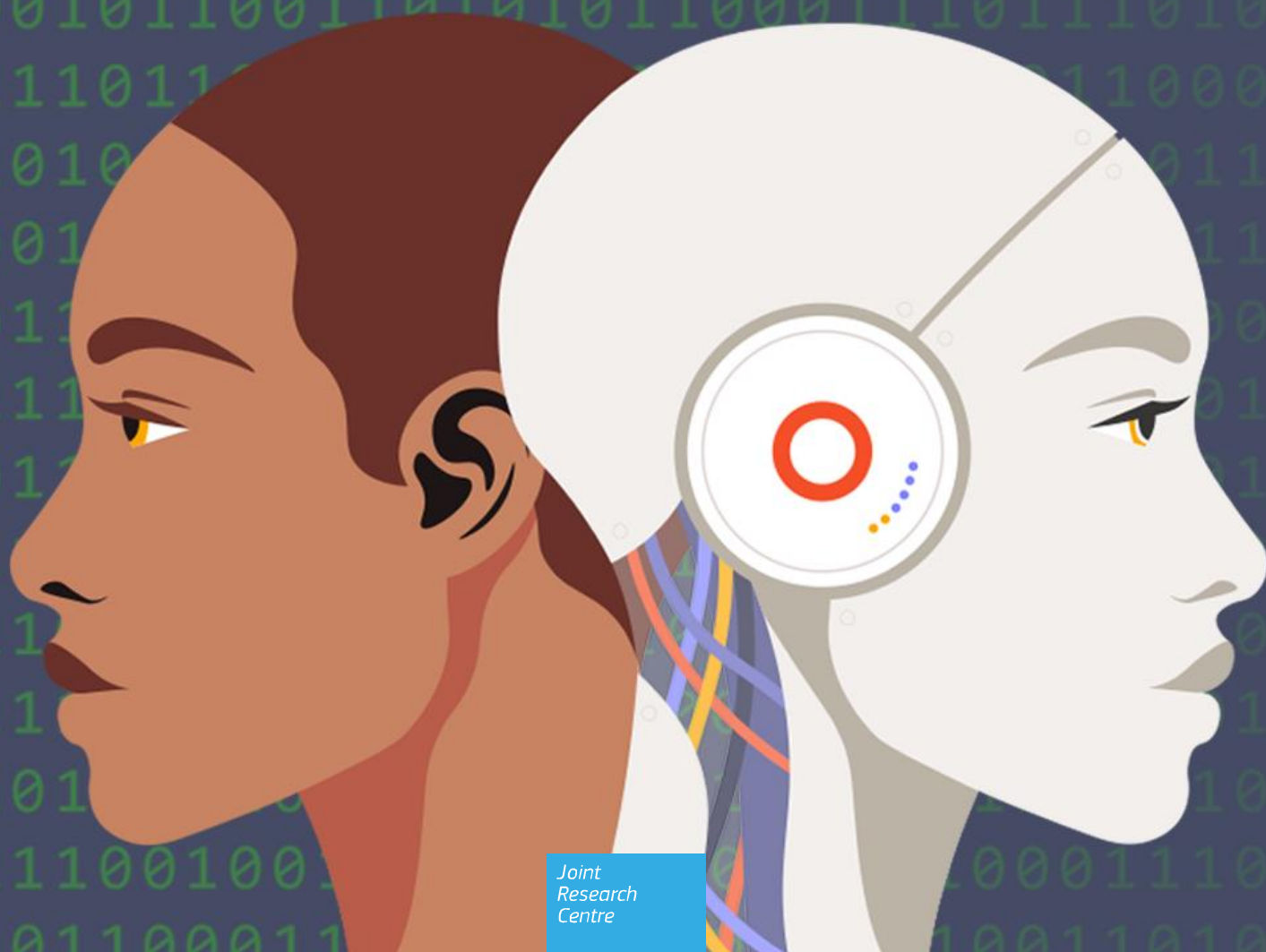


Social Classes in the Digital Age

Kick-off Workshop Summary Report



This publication is a Conferences and Workshops report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication. For information on the methodology and quality underlying the data used in this publication for which the source is neither Eurostat nor other Commission services, users should contact the referenced source. The designations employed and the presentation of material on the maps do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Contact information:

Name: Salazar, Leire

Address: Joint Research Centre, European Commission (Seville, Spain)

Email: leyre.salazar-velez@ec.europa.eu

Tel.: +34 9544-89005

EU Science Hub

<https://ec.europa.eu/jrc>

<https://ec.europa.eu/jrc/en/research/centre-advanced-studies/digclass>

JRC126985

PDF

ISBN 978-92-76-47158-5

doi:10.2760/034630

Luxembourg: Publications Office of the European Union, 2022

© European Union, 2022



The reuse policy of the European Commission is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated. For any use or reproduction of photos or other material that is not owned by the EU, permission must be sought directly from the copyright holders.

All content © European Union, 2022

How to cite this report: Salazar, L.; Gil-Hernández, C. J.; Vidal Lorda, G.; Villani, D. (Editors), Social Classes in the Digital Age. Kick-off Workshop Summary Report, European Commission, Luxembourg, 2022, ISBN 978-92-76-47158-5, doi: 10.2760/034630, JRC126985.

