Review of Social Economy

ISSN: 0034-6764 (Print) 1470-1162 (Online) Journal homepage: https://www.tandfonline.com/loi/rrse20

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To cite this article: Gianluca Grimalda, Alain Trannoy, Fernando Filgueira & Karl Ove Moene (2020) Egalitarian redistribution in the era of hyper-globalization, Review of Social Economy, 78:2, 151-184, DOI: 10.1080/00346764.2020.1714072

To link to this article: https://doi.org/10.1080/00346764.2020.1714072

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Published online: 03 Feb 2020.

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REVIEW OF SOCIAL ECONOMY
2020, VOL. 78, NO. 2, 151–184
https://doi.org/10.1080/00346764.2020.1714072

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Egalitarian redistribution in the era of hyper-globalization

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ABSTRACT
Two traditional theorems of welfare economics posit a trade-off between a government redistribution targets and efficiency. We propose a third 'claim' of welfare economics, stating that in closed economies the actual efficiency costs associated with redistribution are small. We then examine the claim in the current phase of 'hyper-globalization'. On the one hand, a race-to-the-bottom in taxation restricts the capacity to tax high-earners and the associated brain drain may affect a country's long-run growth. On the other hand, demand for social insurance should be particularly high in an open economy, especially with advancing digitalization. Xenophobic sentiments may, however, offset this demand. We also discuss the impact of globalization on wage equalization and productive efficiency. We conclude against the idea that the welfare state is intrinsically unable to carry out its redistributive function in an era of globalization. However, its strategies and tools of intervention must be rethought.

ARTICLE HISTORY Received 17 May 2019; Accepted 26 December 2019

KEYWORDS Globalization; redistribution; welfare state; race to the bottom; taxation

1. The three eras of globalization

The benefits of the welfare state have been pervasive in all advanced democracies up to the beginning of the 80s. The aim of the paper is to assess whether egalitarian redistribution is still feasible in the current era of 'hyper-globalization'. In his paper 'National Self-Sufficiency', Keynes (1933, p. 184–185) famously stressed the need for national governments to insulate themselves from the interference of what in today's words would be called globalization:

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> We do not wish [. . .] to be at the mercy of world forces working out, or trying to work out, some uniform equilibrium according to the ideal principles, if they can be called such, of laissez-faire capitalism. [. . .] We wish – for the time at least and so long as the present phase endures – to be our own masters, and to be as free as we can make ourselves from the interferences of the outside world.

The world that Keynes faced in the 1930s had similarities with today's world. His remarks, therefore, resonate well with the worries expressed by critics of present international integration. Rodrik (2011) identifies three different historical phases of globalization. The first era of globalization occupied the whole century before the start of World War I. It was characterized by:

(a) a rapid increase in world trade, made possible both by reduction in transportation and communication costs and governments' removal of trade restrictions – as epitomized by England's repeal of the Corn Laws in 1846;
(b) a boom in capital flows between countries, particularly after the establishment of the gold standard in the 1870s; and
(c) vast flows of migrants, especially working-class Europeans, moving to other continents.

This era ended with the start of World War I. The inter-war period was characterized by protectionist policies and the failure to re-establish the gold standard, which was finally abandoned by most countries after the Great Depression.

The second era of globalization went hand-in-hand with the 1944 Bretton Woods accords, striking a balance between two different and possibly opposing needs: On the one hand, international trade had to be re-established in order for countries to reap the benefits of growth and efficiency stemming from trade; protectionist policies had to be discontinued. On the other hand, the laissez-faire policies that had dominated the first era of globalization had to be replaced by government intervention and active management of the economy.

The new consensus viewed markets as incapable of self-regulating and of reaching full employment. There was a need for demand-side policies to achieve the macroeconomic equilibrium. Thus there was also a need for national governments and 'self-sufficiency' – which Keynes had advocated a decade earlier. The result was a rather extraordinary piece of international governance, with institutions like the World Bank and the International Monetary Fund ensuring substantial stability in the world economy and a General Agreement on Trade and Tariffs (GATT) regulating international trade. Yet there was ample space for national governments, helped by limited international capital mobility. In this regime of 'moderate' globalization the autonomy of national governments was stronger than the independent forces of international trade (Rodrik, 2011). In France, the period from 1945 through 1975 is still referred to

as the 'Trente Glorieuses,' denoting the unprecedented growth rates in France and other European countries.[1]

The second era of globalization ended with the financial and economic crisis that hit developed economies at the beginning of the 1970s, leading the US government to withdraw the convertibility of the US dollar into gold. The system breakdown led to the third era of globalization. The new system is characterized by supply-side policies – in stark contrast with the demand-side policies of the previous period – and a return to the first globalization era under many domains. Its pillars are:

(a) Tariffs reduction and very low barriers to trade, under the aegis of the World Trade Organization (WTO) as the general arbiter of trade regulation (see Chapter 3 of IPSP Report: Klasen et al., 2018: section 7.5.1);
(b) Unrestricted capital mobility and deregulation in the financial sector (see IPSP Report: Chapter 3; Klasen et al., 2018: section 7.5.2); and
(c) Rising migration flows.

The volumes of international trade in the current system are close to those in the first globalization era. Global trade as a proportion of global income has only recently exceeded the levels reached in 1910–1914 (Rodrik, 2011). Capital is as mobile as in that period, but the greater volume of capital today means much larger absolute flows. The main differences are in flexible, rather than fixed, exchange rates, and overall heavier restrictions on people's mobility than in the past.

Rodrik (2011) coined the term 'hyper-globalization' to describe the current era. The balance has shifted from national self-sufficiency to the cogency of external constraints. Global governance is weak, if at all present. Each country struggles to reach its desired objectives of growth, redistribution and social protection. Recurrent financial crises – from the crisis in Asia and Argentina in the 1990s to the Great Recession in 2008 – erode growth, employment and well-being (Ayhan Kose, Prasad, & Terrones, 2005; Prasad, Rajan, & Subramanian, 2007). High-growth countries like India and China have managed globalization by introducing forms of capital controls and restrictions on foreign direct investment.

In this paper, we focus on the welfare state and in particular on the possibility of carrying out egalitarian redistribution. Section 2 reviews both theoretically and empirically the standard argument that there exists a trade-off between efficiency and equity in public economics. The idea underlying this argument is that equity is costly, because it must rely on forms of taxation that

[1] Growth rates in Europe during the 1950–1970 period reached an unprecedented peak of 3.9% per capita, which contrasts with growth rates of 0.9% in the period 1913–1950, and of 1.9% for the period 1970–2012. Growth rates in America were more constant, averaging 1.4% in the 1913–1950 period, 1.9% in the 1950–1970 spell, and around 1.6% over the 1970–2012 period. Source: Piketty (2014, Table 2.5).

are distortive and as such produce welfare losses. Our account of theoretical and empirical analysis concludes that, up to the latest two decades, this argument was grossly overstated, and that countries could, in fact, achieve – or go close – to a distribution of resources that is considered to be fair without high efficiency costs. This has generated what we call the Informed Democratic Capitalism (IDC) approach to public economics, which rested on a 'division of labour' between markets – responsible to achieve efficiency – and the state – responsible of carrying out the necessary redistribution of initial resources to achieve equitable outcomes. Section 3 is devoted to reassessing this argument under the current hyper-globalization era. Many argue that globalization imposes a constraint on the capacity of the welfare state to perform and in particular to redistribute. We revise several domains of this thesis, including the so-called race-to-the-bottom in taxation, wage convergence across countries, immigration and the support for the welfare state and finally efficiency gains that may be reached as a consequence of globalization. Section 4 offers an overall assessment of the arguments in favour or against the thesis that globalization thwarts the welfare state. We note that in aggregate terms the state does not seem to have lost fiscal capacity. However, a race-to-the-bottom in some tax domains is undeniable. Even if this does not affect overall fiscal revenues, it may affect state capacity precisely in its ability to tax high-earners. Moreover, the sensitivity of international migration to tax rates may engender a brain-drain favouring low-income tax countries such as the US. Section 5 concludes that, even if it is far-fetched to say that the welfare state is unable to carry out its function in an era of globalization, its strategies and tools of intervention must be rethought in the twenty-first century.

