (personal) financial resources.
– Furthermore, traditional security nets – like family bonds – will become looser. Marriages and parental partnerships may no longer last a lifetime and will leave a higher number of single parents, who are particularly affected by poverty – especially in times of higher age.
– Finally, relatively low fertility rates and increasing life expectancy will lead to further demographically aging societies with rising financial pressure on the pay-as-you-go pension system whereby active workers have to pay for retired pensioners.

Openness and the global integration of markets, international division of labour and competition may well improve efficiency and stimulate economic growth. New technologies will offer new opportunities for a better life and greater prosperity for all. But globalisation and digitisation also carry the risks of increasing inequality.[1] The gap between higher and lower-paid work and richer and poorer people could increase.[2] Moreover, growing polarisation will make it more difficult to achieve political stability and social cohesion within and between countries and their societies (Bertola 2018).

A welfare state that has its foundations in the circumstances of the late 19th century may prove unable to keep pace with the mass of structural changes in economics, politics and society in the future. Globalisation and digitisation are highly disruptive processes. Disruption occurs precisely because the consequences of new technologies and new political developments are so flexible and pervasive. Consequently, adopting today's welfare state to the circumstances of the future is one reaction, but adapting is another one (Mühleisen 2018). Therefore, two basic strategies could be followed to answer the challenges of the future: either politics wants to change the world to adapt it to an old social welfare system, or societies find a new welfare system that fits well to the disruptive processes of the world in the 21st century. The UBI follows the second option.

LIMITS OF THE BISMARCKIAN WELFARE STATE MODEL

Today's German welfare state was established by its Iron Chancellor Otto von Bismarck during the heydays of industrialization at the end of the 19th century. At that time, workers were moving in masses from an agrarian subsistence economy to heavy industry and manufacturing factories. They worked hard and died young. While in middle age a farmer had to work some 1,500 hours a year to make a living, at the end of the

[1] It is a hotly debated question whether globalization or digitization is (more heavily) responsible for an increase in inequality. Analysis by IMF staff suggests that technological progress has contributed the most to widening income inequality in recent decades (see Obstfeld 2016).
[2] Income inequality has increased in nearly all world regions in recent decades, but at different speeds (World Inequality Report 2018).

19th century a factory worker had to put more than twice those hours simply to survive (see Bregman 2017). Average annual working time in 1885 was about 3,660 hours; nowadays it is about 1,350 hours per year.[3] And while today's life expectancy at birth is 78.3 years for boys and 83.2 years for girls, it was 35.6 years for boys and 38.5 years for girls in the late 19th century when Bismarck's 'carrot-and-stick policy' was the midwife of the first pension system in Germany.[4]

In the aftermath of the Second World War, the German welfare state had to be re-established from scratch. It still relied on the Bismarckian ideas of a dual system with a pay-as-you go scheme financed by labour wage fees on the one hand, and a tax-financed general redistribution system on the other. Under the disastrous post war circumstances, the Bismarckian type of social welfare state was the right decision because it was fast and relatively easy to establish.[5] And in times of a 'German economic miracle' with rising prosperity for large swathes of the society, a baby boom leading to a growing population, and labour-intensive industrial manufacturing, the welfare state was expanded step by step.

According to the economic, social and demographic conditions of post-war circumstances, today's 'Bismarckian' German welfare state is based *demographically* on the classical population pyramid with many young people following their ancestors; *socially* on the traditional family model with a − mostly male sole earner and a mother who cares at home for the education of common children and a marriage that lasts the whole life long; *economically* on a fast-growing economy, which provides the financial background for a steadily wider range of distribution; and *ideologically* on a (Protestant) work ethic, that understands work as the main task of humans.