AGENDA

Tuesday, September 21st

14.00-14.15	Opening Address	<p>Jutta Thielen del Pozo, Head of the Scientific Development Unit A5, Joint Research Centre, European Commission</p> <p>Enrique Fernández-Macías, Employment and Skills Team Coordinator, Unit B4, Joint Research Centre, European Commission</p> <p>Lázsló Andor, Secretary General, Foundation for European Progressive Studies, and former EU Commissioner for Employment, Social Affairs and Inclusion (2010-2014).</p>
14.15-16.00	<p>Session I: Policy</p> <p>Are existing systems of social protection adequate for the digital age?</p>	<p>Bea Cantillon, Antwerp University</p> <p>Marius Busemeyer, University of Konstanz</p> <p>Aaron Reeves, University of Oxford</p> <p><i>Chair:</i> Leire Salazar, DIGCLASS Team - Project Leader</p>
16.00-16.15	Break	
16.15-18.00	<p>Session II: Social Class</p> <p>Are contemporary societies still class-based?</p>	<p>John Roemer, Yale University</p> <p>Kim Weeden, Cornell University</p> <p>Daniel Oesch, University of Lausanne</p> <p><i>Chair:</i> Carlos Gil, DIGCLASS Team</p>

Wednesday, September 22nd

14.00-15.45	<p>Session III: Technology</p> <p>How are digital technologies transforming the social structure?</p>	<p>Aina Gallego, University of Barcelona, IBEI and IPEG</p> <p>Mark Levels, Maastricht University</p> <p>Nicole Wu, University of Toronto</p> <p>Anke Hassel, Hertie School and Jacques Delors Centre</p> <p><i>Chair:</i> Davide Villani, DIGCLASS Team</p>
15.45-16.00	Break	
16.00-17.45	<p>Session IV: Politics</p> <p>Does socioeconomic position still drive political outcomes?</p>	<p>Jonas Pontusson, University of Geneva</p> <p>Jane Gingrich, University of Oxford</p> <p>Piero Stanig, Bocconi University</p> <p><i>Chair:</i> Guillem Vidal, DIGCLASS Team</p>
17.45-17.50	Conclusions	Leire Salazar , DIGCLASS Team - Project Leader
17.55-18.15	Closing Address	<p>Sabine Henzler, Director of the JRC Directorate A - Strategy, Work Programme and Resources, European Commission</p>

INTRODUCTION

The DIGCLASS Project

The *DIGCLASS* project was born out of the increasing concern in Europe about the implications of the digital revolution for social inequalities and democratic processes. The objective is to provide a better understanding of how digital technologies alter the mechanisms that generate inequalities in the distribution of resources and life chances, which is crucial for social policies to respond to the challenges of the digital revolution.

DIGCLASS is hosted in the Centre for Advanced Studies (CAS) of the Joint Research Centre (JRC) at the European Commission. The JRC is the Commission's Directorate-General for science and knowledge production. It informs and supports EU policies with independent research throughout the whole policy cycle. The CAS aims to enhance the JRC's capabilities to better understand and address the complex and long-term scientific and societal challenges that are currently facing the EU. The CAS is a strategic JRC programme under the Scientific Development unit and collaborates closely with other units within the JRC, in this case the unit on Human Capital & Employment.

The Kick-off Workshop

The *kick-off workshop* was a high-level event with more than 100 participants that brought together 13 high-profile international experts on social inequality from different social science disciplines to discuss technological change and inequality, two topics directly under the European Commission's priorities. The objective was to generate synergies with leading experts and institutions globally on these two key areas to feed the policy process relevant for the Commission.

The programme was structured around four overarching questions:

1. Are existing systems of social protection adequate for the digital age?
2. Are contemporary societies still class-based?
3. How are digital technologies transforming the social structure?
4. Does socioeconomic position still drive political outcomes?

Each of the questions were addressed by three to four experts in a round table format, offering a stimulating debate on the implications of technological change for social inequalities and aiming to promote collaboration between the CAS and leading experts and institutions globally, in order to help shape and inform policy making of the Commission.

An interesting political moment to tackle class inequalities

Lázló Andor, former EU Commissioner for Employment, Social Affairs and Inclusion, stressed, in his opening address, the pertinent timing of a project like *DIGCLASS* and the interesting political moment in which it starts. After reviewing relevant EU initiatives around the social dimension of the Union, such as the Porto 2021 Social Summit, Andor discussed how, in his view, digital transformation is one of the several factors potentially posing a threat to the European social model. He claimed that problems might be caused more by changing working conditions than the availability of jobs, and how different groups are prepared to face upcoming challenges depends in part on the use they can make of technology.

Andor noted in particular the coexistence of high levels of inequality and low social mobility in certain contexts, and emphasized the notion of a Social Union, and recent EU actions, such as the Directive of the European Parliament and of the Council on adequate minimum wages in the European Union, that can play a promising role to advance in this direction.

The DIGCLASS Team

The *DIGCLASS* teams is composed of a multidisciplinary team of social scientists:

Leire Salazar – Sociologist, *Lead Scientist*.

Carlos Gil-Hernández – Sociologist, *Project Officer*.

Guillem Vidal – Political Scientist, *Project Officer*.

Davide Villani – Economist, *Project Officer*.

Marta Fana – Economist, *Collaborator*.

Sergio Torrejón – Sociologist, *Collaborator*.

Enrique Fernández-Macías – Sociologist, *Collaborator*.

Matteo Sostero – Economist, *Collaborator*.

Acknowledgements

The CAS team would like to thank the speakers for their collaboration and contributions, as well as the Scientific Development unit for the support provided for the organization of the workshop.

POLICY

Speakers: Bea Cantillonⁱ, Marius Busemeyerⁱⁱ and Aaron Reevesⁱⁱⁱ

Are Existing Systems of Social Protection Adequate for the Digital Age?

In the first session of the *DIGCLASS* kick-off workshop, we discussed where social policy in the European Union stands, whether it is well equipped for the challenges imposed by technological change, and what avenues for improvement it has. In order to address these matters, we had three leading academics in the field who have published extensively on the relationship between the configuration of the welfare state and the extent and nature of socioeconomic inequalities. Professors Bea Cantillon, Marius Busemeyer and Aaron Reeves engaged in debates around three specific questions, namely (1) the current form of the welfare state, (2) the possibility of devising improved or novel policy instruments, and (3) the notion of a European Social Union.