2. Revisiting the efficiency-equity trade-off in public economics

2.1. The efficiency-equity trade-off and the public economics approach to economic policy

In this paper, we look at the debate on globalization and the welfare state from the angle offered by the *public economics* approach to policy. The foundations of this approach are given by two theorems of welfare economics, whose popularity is so widespread that they can be found in every mainstream first-year economics textbook. The first theorem asserts that perfect market competition will produce outcomes that are efficient in the sense of Pareto. An outcome is Pareto-efficient when no alternative feasible outcome exists that increases some individuals' welfare without decreasing some other individuals' welfare, given individuals' initial endowments and technology. Therefore, perfect market competition entails that any agent in the economy, be she a firm or a consumer or a worker, maximizes her objectives given the economic constraints and the prices they are facing, and the resulting allocation of resources

cannot be improved for someone without worsening someone else's welfare. In other words, if one asks people to vote between all feasible alternatives, an allocation is Pareto-efficient if no alternative would be preferred at unanimity to that allocation. Kolm (1971) refers to that specific property of efficient allocation to be maximal for unanimity.

Pareto-optimality discards any inequality consideration, and consequently, in general, many allocations are Pareto efficient. In particular, even very unequal allocations of resources, where a small group of people ends up with a large share of resources and the rest ends up with a little share, is in general Pareto-efficient. The reason is that redistributing resources from the rich to the poor group would most likely reduce the rich's welfare, and this suffices to qualify this move as 'inefficient'.

Here is where the second theorem of welfare economics kicks in. It states that under some assumptions of regularity – namely, that the preference and production sets are convex-, *any* Pareto-efficient outcome in an economy may be achieved through a suitable redistribution of agents' initial endowments and leaving competitive markets to achieve that specific allocation. This means that the social planner will be able to implement whatever *final* allocation of resources it desires by carrying out the redistribution of *initial* resources that is necessary to achieve the desired final allocation. The combination of the first and the second welfare theorem provides a foundation for what we shall call a 'socio-liberal approach' to productive efficiency and social justice. Simply stated, such a socio-liberal approach prescribes the state not to interfere with free competitive markets, except for correcting market failures such as externalities, imperfect competition and asymmetric information. This prescription rests on the optimality result of the first welfare theorem and on the idea that markets are adequate institutions to achieve efficiency in production and consumption. On the other hand, the state is supposed to intervene in the redistribution of agents' endowments *prior to* the realization of market exchanges. The state is required to select the initial endowment that guarantees the attainment of the final allocation that is deemed to be most desirable, for instance, according to social welfare maximization such as the maximization of the interests of the most disadvantaged people in society, or some other criterion. More specifically, in democratic societies, the final outcomes should be those satisfying the citizens' preferences over social justice. Accordingly, the state should implement the initial distribution of endowments that permits unrestrained free markets to reach those final outcomes maximizing citizens' preferences. In general, the state will be required to carry out redistribution in initial endowments from the rich to the poor, in order to permit the final allocation of goods and well-being not to be too unequal.

To be sure, reality is more complex than what assumed by these two theorems, and many variables of this redistributive problem may be either difficult to ascertain – what are citizens' preferences? – or difficult to implement –

because of the natural conflict between interests of different groups in societies. The second theorem assumes that it is possible to redistribute initial endowments between individuals. The initial endowments in the general equilibrium framework consist of the initial share of natural resources, capital, and abilities that can be enhanced by education. In reality, the change of property rights on capital endowments would face fierce ideological and political opposition. The pacific land reforms in history are rare (see Deininger & Feder, 2003 for modern land reforms). The distribution of human capital is shaped by many factors, such as the characteristics of the school system and whether it is freely accessible or not, the segregation in cities and urban planning, the degree of assortative mating. Reforms of the school systems are difficult to implement and will influence the distribution of competences only in the next generation. Segregation in cities between rich and poor is difficult to avoid if land is private and inequality is high. It is also quite possible that, because of unforeseen shocks to the economy, the desired redistributive 'target' is somehow 'missed' by the market allocation. Regardless of these practical problems, the main idea stemming from welfare economics is one in which markets are held responsible for allocative efficiency, and democratic states are responsible to interpret citizens' preferences for social justice. It may be argued that, to a large extent, the extension of the welfare state from 1945 to 1980 in most Western societies relied on this 'division of labour' between state and markets. Markets were of course regulated by public authorities and anti-monopoly institutions. However, the idea that markets should not be regulated for redistributive goals still applied. The main message is that the intervention of the state at the gross-income stage should be minimal.

2.2. Efficiency costs of redistribution and second-best allocations

The applicability of the second theorem of welfare economics in reality is uncertain because it crucially relies on lump-sum taxes to collect fiscal revenues. Lump-sum taxes are characterized by being invariant to markets transactions. From the theoretical point of view, lump-sum taxes have the great advantage of not changing at the margins people's choices. Lump-sum taxes are thus desirable, from the theoretical point of view, because they do not engender welfare losses. In reality, nonetheless, only very rarely have lump-sum taxes been used. A major reason is that when they increase with individual endowments, for instance, skill levels, they violate basic incentives as shown by the result about the curse of talented people with first-best taxation in the Mirrlees (1986) model. If the state does not have full information on initial endowments and resorts to the private information provided by individuals, the individuals will have interest to cheat if the incentive constraints are not respected. The state will not have the true information undermining the powerfulness and even the implementation of a first-best redistribution. Of course,

a head tax such as Margaret Thatcher's infamous Community Charge in the 1990s is incentive-proof but is regressive. It weighs on poor people more than on rich people, in proportion of their income. Head taxes go in the opposite direction of what suggested by the second theorem of welfare economics. They increase the inequality of welfare with respect to the laissez-faire, and as such are considered unfair and have proved to be unpopular with the public. They should not be considered as a valid option.

The alternative to lump-sum taxes are taxes levied on labour income, consumption, savings, capital incomes, etc. However, these taxes will, in general, modify people's decisions at the margin and thus *distort* their choices. A well-known result of public economics is that such distortive taxes will create efficiency losses in the society. The reason is that rational agents will modify their behaviour as a response to the introduction of taxes through the substitution effects, and these adjustments will create welfare losses. For instance, the income tax introduces a wedge between a worker's marginal productivity and the marginal utility from leisure. This will result in a reduction in equilibrium of hours of work, which is not, under general conditions, optimal. Public economics states that the existence of these efficiency losses only permits the achievement of a *second best* solution for the economy.

The bulk of redistribution in modern states is then through taxes and transfers that are not lump sum and thus may distort agents' incentives in markets. Technically speaking, these forms of taxation occur *ex post* – namely, *after* markets have brought about their outcomes-, rather than *before*, as advocated by IDC. In a *second best* world, it is then necessary to rely on taxation collected after market outcomes have come about, rather than before, to pursue fairness objectives. This can be justified under two perspectives. First, ex post intervention may be seen as a *compensation* for the fact that redistribution of initial endowments fell short of the target. Ex post redistribution through distortive taxes will put the economy in the interior of the *first best* frontier, although the distribution of well-being among individuals will be in general less unequal that in a laissez-faire economy. There is then a trade-off between efficiency and equity. Given the efficiency losses of redistribution, the state can only apply second best solutions to the problem of achieving an equitable allocation of well-being among citizens. Secondly, as argued by Atkinson (2015), ex post taxation is necessary to prevent that inequalities accumulated within one generation get transmitted to the next generation. Given that a generation's initial endowment are, to a large extent, inherited through one's family, ex post taxation is crucial to level the playing field across generations.

The debate over the magnitude of the efficiency losses caused by distortive taxation has been broad-ranging and marred with ideological dogmatism. Many right-wing politicians have relied on the so-called Laffer curve – named after the economist Arthur Laffer – to demand cuts in the income tax. The Laffer curve is based on the simple argument that total income tax receipts must

reach a maximum for some tax rates, beyond which the *mechanical effect* of an increase of the tax rate becomes lower that the *behavioural effect*. These two effects have been put forward by Saez (2001). The first corresponds to the expansion of tax receipts that follows the raise in tax rate applied to the same tax base. The second effect captures the decrease of tax base following the tax increase. In the computation of the differential (dT) of a linear tax t on a tax base x(t), the former corresponds to dtx and the second to tdx. If, at the limit, the tax rate was set at 100%, no sensible person would work and therefore the tax collected would be zero. The argument of many right-wing politicians in support of a reduction of income taxes is, implicitly, that the current income tax rates are already beyond the maximum. In other words, tax cuts would incentivise individuals to work more, thus raising growth rates in the economy. This is a restatement of Okun's (1975) well-known 'leaky bucket' argument. It is then crucial to gauge the magnitude of such efficiency losses introduced by distortive taxation, especially so for open economies.