None of the pillars of the Bismarckian social welfare state of the post-war period will correspond to the future (for data and details, see Straubhaar (2016)): *demographically*, the population pyramid has been turned on its head - fewer and fewer young people will be confronted by more and more elderly people; *socially*, private and professional breaks of relationships have become the rule and the traditional family understanding has been replaced by new forms of living together in 'patchwork' relationships; *economically*, growth rates have slowed, public debt has risen, and globalisation and digitisation are changing the value-added processes, narrowing the room for distribution and calling into question the so-called 'intergenerational contract'; and *ideologically*, more and more people are searching for a more balanced work-life allocation of their life time, searching for options to work less and spend more time on leisure.

It comes as no surprise that the increasing discrepancy between reality and (Bismarckian) ideology has already led to severe problems in the German welfare state in recent decades. The principle of equivalence has been ignored in the social welfare system for a while. The payoffs by far outweigh payments into the system. A balance is only struck thanks to an increasing inflow of additional public money stemming from taxes (and not from contributions, as supposed in the Bismarckian concept). The tax-financed portion reaches about one-third of total payoffs − see Federal Ministry of Labour and Social Affairs (2017). The further ageing of the population in particular will increase the financing problems of the welfare state. Pension contributions will rise, and the pension level will fall. These are not positive prospects for future generations.

BASIC GOALS OF A WELFARE STATE MODEL FOR THE 21ST CENTURY

A welfare state in the 21st century has to correspond to the circumstances that will shape the daily living conditions of the masses in the future. It should switch from "safety net policies — which protect those subject to job loss, for example, through unemployment benefits — to trampoline policies that offer a springboard to new jobs" (Obstfeld 2016, 15).

An appropriate welfare state of the future has to offer answers to the questions of how human work in the 'second age of the machine' (Brynjolfsson and McAfee 2014) can offset robots with artificial intelligence (AI) substituting or replacing the human labour force. It is not so much the fear that the future will lead to a jobless economy and that there will be no need for workers anymore that should be the concern of a welfare state in the future. It is rather the question of increasing the quality of jobs and respecting the growing desire of more and more people for a more balanced division of time between work and life. It could be a quite reasonable goal for a welfare policy to further lower weekly or annual working time, to allow more people to take longer time-outs and sabbaticals (that they could use for further qualification and lifelong further education).[6] Why should a future welfare state not judge 'unemployment' as a political success rather than a failure?

Globalisation and digitisation are provoking growing concerns over the future of employment, and the consequences of new technologies eliminating low-skilled work, depriving parts of the population of the prospect of employment and welfare. New technologies and increasing mobility of factors of

[3] Data are provided for the 19th century by Statista (2018) and for the present by OECD (2018).

[4] Data stems from Statistisches Bundesamt (2018). Actually, life expectancy for 60 year-old men was 12.1 years in 1871 and is 21.6 years today, while for 60 year-old women it was 12.7 years in 1871 *versus* 25.3 years today.

[5] For the distinction between the 'Bismarckian' and the 'Beveridge' type of social welfare state in the context of a UBI, see Kay (2017).

[6] Average working time has further decreased in Germany in the last hundred years from about 3,300 annual hours worked per worker in 1913 (Statista 2018) to 1,450 hours in 2000 and 1,350 hours in 2017 (OECD 2018), in fact the lowest working time of all countries analysed.

production (especially labour) might challenge the viability of social welfare and the financial stability of pay-as-you-go social security systems financed by fees on labour income. But at the same, tax systems that rely on labour income might come under pressure, because robots do not pay taxes (and do not pay contributions to social security systems either). Finally, technological change may result in increased inequality within a society and a stronger polarisation between capital owners and the labour force, and especially lower-skilled workers (European Parliament 2017).

If robots and AI are replacing workers and human brains, capital intensity and labour productivity are increasing. "The good news is that output per person rises. The bad news is that inequality worsens, for several reasons. First, robots increase the supply of total effective (workers plus robots) labor, which drives down wages in a market-driven economy. Second, because it is now profitable to invest in robots, there is a shift away from investment in traditional capital, such as buildings and conventional machinery. This further lowers the demand for those who work with that traditional capital" (Berg *et al.* 2016, 11). This may lead to growing inequality among societies and between economies (World Inequality Report 2018).