1 ARE WELFARE STATES, IN THEIR CURRENT FORM, OUT OF STEP?

Many experts have hypothesized that rapid technological change will affect the availability of jobs and will displace certain workers from the labour market. These are empirical questions that need to be rigorously tackled, but in this changing and uncertain context, a crucial objective is to identify whether welfare states, in the European Union and elsewhere, are still in good shape and are adequate to face potential new needs in terms of social protection.

What are the main threats that welfare states in the EU might be facing? Are they redistributive enough? Do they show a right balance between predistributive and redistributive policies, i.e. interventions that occur before the unequal distribution of rewards in the labour market takes place, or more conventional compensatory measures?

Some of the more pessimistic projections on what we can expect, suggesting mass unemployment, are unlikely to happen, but substantial transformations of the labour market are more certain. The European **welfare states are still conceived for the standard full-time employee**, while a growing presence of new types of employment, some of them potentially associated with precarious life conditions and new types of labour market risks, is likely to occur. Technological change could also bring new social dislocations in the form of regional inequalities that will need to be considered in future growth strategies. One positive aspect of technological transformation is that it might bring back to the labour market some people, such as those with disabilities or in specific regions outside the high-productivity urban poles, who are currently unable to maintain work in the formal labour market.

Relative to other regions in the world, the welfare states in the EU have solid foundations to deal with potential threats.

Unlike the residual role played by public social protection –vis-à-vis the private market– in other regions in the world, and despite evident differences across countries, the welfare states in the EU are generally speaking well-equipped to face upcoming challenges. They have been successful in the last decades at providing social security for certain groups and developing social investments; however, efforts to pursue poverty alleviation –even for those in the labour market– and to grant protection and decent living standards for the less privileged have been less successful.

“It is important to get the institutions [policy instruments] right before these crises happen.”
– Aaron Reeves

The so-called social trilemma –involving high employment rates, low inequality and poverty, and reasonable financial costs– identified by Iversen and Wren in 1998 has become apparent for European welfare states; countries differ in the single goal that is harder to grant. Currently, all EU welfare states combine relatively high employment rates and high social spending, but they face increased inequality and poverty persistence. The idea of social investment as a means to invest on citizens’ capabilities for the labour market was devised as a way to circumvent this trilemma, but it has proved insufficient to do so.

ⁱ Bea Cantillon is professor of Social Policy at the University of Antwerp.

ⁱⁱ Marius R. Busemeyer is professor of Political Science at the University of Konstanz.

ⁱⁱⁱ Aaron Reeves is associate professor in the Department of Social Policy and Intervention at Oxford University.

Politics matters and faces strenuous trade-offs.

The crucial aspect is how unequally emerging labour market risks are going to be distributed, and what the best strategy to deal with them is. No matter how important expanding a social investment agenda (predistribution) is for the long run, there is a tendency to prime, politically, short-term compensation demands. This tension has been obvious during the COVID-19 crisis.

2 CAN WE DEVISE IMPROVED OR NOVEL POLICY INSTRUMENTS BETTER SUITED FOR THIS CHANGING SCENARIO?

In this changing scenario, it is easy to realise that the need to come up with improved or novel policy instruments has become even more pressing than before for policy makers. In terms of social inclusion and fairness, these instruments would ideally need to fulfil at least five requirements: (1) Grant adequate living standards for all citizens; (2) Have a redistributive nature; (3) Ensure equality of opportunity; (4) Be endorsed across the board, and thus politically viable and sustainable; and (5) Be affordable.

Can we devise such measures? What would they look like?

The welfare states have been remarkably stable and are difficult to reform.

These difficulties to update to upcoming challenges vary across countries and depend on the kinds of coalitions that are shaped, and resistances from current beneficiaries of the status quo. Constituencies potentially supporting innovative policy measures are not the most influential or dominant at the moment in the policy-making space. Moreover, although generally speaking there is wide public support for social investment types of policies, those directly affected by technological change are more prone to require and demand immediate or short-term compensatory measures.

The welfare state has an inherent expansionary logic by which it is common to add policies as new social risks emerge. Apart from considering the amount of (additional) spending that dealing with these social risks entails, states need to find ways to get new tools for (social) policy, but also ways to get **revenue from the new forms of value that are being created in the digital economy.**

Welfare states need to create jobs for those with middle and low levels of formal education. The so-called platform economy could bring in labour market outsiders into the production of value and the political realm. The generation of further employment within the public sector, even though is not always broadly supported politically, has the potential to offer interesting possibilities. For instance, the social service sector (healthcare, personal care, etc.) has increasing demand among citizens in the EU and it has a huge potential for expansion. Besides, many of the jobs related to care are not likely to be automated in the short term.

In the past, unions were the kind of actors that most often lobbied for welfare state improvements.

Innovation with regard to collective forms of organization and mobilization might be needed in the digital economy.

The welfare states need to reinforce social protection to shield citizens from emerging risks. Installing some kind of basic security would seem crucial in this regard. (Universal) basic income, which in the past was regarded as unlikely to be adopted, might be a valid instrument to explore in this changing context and it is already being discussed, piloted and even implemented (in some initial or partial/conditioned configuration) in several contexts. More generally, universality in access to social insurance, and whether any private element is required to grant broad political support and thus sustainability, will be key for the welfare states.