2.3. The 'third claim of welfare economics'

We here argue that the leaky bucket argument does not seem to bite much in a closed economy framework. We coin the new term 'third claim of welfare economics' to define the idea that the trade-off between efficiency and equity is only weak in practice. Our 'claim' alludes to the two theorems of welfare economics, which make the theoretical case for the existence of such a trade-off. Clearly, our claim has an empirical rather than a theoretical nature. It cannot have the force of a theorem but there is a body of reliable, accurate and consistent evidence that has sufficient to state the existence and substance of the argument.

What are the empirical estimates of the costs of redistribution? Preliminary descriptive evidence comes from Figure 1, which reports a simple scatterplot of data for GDP growth and the income share of the poorest 20% of the population for a sample of world economies. It goes without saying that GDP growth is a very imprecise measure of efficiency and the income share accruing to the poorest 20% is only one of the many possible measures of equity. Nonetheless, the evidence stemming from the graph is striking in showing a virtually flat relationship. Clearly, a more in-depth statistical analysis would be needed to control for possible confounding factors. Nonetheless, this graph suffices to show that equality and growth can and, in many cases, do go together. The most egalitarian countries in the world grew on average at similar rates as the least egalitarian ones. Moreover, this graph spans a period of hyper-globalization, hence it does not seem that globalization prevents the achievement of equity targets.

As far as taxation of labour income is concerned, the available estimates for the maximum in the Laffer curve situate this point at a tax rate between 76%

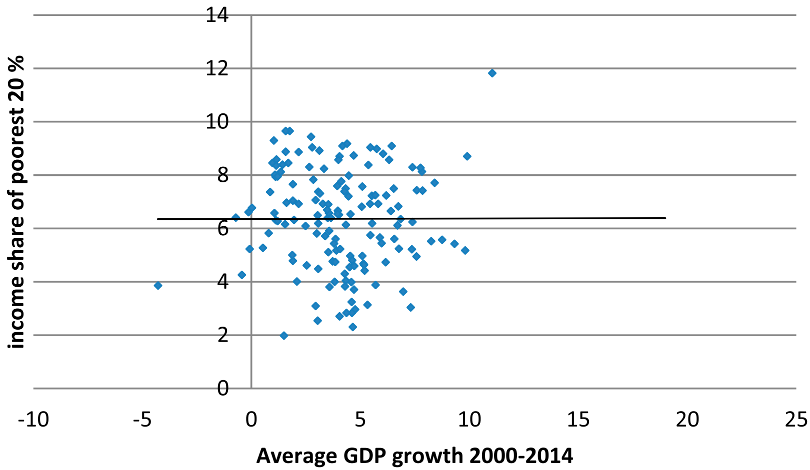

Figure 1. Relationship between average GDP growth (2000–2014) and income share of poorest 20%. Source: World Development Indicators.

and 80% (Atkinson, 2015; Lee & Roemer, 2005), well above the levels actually implemented in reality.

The optimal tax rate depends (inversely) on the compensated elasticity of labour supply with respect to the marginal tax rate. Richard Blundell (2012) surveyed the magnitude of the elasticity of labour supply for different agents and contexts. Substitution effects are generally larger than income effects. Therefore, taxes reduce labour supply. Especially for low-earners, responses are larger at the extensive margin – employment – than at the intensive margin – hours of work. Responses at both the intensive and extensive margins are largest for women with school-age children and for those aged over 55. As Blundell (2014) puts it,

> The key to extending employment and earnings is to focus policy on improving the flows into work for people leaving school and for mothers with young children, and on expanding work among people in their 50s and 60s. These are the margins where labour supply is most sensitive to tax incentives, and a policy redesign can enhance earnings throughout the working life.

Conversely, there is no evidence of ample response behaviour (intensive margin) for educated male wage-earners, who are subject to top marginal tax rates for the income tax. Saez, Slemrod, and Giertz (2012) reinforces this account in their review:

> With some exceptions, the profession has settled on a value for [labour] elasticity close to zero for prime-age males, although for married women the responsiveness of labour force participation appears to be significant. Overall, though, the compensated elasticity of labour appears to be fairly small. In models with only a labour-leisure choice, this implies that the efficiency cost of taxing labour income

to redistribute revenue to others or to provide public goods is bound to be low, as well.

We coin th e term 'third theorem – or claim – of welfare economics'[2] to characterize the low cost of redistribution in reality. In a world in which, contrary to the assumptions of the second theorem, redistribution is bound to create efficiency losses, the extent of such losses is so contained that a closed economy can, in reality, afford high levels of equality and justice with only moderate efficiency losses. In other words, the third theorem warrants the possibility of reducing the inequality of disposable incomes (nearly) as strongly as the policy-maker wishes, starting from almost any level of inequality of primary incomes. Actually, the extent of efficiency losses may in practice be so contained (see the estimation of Stokey and Rebelo (1995) according to which a tax reform introducing a flat tax would have little or no impact on the US growth rate) that most economies can afford high levels of equality – should they wish so. This line of reasoning offers the foundations to what we call *informed democratic capitalism* (IDC). IDC is based on clear division of labour across institutions. The labour market is left to operate without too much intervention; politicians should implement the redistribution levels that satisfy their voters' preferences, and economists and other experts should advise elected representatives to choose the least harmful tax instruments. This recipe may cure the excessive earnings inequality of unregulated markets, ensuring that democracy and capitalism work hand-in-hand to produce a second best outcome.

The validity of the third claim of welfare economics needs some qualification. Firstly, it is based on the value of the labour supply elasticity, but this notion only provides an incomplete measurement of the welfare costs. Following an important paper by Feldstein (1995) the view of the profession has switched from the concept of the rather narrow labour supply elasticity to the broader measure of the elasticity of taxable income to the marginal tax rate. The elasticity of this variable is rather substantial for high incomes (Slemrod and Kopczuk 2002). This broader elasticity concept includes a broad range of reactions to changes in the marginal tax rate, such as tax avoidance, tax optimization, tax evasion, shifting from personal income tax to corporate tax, replacing salaries with perks or capital gains, and so on. All these reactions will have the effect of eroding the tax base.

[2] Others have used the term third theorem of welfare economics. For instance, Hammond (1993) called the third theorem of welfare economics the statement that it is always possible to improve an inefficient allocation by having more extensive perfectly competitive systems and to compensate the losers in such a way that everyone in the economy benefits from the reform. This result holds under some important qualifications. The weakness of this result is that it resorts to lump sum transfers. If we introduce distortive taxes, then on one hand we improve the functioning of markets and on the other hand we weaken the functioning of markets through taxes. Khan (2018) calls third fundamental theorem of welfare economics the theoretical statement that market outcomes are Pareto optimal, equitable, and unique, when agents have other-regarding rather than self-regarding preferences. Nyborg (2019) calls third theorem of welfare economics the statement that if trade is permitted at any time, deliberate learning is possible, and new information may matter for welfare, then no perfectly competitive market can exist.

Under some assumptions, this elasticity of taxable income is the 'sufficient statistic' to compute the welfare loss associated with taxation (see Chetty 2009; Saez et al. 2012). We distinguish between the decrease in labour supply and the attempts to avoid taxation. In the former case, the production set of the economy is not reached, and the productive efficiency of the market economy is hindered. In the latter case, taxpayers are losing time and money in tax consultants to avoid paying taxes instead of enjoying family life and leisure. Surely there is a welfare cost, but following the distinction proposed by Diamond and Mirrlees (1971), although Pareto efficiency requires efficiency both in the production and consumption spheres, the failure of the former is more problematic than that of the latter. In conclusion, the new developments in public economics related to the elasticity of taxable income somehow undermine the validity of the third claim of welfare economics. However, it remains to be seen whether this consideration allows to change the perspective.

A second qualification concerns the taxation of capital. Mankiw, Weinzierl, and Yagan (2009) argue that the third claim of welfare economics does not cover capital taxation in the long run, as the impact of taxation on capital would be highly distortive. However, this view is strongly contested by Diamond and Saez (2011). There is no consensus on capital taxation in the profession and the issue is still unsettled.

3. The third claim of welfare economics under hyper-globalization

The optimism surrounding the possibility of IDC during the *Trente Glorieuses* was thwarted with the advent of the third globalization era (see section 1) and its increasing factor mobility. As argued by Sinn (2003) and others, competition extends to institutions, policies and degrees of market orientation. While it may give rise, in some cases, to more egalitarian institutions with strong unions and generous welfare states, competition may in other cases lead to a race to the bottom in terms of low tax rates, little regulation and low social standards.

