Descriptive and normative narratives on Europeanisation and welfare development are often permeated by pessimism (Ferrera, 2018). By concentrating on European politics with a longue durée perspective, they have lent primary attention to past processes of conflict and structuring. Much less attention is devoted to the ongoing technological change affecting welfare arrangements concerning the European Social Model (ESM) and the prospective unfolding of the European Social Union (ESU) (Vandenbroucke and Vanhercke, 2014).

The relentless process of the robotisation in the new context of Industry 4.0 is already bringing about deep transformations in welfare democracies. This fourth information and technological revolution driven by the generalisation of the Internet and automation is intensifying new applications of artificial intelligence. Eventually, the ongoing robotisation will make the need for a large part of human paid work superfluous. What will the coexistence between robots and humans be like? Everything seems to indicate that the transition towards a full robotisation of economic activities capable of incorporating efficient automation processes will be gradual but accelerated. It will follow the paramount criteria of maximizing profitability in the present configuration of global capitalism (Moreno and Jiménez, 2018).

Europeans continue to rely mostly on the action of their national welfare state. This gives political legitimacy to the all-embracing ESM whose political contours go beyond the elaboration of a clear-cut and definite institutional entity or compound of social policies. Some observers continue to deny the existence of the ESM and speak of a myth because European economic integration has not brought about a social Europe (Höpner, 2018). These kinds of denial narratives tend to reduce the discussion on social Europe to the achievement of an optimal degree of homogeneity vs heterogeneity within the EU. At times, critics also point implicitly to the desirability of building a brand-new continental superstate along the lines of the obsolete Westphalian nation state.

Technological change is expected to affect the structure of employment more than the level of employment, which would create an even more polarized labour market between highly qualified and low-skilled occupations. As a consequence, there would be more
significant wage inequalities between both poles.

I believe that the constitution of a United States of Europe cannot be regarded as the end result of the process of Europeanisation. Neo-functionalist schools of thought have generally adopted the view that universal progress requires a mode of integration equivalent to cultural assimilation, along the lines proposed by the advocates of the American “melting pot”. An alternative view of non-homogenizing integration needs to put the emphasis on the historical, psychological and social characteristics of a plural Europe. This should translate into policy programming reconciling unity and diversity by means of an inclusive political pact of the member states involved.

This contribution focuses on the impact that robotisation is already having on labour markets worldwide and its implications for EU welfare concerning (un)employment protection/insurance, and the eventual implementation of minimum income schemes (GMI). References to robotisation include all the related processes of computing, digitalisation, automation and, in general, all those interrelated applications of information and communication technologies (ICTs).

Living among robots: shared and replaced jobs

Coexistence between robots and humans is already a fact. It does not happen only in clerical environments of mechanical and repetitive work production. By means of sophisticated algorithms, robots also advise the wealthy where best to invest funds and savings. A robot can choose entertainment with suggestions of leisure; it can also diagnose and optimize our health well-being through the so-called “eHealth”. Such coexistence between humans and robots implies great changes in our social life. This is best exemplified by the substitution of jobs performed up to the present only by humans.

How many types of jobs will disappear with the expansion of productive robots? The issue is of crucial importance as welfare democracies are based on wage labour. The 1948 Italian Constitution, for instance, explicitly proclaims that “Italy is a democratic Republic founded on labour”. The study by Frey and Osborne (2013) examined, through innovative research methods, the characteristics of more than 700 occupations in the USA in the year 2010, which were targeted as being automated and robotised in the course of the coming decades. Their calculations and estimates increased up to 47% the number of jobs potentially
replaceable by robots or digital applications of artificial intelligence or big data. Naturally, the jobs that were candidates to disappear more quickly were those that are low-skilled and low-salaried (e.g. assembly line and bank clerk jobs). Only those based on “expert thinking” about solving problems for which there are no fixed or predetermined solutions would be safe and would be needed in ever larger quantities.