Even if the question of whether or not increasing income and wealth polarization is 'fact or fake' is highly controversial; and it is hotly debated whether and to what degree politics and welfare states are bridging the gap, more and more people think and believe that globalisation and digitisation are a negative danger rather than a positive opportunity (see Obstfeld 2016). Moreover, as behavioural economics shows convincingly (see the seminal work by Nobel prize laureates Daniel Kahneman or Thaler), feelings are sometimes more important than facts when people are judging the impact of public (social) policies. That makes the search for a robust and 'fair' welfare system for the 21st century so indispensable.

BASIC IDEAS OF THE BASIC INCOME CONCEPT

The idea of a UBI is nothing new (for a survey on the moral philosophical roots of the UBI, see Van Parijs (1992) and more recently Van Parijs and Vanderborght (2017)): the idea of a minimum income first appeared at the beginning of the 16th century. The idea of an unconditional one-off grant first appeared at the end of the 18th century. And the two were combined for the first time to form the idea of an unconditional basic income near the middle of the 19th century (BIEN 2018).

Among the best-known advocates of a UBI in the 20th century were the British economist and politician Juliet Rhys-Williams, as well as the US economists and Nobel laureates Milton Friedman and James Tobin. As early as 1943, Lady Rhys-Williams made the socially-motivated proposal of a social security transfer that should cover the minimum subsistence level. For Lady Rhys-Williams, the abolition of a degrading 'petition' and a distrustful control by state authorities was the decisive advantage of a state's livelihood without preconditions or considerations: "the State owes precisely the same benefits to all of its citizens, and should in no circumstances pay more to one than to another of the same sex and age, except in return for services rendered" (Rhys-Williams 1943, 138).

In the 1960s, Milton Friedman (1962) developed the concept of negative income tax as a coupling of income tax and social transfers.[7] James Tobin supported the concept of 'an income guarantee' that was based on the negative income tax (Tobin 1966). "In the US presidential election of 1972, Nobel Laureate James Tobin urged Democratic candidate George McGovern to propose basic income policies, while fellow Laureate Milton Friedman advocated a negative income tax to Republican candidate Richard Nixon" (Kay 2017, 70).

The ideas of Friedman and Tobin were then taken up by Philippe van Parijs, who brought forward the concept of a UBI and founded the (European) Basic Income Earth Network (BIEN) in 1986. This network provides alternative arguments about, proposals for, and problems concerning UBI as idea, institution, and public policy practice (BIEN 2018).

Nowadays, many scholars, such as Nobel laureate Christopher Pissarides (2016), believe it is important to search for more clever strategies to cope with the challenges of the 21st century: "we need to develop a new system of redistributions, new policies that will redistribute inevitably from those that the market would have rewarded in favour of those that the market would have left behind. Now, having a universal minimum income is one of those ways, in fact, it is one I am very much in favour of, as long as we know how to apply it without taking away incentive to work at the lower end of the market".

Anthony Atkinson (2013) was also looking for 'new forms of social security'. Of these, perhaps the most discussed is the idea of a 'citizen's income' or a 'basic income', whereby a universal benefit is paid individually to all citizens. If the EU is to go down the basic income route, then a natural starting point is with an EU basic income for children. In his very last book, Atkinson (2015, 303) went a step further by proposing that "there should be a capital endowment (minimum inheritance) paid to all at adulthood" – an idea that closely resembles the UBI (with the difference that it is

[7] For Friedman, the question remained open 'to what extent' and 'in what form' state support should be granted to everybody. He stated that the fixing of the minimal income was primarily a political decision (even if the ensuing costs could produce economic distortions): "it would be possible to set a floor below which no man's net income […] could fall […]. The precise floor set would depend on what the community could afford" (Friedman 1962, 158). To be fair, it must be mentioned that Friedman himself did not pursue a UBI concept, but rather a model aimed at employed persons whose own capacity is not strong enough to meet their own needs. This is supported by his statement that "like any other measures to alleviate poverty, it reduces the incentives of those helped to help themselves, but it does not eliminate that incentive entirely, as a system of supplementing incomes up to some fixed minimum would. An extra dollar earned always means more money available for expenditure" (Friedman 1962, 158).

not paid as a regular periodic (i.e. monthly or annual) flow, but rather as a one-off down payment).