Before dealing with the validity of the third claim of welfare economics under hyper-globalization, we want to recall that according to economic theory, we should not worry too much about the introduction of free trade in itself. A path-breaking result obtained by Dixit and Norman (1986) stated that under mild conditions, there exists a free-trade equilibrium with commodity/factor taxation that is Pareto superior to autarky. The strength of the result is that redistribution is not performed through the elusive lump-sum taxes but through distortive taxation. Importantly, the Dixit-Norman compensation scheme is *strictly national* and does not involve any international transfer. It means that the state should be able to manipulate commodity or factor taxation to compensate the losers of free-trade and capture some of the benefits of the gainers. Likely, the state should decrease the taxes on the commodity much more consumed by the poor (even subsidize them if the taxes are already very

low) and increase the taxes on luxury goods consumed by the rich. An upshot of the result is that a country that adopts trade liberalization should be allowed to modify its tax structure on goods and services to compensate for its regressive effect. Quite to the contrary, the policy adopted by the European Union with the Single European Act (1986) restricted the freedom to modify the tax structure on commodities by member states. This contrasts with the need, as stated above, to differentiate consumption.[3] Conversely, the states have full autonomy on taxes on goods and services.

The consequences of hyper-globalization are difficult to grasp because it goes much further than trade liberalization. It entails some degree of international mobility of factors, such as labour, the consequences of which are not fully understood. For instance, while Hammond and Sempere (2006) do not find specific conditions ensuring that migration will be welfare-improving relative to an arbitrary status quo, with respect to those found with free trade, Felbermayr, Grossmann, and Kohler (2015) argue that compensating losers is more difficult for immigration than for trade. The type of tax mechanism considered by Dixit and Norman (1986) fails to transform an immigration surplus into a Pareto improvement in the host country, unless some discrimination solely on the grounds of a person being a migrant is introduced, which obviously violates political correctness as well as constitutional laws in some countries. According to their findings, there is a fundamental asymmetry between migration and other forms of globalization in terms of Pareto efficiency. We will not pursue this theoretical discussion and we will now focus on the empirical findings regarding the consequences of hyper-globalization on governance.

3.1. The race to the bottom in taxation

The mechanism for the race to the bottom is simple. People and capital may move to countries where the profitability for their services is higher, taxes are lower and where there are fewer regulations.

The race-to-the-bottom seems evident in the case of capital taxation. Since the 1950s and 1970s, when capital mobility was rather low also in the US and the UK, most taxes on capital have seen a decreasing trend (Devereux & Loretz, 2012). The wealth tax has almost disappeared in Europe with the exception of France. The recent story of corporate tax rate provides another striking example. The Irish strategy of undercutting other North-Atlantic countries by reducing its corporate tax rate has been an enormous economic success for the country. In 2016–2017, foreign firms paid 80% of Irish corporate tax and employed 25% of the Irish labour force. In spite of the small economic size of the country, this process initiated in 1987 has launched the race to the bottom

[3] More specifically, there are restrictions on the list of goods that can be taxed at reduced rates. For example, the French government clashed with the EU on the reduced VAT on some items at the beginning of the 2000's decade.

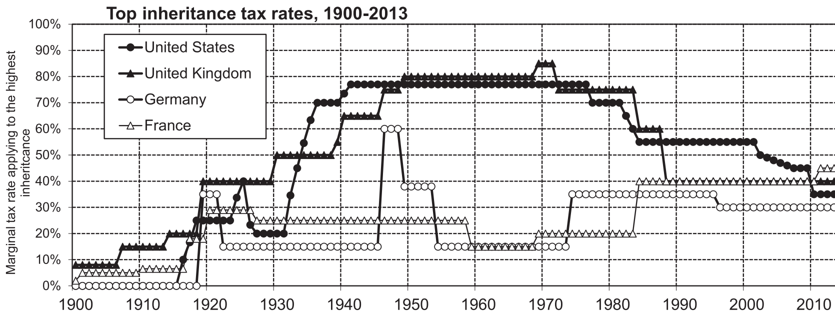

Figure 2. Top inheritance tax rate. Source: piketty.pse.ens.fr/capital21c (Piketty, 2014).

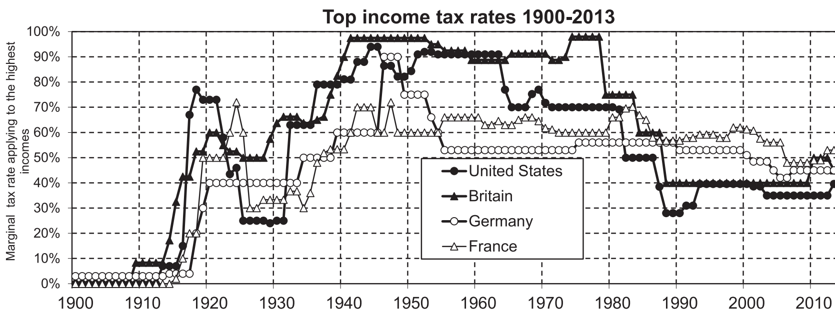

Figure 3. Top income tax rates 1900–2013. Source: piketty.pse.ens.fr/capital21c (Piketty, 2014).

for corporate tax. The race seemed to have been limited to the EU, but the US joined the race by halving its corporate tax rate in 2017. It is surprising how the move of small countries (Ireland, Luxembourg, Switzerland, The Netherlands) was sufficient to change the equilibrium of the 'tax game'. Figure 2 shows how the top tax rates on inheritance in four rich countries have converged to a historically low value. Interestingly, top tax rates were much higher in the UK and the US over the past century than in France and Germany.

Compared to capital taxes, the race-to-the-bottom seems less severe in taxes on labour. Yet, Figure 3 shows how tax rates on top incomes in the US, the UK, France and Germany converged toward the lowest observed levels since World War II. Another piece of empirical evidence shows that only three countries out of 14 had higher marginal tax rates on high incomes in 2005–2006 compared to 1981–1982 (see Table 1, taken from Mankiw et al., 2009). These countries are three Mediterranean countries, Greece, Italy and Spain whose tax rates where the lowest at the beginning of the period. On average, OECD countries have lowered the marginal tax rate on high incomes (defined as 250% of the average income) by nearly 11 percentage points over the last 25 years.

Table 1. Marginal tax rates on high incomes.

Country	Marginal tax rate at 250% of average employee compensation 1981–1982	2005–2006	Change
Australia	53.0	47.0	−6.0
Austria	55.0	50.0	−5.0
Belgium	55.0	50.0	−5.0
Canada	31.0	26.0	−5.0
Denmark	39.8	26.5	−13.3
France	62.5	48.1	−14.4
Greece	38.0	40.0	2.0
Italy	37.0	39.0	2.0
Netherlands	64.4	52.0	−12.4
Norway	38.0	23.8	−14.2
Spain	25.3	29.2	3.8
Sweden	58.0	25.0	−33.0
United Kingdom	42.5	40.0	−2.5
Unites States	50.0	28.0	−22.0

Note: Central Government income taxes only; excludes payroll taxes.
Source: Mankiw et al. (2009).

Yet we do not know how much of this reduction is caused by the option to migrate to countries with lower tax rates. Skilled workers can clearly gain a lot from migration. A Puerto Rican, for instance, can earn almost twice his or her income by moving to mainland US.[4] Yet, if migration has not emptied the island, as predicted by Anita in *West Side Story*, almost one-third of the Puerto Rico-born population had migrated to the mainland US in 2000 (Borjas, 2008) and the number of births and the population have been declining. Since the 1970s, the process of catching up to the average US standard of living has halted.

Moreover, almost half of the total emigrant population in the world resides in just eight rich countries – with one fifth living in the US alone (Docquier & Rapoport, 2012). Even though the brain drain in poor countries can be detrimental to development (Bhagwati & Hamada, 1974), the picture is less clear when we account for remittances and the frequent instances of emigrants returning to their home countries (Docquier & Rapoport, 2012, and IPSP Report: Chapter 3; Klasen et al., 2018: section 7.5.4).

A different issue is the impact of immigration on the design of tax policies followed by countries in the North. Of special concern is that high-skilled people are more mobile than low-skilled people, as they can afford the cost of moving, they face less linguistic and cultural barriers because of the knowledge of English and they more easily obtain work permits. For OECD countries, Grogger and Hanson (2011) show that indeed more educated people are more likely to emigrate and to settle in high-pay destinations. Kleven, Landais, and

[4] Our computations are based on US Census data (see https://www.census.gov/newsroom/press-releases/2014/cb14-17.html, accessed on 24/8/17).