Inevitably, there is no agreement on the timing and proportions of robotic job substitution. Using the same methodology of Frey and Osborne in the case of the United Kingdom, the auditing and consultant company Deloitte offered an alternative reading of the available data. In a subsequent investigation, in this case with a retrospective and not a future look, the consultant company concluded that between 2001 and 2015 four times more jobs had been created than had been lost due to the influence of technology in general (not only by robotisation) (Deloitte, 2015).

In the robotic future, social risks for unpaid workers will need the solidarity of the citizenship at large so that both social rights and duties can be accomplished [...] The best alternative for the European welfare states is to secure and fortify minimum income guarantees for precarious citizens in order to make effective social citizenship possible.

In the United States, manufacturing is in a race between human capital and technology. Some companies seek to robotise almost every facet of production, but many other companies are less eager to invest in robotics. A big barrier for them to committing wholeheartedly is that robotic machines are very expensive. In addition, businesses subject to seasonal or cyclical downturns worry about the costs of idle robotic machines, whereas with human workers, employees can be let go during production downturns. There is also a debate among business people and economists as to whether robots can actually deliver their supposed productivity gains (Acemoglu and Restrepo, 2017; West, 2018).

Furthermore, technological change is expected to affect the structure of
employment more than the level of employment, which would create an even more polarized labour market between highly qualified and low-skilled occupations. As a consequence, there would be more significant wage inequalities between both poles. One of the main challenges for the future of work lies in coping with rising inequality, as technological change creates both winners and losers and an increase in the number of “working poor” (Amtz et al., 2016).

It is estimated that spending on robotics will equal about US$90 billion in the United States in 2018, mostly for manufacturing. Although spending on robotics is expected to amount to “only” 3% of the total US$3 trillion of capital investment, it clearly indicates a trend that can only intensify. Worldwide, and after growing during 2010–15 at a compound rate of 17% a year, the robot market will be worth US$135bn by 2019, according to estimates by the IDC (2017).

Indeed, uncertainty has an important role in driving business cycles, as in the case of robotisation. In past situations, uncertainty shocks typically led to drops of about 2.5% in GDP, with a sharp drop, quick recovery and then continued sluggishness in output (Bloom et al., 2018). In the case of robotisation, and if the projections of job substitution put forward by Fry and Osborne materialize, the emerging situation for welfare democracies would be one of an economic overturn rather than a cycle downturn. The prospects for sustaining the systems of social protection in Europe as we have known them until now would face a critical conjuncture.

Unemployment shocks and guaranteed minimum income

Any social future for the EU is inextricably linked to the survival of the European welfare states. Within them, the provision of an adequate level of protection for workers during the impacts of unemployment shocks is paramount. In the robotic future, social risks for unpaid workers will need the solidarity of the citizenship at large so that both social rights and duties can be accomplished. However, many of the discussions in the ongoing debate on the idea of the universal basic income or basic income guarantee have underlined the possible dysfunctional effects that providing money without working could create (read the conversation between Ferrera and Van Parijs in EuVisions; see BIG for a comprehensive bibliography on the basic income, and Cruz et al. (2018) for a review of proposals for a universal basic income according to ILO standards).

Access to decent and well-paid jobs continues to be the preferred option for many people.
Employment as a means of social inclusion is a resource shared by the majority of the people in our European post-industrial societies. But occupations susceptible to being restructured with the intensification of automation are dwindling. Given this situation, the best alternative for the European welfare states is to secure and fortify minimum income guarantees for precarious citizens in order to make effective social citizenship possible.

GMI implies the distribution of a modest but sufficient amount of money for individuals to live with dignity in their places of residence. Such an income would cover the basic necessities of life and would guarantee legal residents their effective right to social citizenship. In order to enable the application of this new social contract induced by robotisation, an active redistributive policy based on progressive taxation ought to collect sufficient resources for its financing. **Without the large contribution from the wealthier, it would not be possible to improve the material well-being of all citizens.**

A comprehensive and genuine European unemployment insurance scheme seems to be out of the question at this point in time. In the meantime, nothing impedes the promotion of programmes of minimum income guarantees according to the optimisation of multilevel governance in social Europe.