Well-funded municipal governments could open up policy spaces in more innovatively manners than nation states and could serve as “labs” where initiatives could be put to the test. Housing is an example of policy that could be strengthened at the local level. The concentration of high-skilled workers in certain urban sites attracting technology-intensive activity affects housing prices and deepens the urban-rural gap, and pose new social risks that require rethinking (social) housing policy.

Reforms of traditional policy domains are still crucial in order to improve their redistributive nature and grant financial sustainability.

Besides innovating, the current welfare states need to be reformed in several already existing dimensions in order to grant their maintenance and equity along several dimensions. The intergenerational aspect, so crucial in these policy domains, needs to be more generally taken into account. Steps in this direction have already been initiated but need to be intensified.

“When it comes to social investment (education, life-long learning...), the focus has been too much on the middle classes (Matthew effect). Governments should redirect their focus to those children and young citizens most in need.”

– Bea Cantillon

- First, pension reforms, which are crucial in financial terms, have been attempted, sometimes not successfully, in many countries.
- Second, tax reform, including wealth, is already becoming a reality, and the EU is holding a leading role in this enterprise.
- Third, social investment has traditionally benefited more those already in advantaged socioeconomic positions. Efforts to shift these benefits towards the groups who are more in need (and thus can benefit more from the interventions) should be intensified.
- Fourth, expanding social protection towards universalisation is still a challenge to existing European welfare states.

3 IS THERE ANY CHANCE OF A EUROPEAN SOCIAL UNION?

The EU's role with respect to the national welfare states has been reinforced out of necessity.

The European Union is already playing a fundamental role in terms of supporting national security systems. Recent initiatives such as SURE (the temporary Support to mitigate Unemployment Risks in an Emergency) or Next Generation EU are good examples of this, and **a virtuous circle has clearly been initiated**. A momentum has been created for a European Social Union that seems hard to reverse in the near future.

Surely there is further need to harmonize national systems of social policy to **enforce and ensure certain minimum standards**. The EU has the potential to fulfil a triple role, as a guide (through establishing common goals and minimum standards), as a supporter (such as for example with the directive on minimum wages) and as a provider (by transferring direct funds to national systems).

Despite all national existing differences, there are some elements which are genuinely European, when considered from a global perspective. These include: (1) the strong role of social insurance, (2) corporatism, involving social partners in wage-setting, (3) the engagement of several stakeholders, besides governments, in the decision-making process.

Many people identify as EU citizens.

Even though certain states might be reluctant to push towards a European Social Union, particularly since the welfare state has historically been developed at the national level and many nations also share responsibilities with subnational units, there are largely shared values linked to the social dimension that cut across a wide range of European countries.

If a European Social Union comes to exist, it will be very different to what we know from existing national welfare states.

Because of the ways in which capital moves internationally, the EU has a role to play when it comes to wealth taxation, and the extent of intergenerational transmission of (economic) advantage that it is willing to accept. In this same line, there is scope for the EU to intensify its investment in children and children's rights, as initiated for instance by the European Child Guarantee adopted in 2021.

Since some of the social dislocations potentially deriving from technological change are likely to be heterogeneously distributed across countries, the European Union could play a role in dealing with some cross-country redistribution as well.

It is open for debate whether we would need to have a single European pension system, but it probably would be important to move towards European reinsurance system such as a European unemployment scheme. A **focus on (minimum) rights** could become a more fruitful approach for advancing towards a European Social Union than the traditional focus on big redistributive institutions. The social aspect would in addition need to be reweighted, for instance in the European Constitution, vis-à-vis the economic domain.

"If you look at public opinion data, there is a broad support for a European dimension of the welfare state."

– Marius Busemeyer

SOCIAL CLASS

Speakers: John Roemer^{iv}, Kim Weeden^v and Daniel Oesch^{vi}

Are Modern Societies Still Class-Based?

In the second session of the *DIGCLASS* kick-off workshop, we discussed how socio-economic inequalities are generated and rooted in our societies through social classes. We had three world-class experts on social inequality with an interdisciplinary background at the intersection between economics, sociology and political science: Professors John Roemer, Kim Weeden and Daniel Oesch. They addressed three questions on (1) the dimensions that should define a social class, (2) the extent to which modern societies are class-based, and (3) the links between equality of opportunity and class.

1 WHAT ARE SOCIAL CLASSES?

Since the financial crisis in 2007, the debate about social inequality has arisen in public opinion and policy making. Making headlines is the wealthiest 1% departing from everybody else; monopolies in the digital economy and tech tycoons; CEO's exorbitant bonuses; and tax fraud hindering the welfare state. Patrimonial capitalism, driven by finance and wealth inheritance over generations, is here to stay, reminding us of long past feudal times. At the same time, there is widespread concern about the industrial working-class decline, the hollowing-out of the middle classes, and the stagnation of wages.

What do we mean by social class, and what dimensions should define it? Is it just about capital and labour or having more or less money? What are the core classes making up the social ladder in contemporary societies?

Traditionally, social classes were tools to account for big social and political changes, but now we use these tools to discern modern questions about inequalities, life chances and political attitudes. Notably, the definition of a social class depends on its purpose and the policy framework, that is, on the type of outcomes one wants to predict or the social problems one wants to solve. As such, there are different approaches to social class.

Education, skills, occupations, culture, income and wealth are the six key characteristics defining a social class, according to John Roemer. The fundamental ones to define a social class are education, skills and occupations, which determine the latter three: culture, income and wealth.

The relations to the means of production or technology are also critical factors to define social classes: Whether you hire labour, work on your own or sell labour determines class positions. Thus, class positions defining the income hierarchy in society are mainly based on occupations.

Class is therefore a social group with similar positions in the labour market and production units that, consequently, sharing similar life chances and worldviews. Daniel Oesch considers three additional elements that are helpful to define social classes:

I. Employment relations with employers and co-workers that emerge from hiring or selling labour and the socio-technical division of labour. For instance, among employees, skills determine to a certain extent how good their working conditions are in terms of income and stability.