Saez (2013) investigated tax migration for the European football market and found that the elasticity of the number of domestic football players to the net-of-tax rate ranges from 0.07 to 0.16 depending on the specification, while the elasticity of the number of foreign players is above 1. Kleven, Landais, Saez, and Schultz (2014) exploited the fact that new tax breaks have been designed to attract high-income earners in redistributive countries like Denmark, Sweden and France. Their results on Danish data translate into a quite large elasticity of migration with respect to the net-of-tax rate on foreigners, between 1.5 and 2.

The responsiveness of cross-border migration to tax rates will affect the optimal top marginal tax rate. We already know that the labour supply elasticity, be it extensive or intensive, is very small for top income earners. The response of this segment of the labour supply on the extensive margin will be to vote with their feet and to emigrate. Simula and Trannoy (2010, 2018) and Lehmann, Simula, and Trannoy (2014) provide extensions of the Mirlees' model (Mirrlees, 1971) to a context of tax competition between countries. They show by virtue of theoretical results and simulations that the impact of cross-country labour mobility can be rather negative for the extent of redistribution and the degree of progressiveness of taxes. It will not only affect the top marginal tax rate but also cascades down all over the tax schedule and results in lower progressivity.

Until very recently, we did not know too much on whether taxation was really an important deterrent factor for innovation. Innovation is more complex to study than decisions to migrate since it involves both human and financial capital. Akcigit, Grigsby, Nicholas, and Stantcheva (2018) study the effect of corporate and personal taxes on innovation in the United States over the twentieth century. Their analysis focuses on the impact of taxes on individual inventors and firms (the micro-level) and on states over time (the macro level). They find that taxes matter for innovation. Higher personal and corporate taxation entail shifts in location at both the macro and micro levels.

All in all, these results put in jeopardy the validity of the third claim of welfare economics in the context of globalization through the mobility of factors.

3.2. Factor price equalization and wage convergence

The mobility of labour and capital can also contribute to wage equalization across countries, as captured in the so-called Stolper-Samuelson theorem. The purpose of the theorem is to demonstrate that international trade will reduce wages for low-skilled workers in rich countries, and increase wages for low-skilled workers in poor countries. One implication is that trade liberalization may constrain the possibility for a government to influence its wage-setting policy, and unions in advanced countries may experience lower bargaining

power. If factor price equalization and wage convergence do increase the skill premium, it will mean that the inequality of gross earnings will go up. The redistribution budget should then be higher to achieve the same target of inequality of disposable income. Hence, globalization will positively affect both the demand side of redistribution by increasing inequality, but also the supply side of redistribution as the race to the bottom limits the government's financial resources.

But are Western wages actually set in Beijing, as the theory suggests? Focusing on changes in labour demand and prices in China-exposed industries, Freeman (1995) reached an overall negative conclusion. Conversely, Wood (1995) argued for a stronger impact of trade using less conservative calibrations than Freeman's. The most convincing proof that the impact of international trade was moderate in rich countries is perhaps due to the observation of the differences in low-skill wages in trade-exposed vis-à-vis non-trade-exposed sectors. If the impact of trade had been relevant, we should have observed a downward (upward) adjustment in the former (latter) sector. On the contrary, low-skilled wages fell in both types of sectors (Berman, Bound, & Griliches, 1994). This has made skill-biased technological change the most likely explanation for the increase of the skill premium in rich countries. This conclusion has been confirmed in more recent analyses and has even led some economists to declare the Stolper-Samuelson theorem dead (Davis & Mishra, 2007). A variety of theoretical reasons has been proposed to account for the failure of the theorem to explain labour market adjustments. Reviewing them is beyond the scope of this paper (see Davis & Mishra, 2007, for an account). It suffices here to say that a second generation of theoretical models of international trade, which assume a continuum of goods, has been proposed to account for the transformation observed in reality, and this can reach different conclusions from the Stolper-Samuelson model.

Although the view that technology matters more than trade is still dominant, recent work seems to find a larger role for the latter, in particular for what concerns offshoring (Hummels, Jorgensen, Munch, & Xian, 2014; 2016). Low-skilled wages may, in fact, fall for the mere threat that firms relocate their activities from rich to poor countries.

3.3. Immigration and the decreasing support for social insurance

Some evidence exists that exposition to more global competition may stimulate the political demand for social insurance and then the social budget, as countries become more exposed to external risks (Barth & Moene, 2015; Rodrik, 1998). Can immigration change this positive effect and lower the demand for public redistribution?

A hypothesis that has attracted attention in the comparative literature on the welfare state goes under the name of *ethnic antagonism*. In countries with

high heterogeneity, the richest groups – the white majority in the case of the US – may be unwilling to benefit recipients from other groups, such as Afro-Americans (Alesina & Glaeser, 2004; Lind, 2007). The welfare state tends thus to be smaller in countries with higher ethnic heterogeneity. This may be due to either a direct distaste for other ethnic groups (Alesina & La Ferrara, 2002) – similar to the taste for discrimination in the labour market – or to the (possibly misplaced) belief that people from other ethnic groups are less deserving because they lack work ethic and willpower (Gilens, 1999). Such negative beliefs may be based on stereotypes stirred by media manipulation or political leaders (Glaeser, 2005).

Alesina and Giuliano (2009) find that such explanations matter for preferences for redistribution. As argued by Roemer, Lee, and Van der Straeten (2007), in US political debates racial antagonism is often camouflaged under a 'libertarian flag.' Lower redistribution is justified on the basis of US values being intrinsically libertarian – whereas the real underlying motivation has to do with racial antagonism. In fact, empirical analysis based on the US General Social Survey shows that libertarianism has little effect in accounting for racist attitudes. 'Authoritarian' values and the insistence on 'traditional' values seem more important.

Immigration may be expected to bring about a similar decline in the support for social insurance (Alesina & Glaeser, 2004; Roemer et al., 2007). Ethnic antagonism induced by immigration challenges the social contract that rests on shared cultural norms or tolerance of cultural diversity. Immigration may change the networks of solidarity across different socio-economic groups (Brochmann, 2003); cultural and religious differences may become more distinct (Brewer, 1999).

These rather bleak predictions have some empirical support. Racial/ethnic heterogeneity is negatively related with individual propensities to redistribute, and with public goods provision in different areas within the US (Alesina, Baqir, & Easterly, 1999; Lind, 2007; Luttmer, 2001) and across countries (Alesina & Giuliano, 2009; Alesina & Glaeser, 2004). A negative association between ethnic diversity and inter-personal trust has also been identified (Alesina & La Ferrara, 2002; Putnam, 2007), with negative consequences for economic growth (Knack & Keefer, 1997) and social spending (Soroka, Banting, & Johnston, 2006).

Public opinion tends to oppose immigration. For instance, answers to a 2000 World Value Survey question regarding the necessity to reduce or increase the number of immigrants in one's country reveal that two-thirds were in favour of restricting immigration, while only 8% were in favour of expanding it. In all 23 countries surveyed, the anti-immigration block was larger than the pro-immigration one (Scheve & Slaughter, 2006).

Borjas (2003) shows that immigration has a negative effect on US workers' real wages. A 10% higher migration reduces the average native's wage by

3–4%. The reduction is larger for unskilled wages and close to zero for wages for educated workers. Using a different method, Ottaviano and Peri (2012) find only moderate wage losses to unskilled labour and actually a higher average wage as a response to higher immigration. Whatever the direction of the average effect, the decline in unskilled workers' wages seems minor compared to the strength of anti-immigration sentiments. The case of France is revealing. France's high minimum wage insulates low-skilled workers from the pressure of immigration. Nevertheless, anti-immigrant feelings are rampant. Economics is not the whole story.

All in all, we cannot exclude that if the recipients of the social budget are disproportionally the newcomers, the social preference for an egalitarian ethos will weaken.

3.4. Globalization and other gains from efficiency

Bowles (2006) discusses how globalization may, in principle, limit governments' effectiveness at carrying out conventional strategies of redistribution. The constraints, however, do not affect a large class of egalitarian interventions that are productivity-enhancing, including land redistribution and ownership reforms at the enterprise level.

Similarly, Bardhan (2006) discusses cases of successes and failures in how globalization affects poverty alleviation in poor and middle-income countries. He shows that many of the problems affecting the poor have little to do with globalization, but rather with domestic institutions, insisting that the poor's material welfare in developing countries would be improved if the trade barriers and subsidies adopted by rich countries were removed. In this sense, more globalization would arguably benefit developing countries and their poor citizens.