Among the various options to make minimum income schemes effective for all unprotected unemployed people, I consider the one related to the so-called “negative income tax” to be the most appropriate. A minimum amount is quoted fiscally and if the taxpayer’s income is below this threshold the citizen gets the differential. In other words, if the income of a person does not reach the minimum exempt, then money would be provided to reach the minimum. Among other advantages, the management of tax collection via personal income tax and the application of citizenship income would allow: (a) mismatches to be avoided between income and expenses; (b) application of the generalisation of the citizen’s right to an income guaranteeing the net progressivity of the fiscal system; and (c) administrative management to be made simpler and more transparent via annual income tax statements. In the case of countries with large tax-free economies, this
arrangement would help to combat fiscal evasion in the lower echelons of society.

The policies of GMI must be based on the reciprocity of the contribution of beneficiaries to the well-being and cohesion of their societies. Therefore, the essential requirement for their perception must be “justification” by the beneficiaries of participating in community tasks. These could be many and varied, from one’s own personal training to tasks of social volunteering or family care, to name but a few. **A detailed implementation of such programmes would require, in any case, political consensus at the state and substate levels responsible for their implementation.**

The institutionalisation of the minimum income idea would require a unanimous, if “soft”, recommendation by the EU authorities, as happened with the initiative by the Commission (2018) on “access to social protection for workers and the self-employed”. In any case, the support of the Commission, Council and Parliament should avoid being regarded as a “command-and-control” top-down plan imposed upon long-term practices of poverty alleviation developed locally and nationally in the various tiers of multilevel governance in Europe. Such a “soft” approach does not preclude the possibility of EU institutions setting standards of coverage and supplementing them with conditional grants in those member states with less generous systems of social protection.

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GMI does not exhaust the possibilities of articulating other schemes for protection and security for the unemployed via social insurance. Although measures for unemployment protection would be contingent on the effects of economic downturns, they could not be expected to sort out long-standing structural problems of member states concerning the national labour market (e.g. long-term unemployment). These would remain within the remit of the member states for the foreseeable future. **A comprehensive and genuine European unemployment insurance scheme seems to be out of the question at this**
point in time. In the meantime, nothing impedes the promotion of programmes of minimum income guarantees along the lines of what has been described above, and according to the optimisation of multilevel governance in social Europe.

The welfare domain has often been left out of these federal-like arrangements. The reasons for such policy inhibition have been determined to a large extent by the characteristics of the process of Europeanisation, always fluctuating between the two well-known processes of “coming-together” and “holding-together” theorized by Alfred Stepan (1999). Let us not forget that conflict dynamics have served since the time of the 1957 Treaty of Rome to cement horizontal alliances among the disadvantaged and to promote political justice through vertical exchanges between rulers and ruled.

Concluding remarks

Europeanisation cannot be dissociated from the need to advance in the completion of monetary union. The sophism of pulling apart the economic from the social is damaging the very configuration of EU welfare as compared with other competing models (e.g. emerging Asian “neo-slavery” practices or Anglo-American individual recommodification). After all, the ESM is a political project articulated not only around values of social justice (equality) and collective solidarity (redistribution) but also with productive efficiency (optimisation).

Internally, the enemies of a united Europe are the new populisms, many of which identify the EU, and the process of Europeanisation itself, as the evil that afflicts the nationals living in the European member states. Some state nationalisms themselves advocate the maintenance of a nineteenth-century type of impossible sovereignty. Other non-state nationalisms also aim to achieve such illusionary sovereignty through secession. The various political parties and stakeholders committed to Europeanisation face the challenge of streamlining policymaking and advancing further political proposals. The outcome of the upcoming 2019 European Parliament elections may indicate the direction to follow.

As regards our discussion on the effects of the ongoing processes of robotisation, these need to be incorporated into the promotion of social Europe. A study on the case of Italy has confirmed that higher levels of objective technological unemployment risk significantly reduce opposition to the introduction of income protection measures as could be GMI (Sacchi et al., 2018). Indeed, robotisation is projecting far-reaching consequences for welfare...
development in the Old Continent. Some persistent disbelief and political inaction have got to give.