II. Occupations are the primary source of labour income and life chances. Thus, occupations are building stones for class analysis, hierarchical distinctions as a function of labour-power. However, power relations at the workplace are difficult to define and measure. The best indicator is skill or expertise. The more complicated the worker to be replaced, the better the employment relationship will be. This vertical division of social class is not controversial, but Daniel Oesch argues for an additional horizontal axis to classic industrial class schemas: Work logics.

III. Work logics emerge from different types of daily interactions at the workplace. There are four main work logics: independent (self-employed), interpersonal (professionals and social services; female dominant), technical (experts; craft workers; male dominant), and organisational (managers; clerks). Once we cross the vertical and horizontal class dimensions, four large classes emerge:

1. Salaried middle class
2. Big and small employers and self-employed
3. Office clerks
4. Working class in service and industry

^{iv} John Roemer is the Elizabeth S. and A. Varick professor of Political Science and Economics.

^v Kim Weeden is the Jan Rock Zubrow '77 professor of the Social Sciences at Cornell University.

^{vi} Daniel Oesch is associate professor in sociology at the Life Course and Inequality Research Centre (LINES) of the University of Lausanne.

A common view is that social classes are built on occupations with similar tasks and skills. However, Kim Weeden argues that there are as many classes as there are occupations. Some occupations are deeply institutionalised, represented by unions or occupational associations, while others require specialised training or licences, leading to social closure and reproduction. Thus, in Weeden's view, a fine-grained occupational approach to social class would better capture political views and income inequality within large occupational classes.

2 ARE MODERN SOCIETIES CLASS-BASED?

The *death of social class* is an immortal debate. Many commentators have long argued that social class is not a helpful concept anymore when explaining cultural values, political attitudes and increasing income inequality in contemporary societies. The argument follows that globalisation and digital technologies fragmented industrial and service economies into new forms of work, lifestyles, and identities.

Have economic and skill divisions become more relevant in structuring inequalities in life chances than traditional class divisions? Can occupational classes account for megatrends in labour markets, such as automation or skill-biased technological change? Why are social classes not a protagonist in public discourse and academia compared to economic measures?

Inequality trends. Kim Weeden claims that social classes, as measured by occupations, are still helpful to understand current trends in wage and skill premium in the labour market, so that occupational classes capture quite sound trends in income inequality. For instance, some occupations (i.e., doctors, lawyers) protect themselves from the market competition thanks to licences and entry barriers.

Life Chances. To understand inequalities in life chances, occupational classes are more valuable than income. A very timely example is the mortality risk by COVID-19 as a function of occupations or income. Occupations (i.e., essential workers) are a way better predictor than income, as there is a very different risk for different occupations at the same income level. Not in vain, individuals identify themselves with occupations, not income.

"The challenge of class analysis lies on the complex relations between educational, occupational and economic inequalities and their joint impact on life chances, political beliefs or mortality rates."

– Kim Weeden

"It is a paradox that people are talking about income and not about social class", Daniel Oesch underscores. In his view, objective class divisions have become more profound in many Western countries in the last three decades. We see more substantial class inequalities today than thirty years ago, but, at the same time, the subjective consciousness of class divisions and political mobilisation of class has declined. Industrial conflict and strikes have never been lower than today.

Political supply. The working-class represented the uncontested majority of the workforce until the 1980s. Back then, the dominant question was the place of the working class in society. From that point in time, with technological change, globalisation, and neoliberal trends in economic policy, the working class was under tremendous pressure via mass unemployment and stagnating income, suffering a substantial decline as a share of the workforce.

As the size and power of the working class declined, the political parties traditionally linked to the working class started to realise that their hunting ground was smaller and began to attract the attention of the salaried middle class in the 1990s. As a result, political parties do not talk about class anymore or, if they do so, talk about middle-classes. In the meantime, the working class has faded out from public discourse and academic discussion.

"It is the working class that is under great pressure due to technological change and globalisation, not the middle classes. There has never been more people working in managerial and professional jobs in history".

– Daniel Oesch

The working class. According to John Roemer, we do not have the simple class analysis that Marx and Engels envisaged in the industrial revolution. Then, (1) the working class had the power to stop production; (2) the working class was the most oppressed and exploited; (3) and the working class was the primary source of profits for the capitalist class. These three characteristics do no longer coincide in one class.

Today, the more oppressed are only a tiny section of the working class and the so-called precariat —service workers with a minimum wage and those in and out of the labour market—, while the traditional working class is much smaller than in the early 20th Century. Large parts of the working class were organised by unions after the II World War, achieving higher levels of social rights. A new class of IT workers has the power to stop production but not the capacity to do so because they are unorganised.

3 WHY SHOULD POLICY-MAKERS CARE ABOUT SOCIAL CLASS?

As previously discussed, modern societies are class-based, so the occupational structure is still a valid instrument to account for the systematic generation of socio-economic inequalities in life chances. However, what about the transmission of these inequalities between parents and children over generations?

Equality of opportunity is a pillar of contemporary democratic societies, supported by liberals and social democrats alike. However, intergenerational transmission of inequalities is high and persisting, and the current increase in economic inequalities in the context of the COVID-19 pandemic could make things even worse for the next generations. Moreover, the digital age could open new socio-economic gaps in human capital formation and wealth accumulation.

Do occupational classes account for the main transmission channels of (dis)advantages over generations in the digital age? How is social class related to equality of opportunity, a central target of social policy in the EU and liberal democracies? Why should policy-makers care about social class?