Moreover, as extensively reviewed in Chapter 8 of the IPSP report (Grimalda et al., 2018), the experience of the Nordic countries shows that globalization may act as a self-imposed constraint to increase productive efficiency. Policies such as wage compression, which have been the result of the practice of centralized bargaining, have been made necessary by the need to keep the country competitive on international markets. At the same time, wage compression demands firms to keep high efficiency and innovation rates, lest their eviction from the market. It is then not surprising that Norwegian firms appear to have higher overall factor productivity than US firms (Grimalda et al., 2018). Needless to say, wage compression guarantees equity, as Nordic countries top the ranking of income equality. They represent an example of economic systems where equity and efficiency go hand-in-hand, and where in fact equity was an instrument to achieve the overarching target of efficiency. However, Iacono (2018) points to a decrease in the future sustainability of public welfare spending in the Nordic countries.

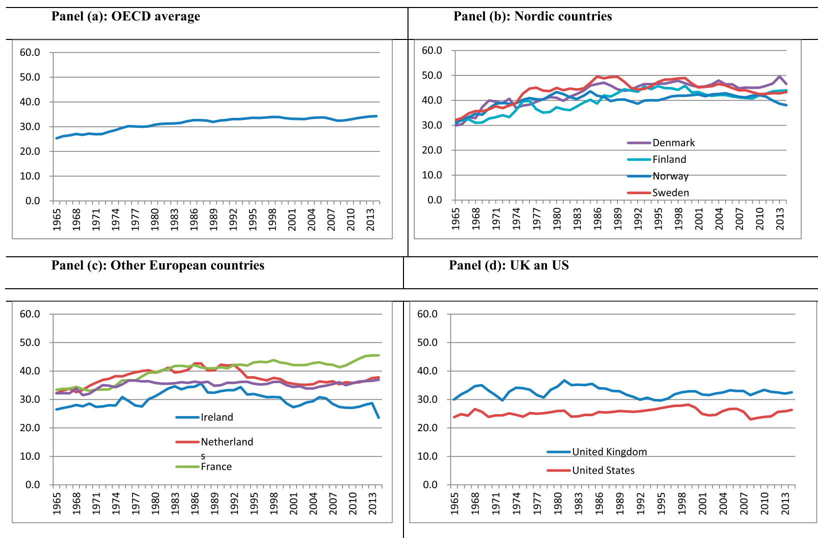

Figure 4. Evolution of total tax revenues as proportion of GDP (selected countries). Source: OECD online database.

4. An overall assessment of the welfare state in a global era

Section 3 laid out some arguments pointing to a possible weakening of the financial capacity of the welfare state, in particular with respect to egalitarian redistribution, in the current global era. In this section, we take stock of the previous arguments and provide a general assessment of the nature of redistribution and of the welfare state in the future.

4.1. A historical assessment of the financial capacity of the welfare state

That top tax rates have been falling and converging – at least among rich economies – is evident from Figures 2 and 3. However, this does not seem to have dented states' overall financial capacity. Figure 4 shows the historical evolution of tax revenues as a proportion of GDP since 1965, for some rich economies representatives of different 'varieties of capitalism'. If anything, taxation as percentage of GDP has increased 10% in the OECD area over the period (Figure 4, panel (a)). In Nordic countries, taxation increased steadily from 1965 up to the 1980s. Since then, the level of taxation has either plateaued (in Denmark and Finland) or decreased (in Sweden and Norway) (see Figure 4, panel (b)). A sharp decrease of progressivity in the Swedish income tax is well documented (Bengtsson, Holmlund, & Waldenström, 2016).

Panel (c) shows a rather stable evolution of taxation for Germany, whereas taxation is on the rise in France. Ireland and the Netherlands have experienced

sharp drops in their tax revenues since the mid-1980s. Both countries have lowered their corporate tax (see section 3.1), so the race-to-the-bottom seems to be showing some bite for these small open economies (see Figure 4, panel (c)). Taxation is considerably lower in the US and the UK (see Figure 4, panel (d)), but again we do not discern any decreasing trend. Overall, the weight of the state in the economy has, on average for rich economies, never been as large as today (see Grimalda et al., 2018; Piketty, 2014). The fact that, with some rare exceptions, the volume of taxation over GDP does not seem to be rising any more – and in this respect the experience of Nordic countries is particularly noteworthy – may suggest that public spending has already peaked. The future may hold constant or maybe decreasing levels of taxation in the economy.

There are several reasons why the total tax receipts have not been affected by the drop in the tax rates. The first reason has to do with the fact that Figures 1 and 2 concerned the *top* tax rate, rather than the *average* rate. The latter, which is more relevant for the determination of total tax receipts, has gone through lower variation than the top tax rate. In the case of the US, the reduction was in the order of few percentage points (Saez, 2004). In fact, it can be argued that for the period spanning the end of the Second World War up to the 1980s, the main function of the top income tax rate was *not* to collect tax revenues *per se*, but rather to send a signal to the labour market about which income level would be considered socially acceptable.

Top income tax rates were as high as 90% in Britain in the 1940s and again in the 1970s, and in the US in the 50s through the mid-60s. They were levied because the dominant 'sentiment' in the society was that high incomes were fundamentally undeserved. It is remarkable that these rather egalitarian sentiments evaporated from the public debate in the US and UK during the 1980s. It is an open question what actually determined this shift in public opinion. The leadership of Ronald Reagan and Margaret Thatcher played a big role, but it would be difficult to imagine that such leaderships were able to propagate a radically different approach to taxation of high incomes without some underlying social consensus.

Piketty (2014) suggests that US citizens' fear of being overtaken, in terms of standards of living, by Europe and Japan at the end of the 1980s was one of the main reasons for the libertarian turn. Incidentally, it would be wrong to say that Europe was committed to inegalitarianism during the *Trente Glorieuses.* Rather than setting high top tax rates, many European countries preferred to apply salary caps to executives, or other forms of control of excessive pays. It is also worth noting that top tax rates on wealth in the US and the UK were similarly confiscatory up to the 1980s, and fell dramatically afterwards. High wealth was seen with as much suspicion as high incomes.

An additional explanation for the declining tax rates at the top can be found in the falling growth rate caused by a secular reduction in the rate of technical

progress (Gordon, 2016). When the size of the cake is increasing at a slower pace, the tax sacrifice is less hidden by the increase of the cake. The collapse of communism as a global threat for the affluent also played a part in denting redistributive goals. Atkinson (2015) argues that the vanishing of a collective egalitarian and cooperative ethos which was widespread in the aftermath of the Second World War played a big role in making redistribution less popular as well as spurring wage inequality.

Overall, the argument that states are losing their tax-raising capabilities does not seem to have much bite. It is documented that indirect taxation of consumption made up for the drop in income or wealth taxes. For instance, the implicit tax rate on consumption for the EU-27 (all member states except Croatia) continued its upward path since 2009 (see EU Commission, 2019: Graph 8, p.22). Nevertheless, the lowering of top tax rates combined with tax breaks, deductions and credits, and tax holes, are likely to mitigate the sharpness of the tax instruments to reduce overall inequality in a society.

4.2. Consequences of lowering top tax rates

The consequences of lowering top tax rates on income and wealth, however, go well beyond its impact on government budgets. Brain drain between the South and the North but also between Northern countries is one. Large numbers of highly educated people from both low-income countries and from rich countries decided to settle in North America. It is open to debate whether the one million German university graduates or the 1.4 million UK university graduates who decided to relocate to the US during the 2000s (Docquier & Rapoport, 2012) are big enough numbers to slow down the growth of countries where emigration is taking place, to the advantage of the US. Yet, the migration of many researchers is noteworthy, given the obvious relevance of scientific research for innovation and growth.

Another obvious consequence of the reduction in the top tax rates is its impact on inequality. The explosion in income inequality and wealth concentration that we witnessed in the US clearly went hand-in-hand with reduction in top tax rates. As discussed in detail by Piketty (2014) and others, the phenomenal rise in the payment of CEOs – partly in salaries and partly in capital incomes – is associated with this trend.

An orthodox explanation of the trend holds that the reduction in tax rates raised the productivity and the labour supply of CEOs and managers, and more generally of talented people, who earned much larger quantities of money for their abilities. A related account has to do with the economics of 'superstars' (Rosen, 1981). Modern communications technology permits firms to reach much larger markets than before. This entails that talented individuals can gain larger profits to their companies. The outcome is the creation of 'winner-take-all' markets where the most talented individuals reap huge rewards, even if

they are only marginally better in what they do than others. Gabaix and Landier (2008) find very small dispersion in CEO talent, but a high and striking correlation between CEO pay and firm size. In particular, the six-fold increase of US CEO pay between 1980 and 2003 corresponds to the six-fold increase in large companies' market capitalization over the same period.