Politics has reacted to the increasing demand for new social welfare concepts and the UBI plays a prominent role in these reactions. Switzerland held a referendum on its introduction (and rejected it) – see Schweizerische Eidgenossenschaft (2016). Finland has carried out a basic income experiment in 2017–2018 and will now go through an assessment of its results in 2019 (Kangas *et al.* 2017). India is contemplating replacing the welfare state with a UBI (Economist 2017). And in the United States discussions in favour of a basic income are gaining momentum, and especially arguments that a UBI might be a sane solution to the era's socioeconomic woes (Lowrey 2018; Yang 2018).

THE BASICS OF BASIC INCOME CONCEPTS

The most popular definition of a UBI stems from the Basic Income Earth Network (BIEN): a basic income is a periodic cash payment unconditionally delivered to all on an individual basis, without means-test or work requirement. That is, basic income has the following five characteristics: (1) periodic: it is paid at regular intervals (for example every month), not as a one-off grant; (2) cash payment: it is paid in an appropriate medium of exchange, allowing those who receive it to decide what they spend it on. It is not, therefore, paid either in kind (such as food or services) or in vouchers dedicated to a specific use; (3) individual: it is paid on an individual basis – and not, for instance, to households; (4) universal: it is paid to all, without means test; and (5) unconditional: it is paid without a requirement to work or to demonstrate willingness-to-work (BIEN 2018).

A wide variety of UBI concepts and proposals have been presented and discussed in politics, economics and philosophy recently. They differ along many dimensions. There are different views on the amounts of the UBI, the source of funding, as well as the nature and size of reductions in other transfers that might accompany it. Straubhaar (2017) has elaborated a UBI concept that is an unconditional cash payment flowing monthly from the state budget to everybody. It is transferred from public to private accounts a whole life long, from birth to death without any pre-conditions to be fulfilled by the beneficiary. It is supposed to cover the socio-cultural subsistence minimum. However, it is a political and not an economic decision, where exactly the level of subsistence will be fixed.

The UBI is guaranteed to each member of the society as an individual legal claim. Everyone receives the UBI without application, without controls and without preconditions. It flows independent of employment, personal circumstances, relationships or attitudes. No one checks who is living with whom in what kind of relationship or whether there are good or bad reasons for granting a minimum allowance.

Straubhaar (2017) sees the UBI as a complete substitute for all other publicly financed support. The social welfare state would be replaced by one single payment – the UBI. It would be financed by taxes and there will be no further social fees to be paid by workers from their incomes. In its most stringent form, it would be designed as a single universal transfer combining in one single instrument all individual direct taxes and transfers or subsidies flowing from public coffers to individuals.

Finally, according to Straubhaar (2017) the UBI is financed by taxing identically (i.e. a flat tax) the outcome of all economic activity (i.e. the value added). Taxing identically value added at the end of the production process just when value added is leaving the production site and is distributed to the production factors in form of wages for labour, or interests (or dividends) for capital owners, or profits for the shareholders looks like the most promising response of the welfare state to 'digitisation'.[8] As soon as value added reaches people (i.e. workers, capital owners or shareholders) the treasury should tax the benefits of economic activities (and the outcome of a positive interaction between man and robots, human and artificial intelligence).