The endowments of the family that one is born into, the wealth and education of the parents, largely determine the opportunities that a child will have to succeed. Thus, the intergenerational transmission of success is mainly based on the parental socioeconomic status.

"In a just society, the opportunities of the children are influenced by their circumstances in the weakest way. In Nordic countries circumstances are less consequential for life chances."
– John Roemer

Intergenerational mechanisms of inequality.

According to Kim Weeden, an occupational approach is helpful to understand the mechanisms by which parental education and income are so closely related to children outcomes. Children outcomes are not just the result of parental financial capital (income, wealth) but also of parental human capital (skills) and social capital. Therefore, parental occupations are a good indicator of all of these resources or capitals that explain the intergenerational transmission of (dis)advantages.

Daniel Oesch also considers that studying parental occupations is a good approximation for children's opportunities and constraints. It is within occupations that parents transmit economic, cultural and social resources. For instance, a doctor can teach his/her child how to study more efficiently, a real estate agent can pay for a support teacher, and a lawyer can help his/her child to get a job interview. As such, intergenerational (dis)advantages are mainly transmitted through the occupational social class.

"Asking someone what do their parents do is asking what social class someone is in and therefore what their life chances are."
– Daniel Oesch

Combating unequal opportunity. The traditional recipe to combat inequality of opportunity has been investing in education, but, according to Daniel Oesch, it is not the big game-changer. Inequality of opportunity is grounded in inequality of condition. Therefore, policies that aim at reducing educational inequalities are likely to be offset by richer parents using their greater resources to uphold their children's competitive edge – during and after their education. If we aim for more equality of opportunity, Daniel Oesch contends that governments need to invest more in equality of condition by redistribution policies not just in schooling but also in housing, healthcare, child and family allowances, wages and life chances in general.

Most social policies focus on post-market economic inequalities through taxation and redistribution, but Kim Weeden encourages policy makers to take a step back and try to equalise opportunities by addressing the causes of market inequalities related to unequal opportunities in life chances.

TECHNOLOGY

Speakers: Aina Gallego^{vii}, Mark Levels^{viii},
Nicole Wu^{ix} and Anke Hassel^x

What is the relevance of new technologies in our society?

The rise of new technologies is attracting increasing attention from several disciplines and the public in general. Academics, policy makers and civil society organisations are discussing the role that the spread of new technologies will have on the labour market and, more generally, on our societies. In this context, it is also crucial to discuss the space for governing the changes, challenges, and opportunities our societies will face in the near and distant future.

It is not easy to find a unique interpretation regarding the impact of new technologies. Part of this difficulty has to do with the fact that the process of adoption of new technologies is changing rapidly and, in some fields (e.g., robotics), it is still at an early stage. Another aspect to consider in the discussion is that the latest technological wave involves different technologies, such as automation, robotisation, artificial intelligence and digitalisation, each one with its own characteristics. In the third session of the workshop, we addressed the role of new technologies in our societies with four renowned academics: Aina Gallego, Mark Levels, Nicole Wu and Anke Hassel.

1 HOW WILL DIGITAL TECHNOLOGIES TRANSFORM THE SOCIAL STRUCTURE IN THE NEAR FUTURE?

There is a rising debate concerning the impact that new technologies (digitalisation, robotisation and AI) will have on our societies and, to the particular interest of this session, job relations and the social structure. This concern is far from new, and it has accompanied every wave of innovation since the emergence of capitalism.

To what extent are digitalisation and artificial intelligence different from previous waves of innovation (e.g., mechanisation)? What is likely to be the impact and direction of digital technologies in transforming the social structure?

A useful point of departure is to consider the specificities of the new wave of technical change compared with previous waves of innovation. As with past technological revolutions, it is common to look at new technologies with a mix of hopes and concerns. One of the effects of automation will likely be the increase in productivity, substituting some human tasks with machines. In this respect, new technologies are not that different from previous waves of innovation.

“One difference with previous technological waves is that Artificial Intelligence based technologies can perform non-routine tasks.”

– Mark Levels

However, some specific characteristics are particular to our times. One of the major novelties of the new wave of technical change resides in that new technologies could also extend their range of action, increasing the number of non-routine tasks that could be automated. Digital technologies can also alter the degree of control at the workplace and affect the degree of autonomy of the workers. Moreover, digital technologies permit remote control of the production process, which could have an impact on the organisation and the geography of production.

In the last years, new jobs have emerged. Some of these jobs are characterised by short and precarious working conditions and are often not regulated by collective agreements. Yet, new technologies have also brought about new highly specialised jobs such as AI programmers, which are usually well-rewarded. This process introduces new challenges to our welfare and legal systems.

^{vii} Aina Gallego is associate professor of Political Science at the University of Barcelona.

^{viii} Mark Levels is professor of Health, Education and Work at Maastricht University.

^{ix} Nicole Wu is assistant professor of Political Science at the University of Toronto.

^x Anke Hassel is professor of Public Policy at the Hertie School and Co-Director at the Jacques Delors Centre.

2 WHAT BENEFITS AND DANGERS DO NEW TECHNOLOGIES BRING?

Despite generating concerns, new technologies and the growth of productivity have also generated confidence that technical change would improve employment for the majority of the population. However, this optimism seems to have somehow faded out with the current debate regarding digitalisation and the rise of AI.

Is there a difference compared to the past in the perception of new technologies? If so, why? What are the grounds for being pessimistic or optimistic about these changes?

Routine jobs are more at risk of being replaced, but there are other impacts on the occupational structure. In some countries (e.g., UK), the technical progress led to the polarisation of the occupational structure, reducing manual occupations and expanding non-routine jobs both at the bottom and at the top of the occupational distribution. However, most European countries show a different pattern, often characterised by an occupational upgrading process. Therefore, drawing a univocal relationship between technological development and its impact on the labour market is complicated.