Correlation does not mean causation, though. An alternative explanation dismisses the incentive effect on productivity, and points at the incentives of CEOs to exploit their bargaining power. This explanation rests on the idea that CEOs had almost no incentive to bargain for higher pay when the tax rates on top income were at the confiscatory levels of the 1960s. But as soon as tax rates dropped, the incentives of bosses to claim higher pays grew.

Exploring how CEOs' remunerations are set in practice is revealing. Given the complexity of teamwork in large organizations, it is very difficult to ascertain the marginal productivity of each participant. CEOs have large discretionary power in setting their own pay; if their salary is not set by themselves, it is set by a corporate compensation committee whose members are often nominated by the CEO themselves, or expect large remunerations in return.

Which of the two accounts is correct? Both accounts are likely to be relevant. Yet the support for the bargaining power account is arguably more convincing. Neither productivity nor growth rates have shown clear increases in the US after the fall in the top income tax rate (Piketty, 2014). On the contrary, the rate of innovation was higher in the previous decades. This sheds more than a shadow of a doubt on the productivity argument. Piketty, Saez, and Stantcheva (2014) show that the elasticity of taxes on 'pay from luck' (pay increases derived from a whole sector performing relatively well) exceeds the elasticity of 'pay from reward' (pay accruing to managers of companies that outperformed other companies in the same sector). Other pieces of evidence point in the same direction. Firms that were classified as having worse than average governance had managers who achieved higher than average pay rises.

Regardless of whether the correct interpretation is that top managers took advantage of decreasing top tax rates to increase their salaries, or 'superstar' CEOs won positional rents, it does not seem that increasing top tax rates would jeopardize government tax-raising capacities.

4.3. A reassessment of the demand and supply for social insurance in globalized economies

4.3.1. The relationship between demand for social insurance and globalization

The size of governments in the economy increased tenfold in the course of the twentieth century. Prior to 1910, levels of taxation were in the order of 10%

of GDP. In Piketty's words, the role of the state was in this period confined to its 'regalian' duties before the 1910s, namely guaranteeing public order through police and defence, ensuring the rule of law through courts and justice, conducting foreign policy, and little else. It was only during the twentieth century that the welfare state as we know it today was established gradually and reached a plateau after the *Trente Glorieuses*.

One can notice that the government's size is bigger today in France and Sweden compared to the UK and the US. What explains such differences in the size of the government? Political scientist David Cameron (1978) was the first to claim that openness to international trade was a key factor. Larger governments were necessary in countries that were more exposed to international trade, exposing larger risks to their citizens' incomes. The need to stabilize incomes through a state-run system of social insurance had, therefore, to be regarded as a major cause of the differences in government's size. Rodrik (1998) proposed conclusive evidence for the robustness of this result both in developing and developed economies. Hence, contrary to the thesis that a state's action space is reduced in a global economy, the opposite seems to have been the case.

Atkinson's (2015) historical analysis leads to the same conclusions. He points out that the institutions providing social insurance were built in most countries towards the end of the nineteenth century, in a period of great international economic integration (section 1). The Industrial Revolution created new forms of employment relationships that made key institutions of social protection necessary. Programmes such as unemployment insurance, industrial injury benefits, sickness insurance, and old-age pension schemes, were all created between the end of the nineteenth century and the early twentieth century to protect workers from the risk of loss of earnings. It is not incidental that these institutions for social protection were created at a time of high trade openness, because trade fluctuations made such risks even more acute. Germany led the way with Bismarck's reforms. Clearly, other factors were also relevant, such as the need to preserve political and social stability at a time when socialist ideas were spreading and workers' organizations had become stronger.

We do not believe that the above argument is any different in the current phase of globalization. In fact, the ongoing process of digitalization (Norris & Inglehart, 2013) adds considerable uncertainty on people's income prospects. Digitalization has huge technological potential, but also runs the risk to make the skills of many workers obsolete. Contrary to previous stages of technological change, with current digitalization not only low-educated workers but also high-educated ones may see their skills fast depreciating, because of the spread of artificial intelligence. For this reason, we do not expect that the demand for social insurance is any way lower today than it used to be in the past. If anything, it may be higher. In fact, one of the reasons for the current

populist turn may be precisely the dissatisfaction by many citizens with exceedingly liberalist regimes, which have deprived them of the safety nets on which they could have relied upon in a recent past.

One possible element differentiating the current phase from previous ones, especially in Europe, is the increased ethnic heterogeneity that has been spurred by immigration. As revised in section 3.3, this may reduce demand for redistribution if, as is normally the case, immigrants or descendants of immigrants are the net beneficiary of redistribution. While first-generation immigrants may be excluded from the benefits of redistribution on the grounds of lack of citizenship, it is more difficult – or impossible – to exclude second-generation immigrants as long as they legally acquire citizenship.

It is an open and under-investigated question how the desire for social insurance weighs up against natives' desire to restrict the access of ethnic minorities to the benefits of income redistribution. The current rise of populist parties may suggest that the latter motivation is stronger than the former, even if this jeopardizes the interests of many among the natives. For sure, this theme will occupy the research and policy agenda for the years to come.

4.3.2. Universality vs. conditionality in the supply of social insurance in globalized economies

While we do not consider the overall demand for social insurance to be less high today than in the past, we believe that its current patterns and optimal response by governments are different from the previous era of globalization. The Bretton Woods era was characterized by stable, permanent, and full-time jobs and standardized contracts typical of the Fordist and early post-Fordist era. Insurance against risks of unemployment, sickness and injuries was embedded in the labour contracts, as well as the right to receive a pension after retirement. The benefit being provided by the government was generally proportional to the amount of contributions accumulated by the worker through e.g. payroll taxes.

Technological innovations and changes in industrial relations of the last three decades have introduced contractual forms in the labour market that are in general very different from those of the previous era (Atkinson, 2015). Many more workers than in the past are now subject to relatively unstable, flexible, and fixed-term contracts with no clear provision for working time, as in the so-called gig-economy. Relatedly, rights to a pension scheme may no longer be attached to one's job. Nonetheless, social insurance provided by contemporary welfare states still mainly relies on the principle of attaching protection to jobs that are presumed to be of the Fordist type. This is clearly anachronistic and runs the risk of leaving many workers devoid of social protection. We argue that social security systems should integrate into the general social protection

architecture the principle of providing universal and non-contributory forms of protection that do not hinge upon one's participation in the labour market. Universal forms of social insurance would include for instance the provision of a universal basic income, the delivery of unemployment subsidies unconditional on the amount of contributions previously paid, and a basic universal flat pension system. These forms of intervention may accompany, or considerably replace, the current instruments of intervention, that are instead based on the principle of accumulated contributions and rely on formal job market participation.

We believe that the principle of a universal basic income would be particularly important to redress one of the biggest forms of unfairness in contemporary societies, that is, the lack of protection and reward for work within the household, which is disproportionately carried out by women. It is, to say the least, paradoxical that many women are *de facto* working as housewives to produce goods and services for no wage, and for this reason they are entitled to no pension or assistance. The introduction of universal forms of protection would have the merit of addressing this glaring injustice.

We are well aware of the difficulties, both at the practical level and at the political level, to incorporate universal forms of protection into the welfare system. We also believe that citizens from different countries may differ in their preference over a universal system of social protection versus a more traditional contribution-based system. Citizens from some countries might perceive as unfair that assistance is provided to people who are not making any effort to contribute to production activities. These sentiments may be shaped by cultural heritage or historical trajectories (Fong, Bowles, & Gintis, 2005). It would be wrong to disregard these attitudes, because they may lead to disaffection towards the welfare state if they go unheard. Finding the optimal balance between a universal system and a contribution-based system is a matter as delicate as it is important. It should be the subject of national dialogue and political mediation. It is not impossible that some countries may decide to opt for a system uniquely based on universal protection. What we advocate is that some elements of a universal system of protection *should* be urgently incorporated into the social protection architecture, in order to address some relevant and pervasive forms of social injustice that have been affecting contemporary socio-economy systems and have become particularly acute under the hyper-globalization era. We argue that social insurance should be seen as something broader and more redistributive than traditional contributory systems. Family allowances, pensions, unemployment and access to health insurance should have a first strong non-contributory universal floor that should be an important pillar – maybe the most important pillar – of the new social insurance systems. In other words, we should assume that social insurance is collective and citizenship-based, rather than private and work-based.