UBI AS AN ADAPTION OF SOCIAL MARKET ECONOMY PRINCIPLES

The social market economy concept follows a simple idea: market efficiency and social redistribution are not mutually exclusive – indeed, they are mutually dependent. "The fundamental meaning of the social market economy is to link the principle of freedom in the markets with the principal of social balance" (Müller-Armack 1976, 243). A free market economy based on the principle of free allocation of production factors and prices that reflect supply and demand in competitive markets creates the greatest possible value added. Generating the highest value added possible is the most powerful precondition for socially oriented redistribution from the economically strong to the economically weak.

The UBI is an adequate and effective way to adjust the concept of the social market economy to the age of digitisation, globalisation and the long-term trends that accompany a demographically ageing society. It follows the principle that economic efficiency and social justice are not opposites. They can be harmoniously combined and are mutually complementary. The unconditional basic income unites the social with the liberal: it is liberal because it is unconditional, and social because it is for everyone. It is equal for everyone – and at the same time allows everyone to be different (Häni and Kovce 2015).

[8] Theoretically, it does not matter whether production (i.e. value added) or consumption is taxed with a flat (i.e. constant) rate. In practise, however, different degrees of openness and international mobility for consumers and producers, and the ease of tax avoidance strategies may speak in favour of taxing production rather than consumption.

Like the social market economy, the UBI consistently separates the allocation of income and the distribution of income. The efficiency of market economies should be used to maximize the value added in an economy (as the basis for income of the production factors involved to produce the value added, i.e. wages for labour, interest payments for capital and profits for owners and shareholders). In addition, market interventions aimed at redistributing income (i.e. taxes and transfers) should be applied efficiently, which means that they should distort the market outcomes as little as possible.

The UBI frees the labour market from social-political redistribution tasks. But it also corrects the income allocation effects of the labour market. It takes something away from the better-off to give it to those who earn little or nothing.

BASIC (DIS-)INCENTIVES OF A BASIC INCOME

(Micro-)Economics is the art of setting incentives and sanctions in such a way that efficiency and equality, allocation and distribution, are balanced in a fair and equitable manner. Of course, the fundamental questions arise of what should be the level of a UBI and what would this mean for the tax rate to finance it? However, these questions are not at all specific to the UBI. They have to be answered anyway and independent of the question of whether a society wants to stay with a Bismarckian-type of welfare state or move towards a UBI.

Determining the UBI level is necessarily a political decision. Economists can only argue that a high UBI would require high tax rates (and *vice versa*) in order to finance it. High tax rates normally decrease incentives to work, because they have a negative impact on the available income. And a higher UBI will diminish individual labour supply more strongly than a lower UBI.

It cannot be ruled out that parties could be tempted to promise (unrealistically) high UBIs prior to elections. But this is by no means different from current practices. Competition for the electorate is part of democracy. A population must decide through democratic procedures whether it wants the UBI to be high or low, and whether it is willing to accept the consequences of this decision – including the high (or low) tax rates required to fund the UBI.

The German government regularly presents a 'report on the amount of the minimum subsistence level of adults and children to be tax-exempt', i.e. the minimum subsistence rate (Federal Ministry of Finance 2016 and 2018). Therefore, the political determination of the subsistence minimum in the context of a UBI would not be new, but rather the continuation of long-established political procedures.

There is no doubt that every intervention into the free interplay of supply and demand of production factors will have a greater or lesser impact on incentives to work. These trade-offs are immanent to every welfare system that taxes income and subsidises people – independent whether it is a Bismarckian welfare system or a UBI. Therefore, the consequences of a UBI must be judged in relation to the (dis)incentives of today's welfare state.

While the extent of redistribution requires a (normative) political discussion, the (positive) economic analysis can convincingly demonstrate that a 'blind' social policy is the most effective, most efficient and thus the most equitable social policy. An efficient social policy should support people, and not specific factors of production or regional or sectoral industries. Furthermore, it should refrain from paternalistic behaviour and simply flow unconditionally. The fundamental aim should be to redistribute some degree of purchasing power from people with higher incomes to those with lower incomes. Not more, not less. Direct individual payments to economically weaker people are more targeted, less expensive and more effective than indirect measures, which require the fulfilment of specific criteria, particular pre-conditions or certain behaviours, for example, the requirement of being employed or at least searching for employment, or the attainment of a specific age.