The process of digitalisation has introduced new infrastructures that are essential to perform activities in our daily lives (e.g. the internet). These essential infrastructures are often owned, controlled and managed entirely by private corporations. This represents a major difference compared to previous waves of infrastructure development, such as motorways or railways, in which the State led directly (via ownership) or indirectly (via strict supervision) its development. This aspect should not be overlooked, as the current infrastructure settings could potentially create vulnerabilities in terms of transparency and data control and lead to oligopolistic markets. Moreover, there is a high heterogeneity in the degree of pervasiveness of new technologies across firms which may have uneven effects on the productive structure. Big companies are the leaders of this change and also those that may benefit more from technological gains. This trend could contribute to the rise of a few giant firms at the expense of smaller firms.

There is mixed evidence regarding the effects of new technologies on the level of employment. As it happened with previous technological waves, it is possible that new technologies can displace part of the employment in the short run, but this negative shock may be absorbed in the medium and long run. Jobs will also be affected in qualitative terms, especially regarding the possibility of replacing and improving the more unpleasant ones.

"If we look at the experience of OECD countries, we see that very little has to do with the emergence of new technologies and automation; a lot has to do with fiscal policies and financial crises and, generally speaking, macro-trends."

– Anke Hassel

New technologies will not only destroy jobs, but they will also contribute to their creation, though at the moment it is not easy to quantify in what proportion. At the same time, it should also be considered that other factors not related to technology are more likely to affect the level of employment. Macroeconomic shocks, public policies and financial crises historically have had great impact on occupations and are likely to continue playing an important role in determining future employment trends.

The perception of the risk of being replaced also changes considerably across individuals and countries. Sometimes, those groups that are more at risk of being replaced do not attribute this risk to the emergence of new technologies and tend to focus instead on factors that do not constitute a threat to their jobs.

"In some cases, those who are more in danger of being displaced by automation tend to blame other factors that have little role to play, such as immigration."

– Aina Gallego

3 WHAT IS THE ROLE OF INSTITUTIONS?

Sometimes there is the general perception that technology is ungovernable. However, a big part of the literature shows that public institutions have a large role to play, as the effects of technology can differ considerably across different countries.

What role do institutions (national and international) have in shaping the creation and impact of the new technologies? In other words, is there a univocal outcome that will be the same everywhere or we should expect certain differences across countries?

Although new technologies are pervasive and are likely to have a big impact in our lives, the transition can take several years to complete. This period can allow our societies to get equipped with adequate tools to face the challenges posed by the expansion of new technologies. The educational system will play an important role. (Re)training of the existing labour force will be essential to grant workers the necessary skills to adapt to the future job market. Both firms and states have an important part to play in this context.

The institutional setting varies across countries of the European Union. It is important to establish common norms that can help to tackle disparities across member states.

“What is important is not protecting jobs per se, but protect people that are behind these jobs.”
– Nicole Wu

Sometimes the focus of the discussion is on protecting the existing jobs from the risk of automation. However, welfare measures should not be restricted to protecting the existing structure. Policies should consider the dynamics of transformation of the productive system. It is therefore relevant to protect those categories and individuals that are more at risk of being replaced.

At the same time, we should always consider that the process of transition can take time. For this reason, some of the vulnerable workers (especially middle-aged ones) will have time to access retirement before their jobs disappear, contributing to a smoother transition towards a different occupational structure.

POLITICS

Speakers: Jonas Pontusson^{xi}, Jane Gingrich^{xii} and Piero Stanig^{xiii}

Does Socioeconomic Position Still Drive Political Outcomes?

Previous sessions discussed the role of inequality, technology and social class in determining several aspects of social life. In the last session of the *DIGCLASS* kick-off workshop, we discussed to what extent changing social structures can explain recent political dilemmas, how it affects citizens' preferences and coalitions, and the emergence of new socio-economic divides. In order to address these matters, we had three leading academics in the field. Professors Jonas Pontusson, Jane Gingrich and Piero Stanig engaged in debates around three specific questions, namely (1) the political effects of the changing class structure, (2) the emergence of populism, and (3) the political consequences of technological change.

1 HOW HAS THE TRANSFORMATION OF SOCIAL CLASS CHANGED POLITICS?

While much has been discussed on the issue of class voting and it remains a controversial issue amongst experts, **it is undeniable that the industrial class structure that defined the growth of the welfare state has radically transformed in the past decades.**

How has the decline of the industrial class had an impact on the political configuration of European societies? Have the preferences or interests of voters changed with the transformation of class structures? What new types of dilemmas are parties currently facing in the face of a changing class structure?

It is well established that social class continues to shape attitudes, mobilization, or aspects of policy making. Yet, the nature of this process, from connecting voters and their work lives to politics and policy, has changed dramatically.

The decline of the industrial class structure evokes two fundamental shifts that explain these changes. The first is the expansion of tertiary education, which implies the growth of the middle classes relative to the working class. The second is the shift in types of tasks and occupations, which have different implications for the different classes. Inside the working class, industrial workers have progressively reduced in absolute numbers, getting replaced by service workers in both the public and private sectors. The shrinking of the industrial class relative to the service class implies a growingly fragmented and less unionized working class. This presents difficulties for political parties, especially on the left, as they need to mobilize a far less cohesive social group.

The expansion of education and the changing nature of jobs have transformed social classes and their political attachment.

Similar compositional changes have also occurred within the highly educated groups. Whereas before the highly educated tended to be richer and vote mostly for the political right, there has been a progressive divergence of this logic with the expansion of education. As shown by H. Kriesi, T. Piketty, P. Rehm and others, we are witnessing an increasing bulk of the highly educated that now opt for forces of the left (the so-called sociocultural professionals). Part of this effect can be understood by the upward social mobility facilitated by the expansion of education: Sectors of the working class have had access to education while retaining their working-class socialization, generating a greater heterogeneity in the material and other types of interests within the highly educated.