5. Conclusions

In 1998, in an opening speech titled 'Worldwide Crisis in the Welfare State: What is next in the Context of Globalization?,' the then IMF managing director Michel Camdessus stated: 'Welfare systems, based on the best possible motivation of ameliorating hardship and improving human welfare, have come to represent an enormous drain on the resources and the efficiency of many of the so-called welfare states.' We have analysed this argument, in particular with respect to the function of the welfare state pertaining to egalitarian redistribution.

Our main conclusion is that Mr Camdessus's fears are unmotivated and arguably led by ideological fervour rather than critical analysis. This is for sure the case in a closed economy. We have coined the term 'third claim of welfare economics' to state that in a closed economy, the magnitude of the distortions introduced by the tax systems is relatively contained, hence it does not hinder the achievement of ample income redistribution policies.

More problematic is the case of the currently open economies. A 'race-to-the-bottom' in the top rate tax seems to occur in many domains – income tax, corporate tax, inheritance tax. This hinders the possibility of limiting the incomes of top-earners, and thus triggers ever-greater inequality. The last three decades have witnessed the rise of what Branko Milanovic (2016) called a 'global plutocracy', given by people belonging to the top 1% of the global income distribution, who have been capable of appropriating of as much as 27% of the total income growth produced worldwide. As shown in section 3.3, high-skilled individuals seem to respond to cross-country differences in the tax rate, thus favouring the innovation and the growth potential of low-income tax countries like the US at the expense of other developed economies. Nonetheless, the race-to-the-bottom seems to affect mainly top tax rates rather than average tax rates. This is the reason why, overall, the financial capacity of most OECD countries does not appear to have been jeopardized. Rather, in historical perspective, the size of the state has never been as large as today.

What are then the prospects for the welfare state and egalitarian redistribution in the age of hyper-globalization? We lay out three different scenarios in what follows.

One possible scenario is a retreat from globalization, taking the form of unilateral rise of tariffs and higher barriers to immigration. In the current era of populist rule in several countries, this turn does not seem too far-fetched. As mentioned in section 4.2, retreating from globalization presents the allure of permitting countries the re-establishment of national sovereignty at the expense of the undemocratic dictates of global markets. The retreat from globalization may also permit the halt of the race-to-the-bottom thus possibly increasing tax rates. We believe that this strategy would be extremely

detrimental. Even if we do not contend the view that globalization has gone 'too far', we believe that a return to protectionism and autarchy would significantly impair a country's growth potential. Moreover, it is extremely doubtful that a country would regain its capacity to tax the rich, because of the high ability of the rich to evade taxation by taking advantage of tax havens. While the current populist turn typically applies to trade protectionism, the issue of capital restriction is much less popular, thus it would not prevent the race-to-the-bottom in corporate tax or financial gains tax.

A second, more promising, avenue is for a country to redesign its redistributive policies to take into account of the constraints imposed by participating in the global markets. We noted that a country's financial capacity does not seem to have been diminished by the race-to-the-bottom in taxation. If redistribution through the traditional instrument of 'tax-and-transfer' is no longer viable, a country may then explore other forms of redistribution. In particular, 'in-kind' redistribution may replace income redistribution. In other words, a country may devote more resources to equalize individual endowments of human capital, through higher investment in primary and secondary education and easier access to tertiary education. This strategy may be combined with active labour market policies and programmes favouring life-long learning. Strengthening individual skills before accessing the labour market and protecting them throughout one's working life would have the effect of 'raising the floor' of the income scales, thus reducing inequality. By attempting to reduce inequality ex ante, this approach is reminiscent of the original stance of IDC. This result is however not the result of the belief that markets are efficient, but rather a pragmatic approach given the constraints imposed by globalization. Fleurbaey et al. (2018) lay out in more detail the room for manoeuvre of the welfare state in a global era.

A third avenue is antithetical to the first one, and forecasts more global governance. This view may be depicted as utopian nowadays. Nonetheless, it should not be discarded. First of all, the very fact that global institutions exist and are active in some domains, such as the Sustainable Development Goals, is testament to the fact that some political consensus exists supporting international action. International cooperation may be judged to be insufficient under other domains – in particular with respect to action against climate change or tax evasion. However, it is not too far-fetched to think that, as the pressure to deliver global public goods will increase, international cooperation will also grow. That this *may* happen is foreseeable in particular for climate change.

As the possibility of climate catastrophe will become more concrete, then it may be expected that countries will be forced to agree on some kind of accords. Another area where some kind of global cooperation may be expected is the fight against international tax evasion or tax avoidance. The race-to-the-bottom is a typical cooperation problem where the action of free

riders will beget convergence towards the socially sub-optimal equilibrium with low tax rates. The closer we get to this situation, the smaller the incentives to further reduce the tax rate, and the larger the gains from coordination on some international agreement.

To be sure, the power of pressure groups and lobbies campaigning, more or less openly, to preserve the current situation, is not expected to wane any time soon. But even in this case, it is not unthinkable to conjecture that civil society campaigning for global social justice will be able to gather consensus to implement radical reforms in the field of international taxation. In fact, some progress has been done on international tax avoidance, thanks to initiatives such as the OECD Base Erosion and Profit Shifting Project (BEPS). In the same vein but in a more ambitious way, a group of countries may decide to adopt tax instruments which by essence remove the possibility of tax avoidance by moving abroad. We briefly review the possibility both for the income tax for individuals and for companies. Regarding individuals, a solution would be to switch from the residence-based approach to the citizenship-based approach. In the former, the country taxes their local residents on all income earned from both local and foreign sources. In the latter, the citizen is subject to the same rules regarding income taxation as people living in the country, so it can be said that the citizen-based principle leads to an income-tax which is lump sum (invariant) with respect to the residence choice.

The US takes a relatively unique approach when it comes to taxing individual income, since it is the only country that embraces the citizenship stance. They do so because they are sufficient powerful to twist the arms of foreign banks to be cooperative. Smaller countries will have to resort to international cooperation to go in this direction. International agreements are also necessary to avoid double taxation. Regarding corporate tax, Auerbach, Devereux, Keen, and Vella (2017) propose the Destination-based cash-flow taxation (DBCFT), which also undercuts any possibility of optimization through manipulating transfer prices between subsidiaries of the company. The main idea is to tax business income in a relatively immobile location – that is, the location of final purchasers of goods and services (the 'destination').

The DBCFT has two basic components. The 'cash flow' taxes every source of cash coming in and gives immediate relief to all expenditures, including capital expenditures. The 'destination-based' element introduces border adjustments of the same form as under the value added tax (VAT). Therefore, exports are untaxed, while imports are taxed. DBCFT is robust to tax avoidance through inter-company transactions. Indeed, since exports are not taxed, a sale from a German subsidiary to an Irish one would not affect the DBCFT. The bottom line of these two examples is that technical solutions exist to circumvent tax avoidance by affluent individuals or companies. The lack of international cooperation is the only missing element so far. The political willingness to go forward depends on both the political

will of policy-makers in large democracies and on public opinion in those countries.

This scenario obviously presents the best opportunity to tackle the issue of egalitarian redistribution, especially because it would permit action against both national and global inequality. Recent experience would of course make us doubtful that such a scenario would so easily emerge, and most likely it would first take the form of regional agreements on international tax coordination rather than global agreements. In particular, the European Union may be expected to take the lead on this front.

The objective of this paper has been to critically evaluate the possibility of egalitarian redistribution in the current hyper-globalized era, considering different domains. Overall, our conclusion is that the current phase restructures rather than limits the extent to which states can carry out redistribution. International competition adds a further constraint on national governments' action space, but by all means this does not imply that such an action space is void. Redistribution may take the form of empowering individuals before accessing the labour market rather than redistributing resources ex post. We believe that the perspective that welfare states will be progressively rolled back is far from a foregone conclusion, and even less so the argument that this is optimal on the grounds of efficiency.

As argued in Chapter 8 of the IPSP report (Grimalda et al., 2018), markets and states should not be seen as substitutes but rather as complements. Stronger states make possible more fruitful market engagements. Moreover, it is precisely at a time of increased insecurity that the role of the welfare state should be held in higher consideration, as historical experience proves to have been the case. Now that digitalization adds to globalization as a source of insecurity, it is plausible to think that the role of the welfare state in providing safety nets and assurance against risk will be held as relevant by citizens of Western countries. However, how this desire combines with the rise in xenophobic sentiments brought about by waves of immigration is open to question.

Disclosure statement

No potential conflict of interest was reported by the authors.

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