The UBI replaces the activating, controlling and thus paternalistic social policy of indirect aid with unconditional direct cash payments. However, this also explains why social bureaucracy and trade unions might oppose a UBI. They would lose influence and power in this new construction of the welfare state. The minimum wage would be replaced by a state-guaranteed minimum income, and the state would no longer have to worry about job creation or unemployment. Active public labour policies would become superfluous, which would save administrative costs.

Direct aid is more economically sensible and socially equitable than indirect actions, which are always associated with leakage in the form of bureaucracy and false incentives. Indirect interventions in the labour, education, health, insurance or housing markets are comparatively more expensive, imprecise and unjust.

UNIVERSAL BASIC INCOME – EMPTY DREAMS OF PARADISE OR UTOPIA FOR REALISTS?

In spite of the radical rhetoric that some proponents use, the UBI is nothing but a fundamental tax reform. It unites all personal government transfers (or subsidies) and direct taxes as a universal payment in a single instrument. The UBI follows the concept of a negative income tax and enables a politically determined redistribution goal to be achieved much more precisely than with today's principle of a tax system combined with a social insurance system. The UBI, in the form of a negative income tax, solves the allocation-distributionpuzzle with one simple and transparent instrument in an efficient and effective way.

It is not really a surprise that the UBI gets a lot of headwinds and criticisms. Some opponents judge it simply as an 'empty dream of paradise' and decry it as 'false happiness promises' (Schneider 2017). Others see the UBI as a 'Trojan Horse' that fulfils the cynical plan, namely to destroy the old Bismarckian welfare state. They call it a *Stilllegungsprämie*, a public payment for deprived people to be silent and accept the severe consequences of structural change calmly and peacefully.

In a very balanced overview of the most hotly debated controversial arguments, Osterkamp (2016) examines the pros and cons, and also demonstrates (as far as available) some existing empirical evidence. It becomes obvious that the fiscal and labour market impacts of a UBI most heavily depend on the amount of the UBI. However, most, if not all, empirical analysis suffers from the disruption that the UBI would provoke. A simple extrapolation of existing correlations or causalities is misleading. The Lucas-critique applies "that any change in policy will systematically alter the structure of econometric models" (Lucas 1976, 41).[9]

The most controversial critique of a UBI is probably the expectation that people might lower their labour supply and will refuse to accept badly-paid, monotonous work offers; or jobs that are dangerous, harmful to health or violate human dignity. Yes, this may indeed prove the case, but may this turn out to be a positive goal: to avoid work that leads to physical injury and psychic pressure or mental illness?

The UBI wants to create the best possible (pre-) conditions for people willing to work. If as many people as possible are employed in (well-paid) jobs, there are also more funds available to support the economically weak. That is why everything must be done to enable people to work and earn their own incomes. The UBI empowers people, irrespective of gender, age and preconditions. It makes it easier for people to live according to their own ideas, wishes and norms. Not everyone will take advantage of these opportunities, but at least the options are open to everybody.

The UBI would empower people to more readily take on some risks of daily life.[10] If people are assured that a failure will not lead to a bottomless case of destitution and poverty, and that their subsistence minimum is secured, they will assess future challenges as opportunities rather than threats. This applies to all people, and not just to those who behave in accordance with social norms and traditional values or behaviours. On the contrary, non-conformists often help to see the world through different eyes and from novel perspectives. New ideas and innovative solutions can emerge from the new thinking of outsiders.

Although the UBI is neither perfect, nor easy or even costless to introduce, it is worth analysing its implications in-depth and comparing them with those of alternative welfare state systems now more than ever. The UBI fulfils the economic law of satisfying a political goal at minimal economic cost better than any other concept for a future welfare state. So although a UBI may still seem utopian to many opponents: sometimes the long-term risks of radical changes cause lower costs than the risks associated with continuing the system already in place. A UBI is risky, but no UBI might be even riskier!

[9] The structural breaks that genuinely accompany the UBI also limit the insights of OECD (2017)-research into the impact of a UBI, because the OECD-simulations were restricted to the four countries Finland, France, Italy and Britain and derived their results from the rather unrealistic assumption of excluding any short-term or long-term behavioural responses to the introduction of a UBI. The OECD concludes that "realistically, and in view of the immediate fiscal and distributional consequences of a fully comprehensive UBI, reforms towards more universal income support would need to be introduced in stages, requiring a parallel debate on how to finance a more equal sharing of the benefits of economic growth" (OECD 2017, 1). These might indeed be wise suggestions to implement the UBI in practice.

[10] The economics of insurance behaviour convincingly show that insured people are willing to accept more risks (Sinn 1986). And a larger share of risk-takers within the total population correlates positively with the macroeconomic performance of a society. This empirical observation is the justification for compulsory insurance, for example motor vehicle liability insurance or health and accident insurance. However, the positive correlation between being insured and taking more risks also contains sound economic reasons for a state social policy, which serves the purpose of securing the subsistence minimum for everybody.

REFERENCES

Atkinson, A.B. (2013), "Reducing Income Inequality in Europe", *IZA Journal of European Labor Studies* 2, No. 1.

Atkinson, A.B. (2015), *Inequality: What Can Be Done?,* Cambridge, MA: Harvard University Press.

Basic Income Earth Network (BIEN, 2018), https://basicincome.org/basic-income/.

Berg, A. *et al*. (2016), "Robots, Growth, and Inequality", *Finance & Development* 53(3), 10–13.

Bertola, G. (2018), "Inequality and Market Integration: Direct Effects and Policy Implications in EMU", *CESifo Forum* 19(2), 3–8.

Bregman, R. (2017), *Utopia for Realists (And How We Can Get There),* London & New York: Bloomsbury Publishing.

Brynjolfsson, E. and A. McAfee (2014), *The Second Machine Age (Work, Progress, and Prosperity in a Time of Brilliant Technologies),* New York: Norton & Company.

Economist (2017), "UBI: Bonfire of the Subsidies", 4 February.

European Parliament (2017), *Committee on Legal Affairs: Report with Recommendations to the Commission on Civil Law Rules on Robotics* (2015/2103(INL)), Brussels, 27 January.

Federal Ministry of Finance (2016), *11. Existenzminimumbericht. Bericht über die Höhe des steuerfrei zu stellenden Existenzminimums von Erwachsenen und Kindern für das Jahr 2018,* 21 November, http://www.bundesfinanzministerium.de/Content/DE/Monatsberichte/2016/11/Inhalte/Kapitel-3-Analysen/3-4-existenzminimumbericht.html.

Federal Ministry of Finance (2018), *Finanzielle Entlastungen für Familien im Bundeskabinett. Vorgriff auf den 12. Existenzminimumberichts (Herbst 2018),* https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Steuern/Weitere_Informationen/2018-06-27-Familienentlastungsgesetz.html.

Federal Ministry of Labour and Social Affairs (2017), *Sozialbericht 2017,* https://www.bmas.de/DE/Service/Medien/Publikationen/a-101-17-sozialbericht-2017.html.

Friedman, M. (1962), *Capitalism and Freedom,* Chicago: University of Chicago Press.

Häni, D. and P. Kovce (2015), "Plädoyer für das Grundeinkommen", Capital 29, September, http://www.capital.de/meinungen/plaedoyer-fuer-das-grundeinkommen.html.

Kangas, O. et al. (2017), “Basic Income in the Finnish Context”, *Intereconomics* 52, 87–91.

Kay, J. (2017), “The Basics of Basic Income”, *Intereconomics* 52, 69–74.

Lowrey, A. (2018), *Give People Money: How a Universal Basic Income Would End Poverty, Revolutionize Work, and Remake the World,* New York: Crown (Penguin Random House).

Lucas, R.E. (1976), “Econometric Policy Evaluation: A Critique”, in: Brunner, K. and A.H. Meltzer (eds.), *Carnegie-Rochester Conference Series on Public Policy*, Vol. 1, 19–46.

Mühleisen, M. (2018), “The Long and Short of the Digital Revolution”, *Finance & Development* 55, 4–8.

Müller-Armack, A. (1976), “Soziale Marktwirtschaft”, in: Müller-Armack; A. (ed.), *Wirtschaftsordnung und Wirtschaftspolitik,* 2nd Edition, Bern & Stuttgart: Paul Haupt, 243-249.

Obstfeld, M. (2016), “Get on Track with Trade”, *Finance & Development* 53, 12–16.

OECD (2017), *Basic Income as a Policy Option: Can it Add Up*? Policy Brief, http://www.oecd.org/employment/emp/Basic-Income-Policy-Option-2017.pdf.

OECD (2018), *Hours Worked (indicator),* https://stats.oecd.org/Index.aspx?DatasetCode=ANHRS.

Osterkamp, R. (2016), “Fünf Streitfragen um das bedingungslose Grundeinkommen – unaufgeregt betrachtet”, *ifo Schnelldienst* 69(21), 26–35.

Pissarides, C. (2016), *A Nobel Laureate Argues for UBI at the World Economic Forum at Davos,* Basic Income Earth Network, 6 February, https://basicincome.org/news/2016/02/international-christopher-pissarides-a-nobel-economist-argues-for-ubi-at-a-debate-in-davos/.

Rhys-Williams, J. (1943), *Something to Look Forward to. A Suggestion for a New Social Contract,* London: MacDonald & Co.

Schneider, H. (2017), “Universal Basic Income – Empty Dreams of Paradise”, *Intereconomics* 52(2), 83–87.

Schweizerische Eidgenossenschaft (2016), *Volksinitiative “Für ein bedingungsloses Grundeinkommen”*, Bern.

Sinn, H.W. (1986), “Risiko als Produktionsfaktor”, *Jahrbücher für Nationalökonomie und Statistik* 201(6), 557–571.

Statista (2018), *Durchschnittliche jährliche Arbeitszeit und insgesamt geleistete Arbeitsstunden in Deutschland in den Jahren 1849 bis 1958,* https://de.statista.com/statistik/daten/studie/249784/umfrage/historische-entwicklung-des-arbeitsumfanges-in-deutschland/.

Statistisches Bundesamt (2018), *Sterbetafel 2014/2016 (Methoden- und Ergebnisbericht zur laufenden Berechnung von Periodensterbetafeln für Deutschland und die Bundesländer)*, https://www.destatis.de/DE/Publikationen/Thematisch/Bevoelkerung/Bevoelkerungsbewegung/PeriodensterbetafelErlaeuterung5126203167004.pdf?__blob=publicationFile.

Straubhaar, T. (2016), *Der Untergang ist abgesagt (Wider die Mythen des demografischen Wandels),* Hamburg: edition Körber-Stiftung.

Straubhaar, T. (2017), *Radikal gerecht (Wie das Bedingungslose Grundeinkommen den Sozialstaat revolutioniert),* Hamburg, edition Körber-Stiftung.

Tobin, J. (1966), “The Case for an Income Guarantee”, *Public Interest* 4, 31–41.

Van Parijs, P. (ed., 1992), *Arguing for Basic Income - Ethical Foundations for a Radical Reform,* London & New York: Verso.

Van Parijs, P. and Y. Vanderborght (2017), *Basic Income (A Radical Proposal for a Free Society and a Sane Economy),* Cambridge, MA: Harvard University Press.

World Inequality Report (2018), https://wir2018.wid.world/.

Yang, A. (2018), *The War on Normal People: The Truth About America’s Disappearing Jobs and Why Universal Basic Income Is Our Future,* New York: Hachette Books.