"Growingly fragmented, more complex societies, forces us to rethink social class."

– Jane Gingrich

The growing heterogeneity of class structures thus forces us to rethink social class, as well as the underlying structure of preferences. Although there is substantial variation, there are some patterns that can be laid out in terms of economic and cultural preferences. For instance, the highly educated tend to be more culturally liberal and favour redistribution in terms of investment (pre-distribution), while those with lower formal levels of education tend to be more culturally conservative and favour more income redistribution (consumption).

^{xi} Jonas Pontusson is professor of Comparative Politics at the University of Geneva.

^{xii} Jane Gingrich is professor of Political Economy at the University of Oxford and a Tutorial Fellow at Magdalen College.

^{xiii} Piero Stanig is associate professor of Political Science in the Department of Social and Political Sciences at Bocconi University.

This generates new types of dilemmas for political parties that aim to forge cross-class coalitions. For instance, social-democratic parties face new difficulties in bridging the appeal to the old industrial working class, the new service class, and the socio-cultural professionals.

2 CAN THESE CHANGES EXPLAIN THE EMERGENCE OF POPULISM?

The transformation of the industrial class structure has had important political implications in terms of policy preferences, the extent to which class predicts the choice of various policy packages, and the role of class in political participation. One of the most discussed of these implications is the so-called "cultural backlash", argued to have given rise to nationalist, populist and authoritarian-leaning leaders around the globe in the last decade. Several cultural, social and economic explanations have been advanced to explain this phenomenon.

What explains the rise of nationalist, populist and authoritarian-leaning leaders around the globe in the last decade? To what extent is growing inequality and the emergence of new types of socio-economic or identitarian divides to be blamed for this?

There has been a lot of sterile discussion about whether the success of populist parties is rooted in cultural or economic explanations, when in fact it has been both and they are effectively interlinked. The frustrations that globalization has generated for the social groups most negatively affected by this process, in absence of adequate compensation, have become breeding ground for populist parties. New grievances have emerged as a result, and these have been channelled in several ways and through different discourses, from welfare chauvinism to nativism.

"Globalization has generated winners and losers, and populist parties have been aptly able to capitalize the frustrations of the losers, who have not necessarily been compensated adequately."

– Piero Stanig

There are stark differences across regions and countries associated to the so-called "cultural-backlash", but also some similarities. At the micro level we know that the populist vote is linked to manual occupations, mostly

composed of men. It is also not randomly distributed across different types of local labour markets, depending on how hard they have been hit by globalization. It has been shown, for instance, that those more exposed to Chinese exports are more likely to vote for such parties. At the macro level, we also know that **vote for populist parties is related to the trajectory of economic developments such as financial crisis**. Therefore, there seems to be some indication that there is an economic rationale to this backlash.

However, it is not very straightforward how this all lines up, as there are several differences across countries and regions, also with regards to the structure of political conflict. For instance, in the U.S., the success of Trump was closely related to the racial question, though voters have not necessarily become more racist over time. It is rather the shift of the political dimensions, that is, certain issues that have become more salient, rather than the people themselves, that explains this particular case. In the case of Brexit, support was stronger in struggling economic areas, but at the same time it was the older population who was better off in these areas who was more likely to support it. In Northern Europe, where the social security provided by welfare states is extensive, right-wing populist parties remain quite strong, while in Southern Europe, where the Great Recession of 2008 hit particularly hard, we have also seen the emergence of left populist parties.

There are plenty of puzzles that remain unresolved, but in most cases, we find an interaction between an economic and a cultural or "status" dimension, where national identity plays a key role alongside material grievances and aspirations. Moreover, there is also an important political dimension that is often overlooked in the public debate. **Not feeling well-represented by current politicians or political parties, trust in political institutions, or the declining participation of trade unions, have also been found to be significant factors in the vote to populist right parties.**

3 WHAT ARE THE POLITICAL CONSEQUENCES OF TECHNOLOGICAL CHANGE?

In the technology session we discussed the dramatic effects of technological change. Mark Levels mentioned that “the fourth industrial revolution might mimic the first one” –which makes one wonder if we will witness similar types of political conflict. It was also mentioned by Nicole Wu that, ultimately, change is extensive in the long run, but can be very destructive in the short run.

How will technological change translate into the political arena? What types of conflicts are likely to emerge as a result of the distribution of gains and losses from technological change (i.e., winners and losers of technological change)? To what extent can technological change be used to create a new political and social consensus to renew the social contract?

It is important not to think of technology deterministically, but to understand that politics is what ultimately shapes technology. As such, the political effects of technology are not homogenous, but depend on the regulatory environment and on the structure of financial markets. For instance, if we focus on the technology sector in the U.S., we observe that 1) gains of technology are extremely geographically concentrated; 2) that there are a few dominant companies accruing most of the market power which rely on intangible assets (brands, management approaches, etc.); and 3) that this is linked to the regulatory governance of the sector, such as the nature of patent protections or anti-trust regulations, which have important spill-over effects in Europe.

*“We ought not to think of technology deterministically:
Technology is plastic.”*

– Jonas Pontusson

In the absence of an inclusive regulatory framework that aims at leaving nobody behind, however, we can expect accentuated differences between winners and losers from technological change. **One of the main perils is that the bargaining power of organized labour declines, thus shifting the balance of power in favour of employers.** This is because, on the one hand, certain types of occupations are transformed, and others become more replaceable, weakening organized labour. With digitalization, for instance, we see a growing group of workers with non-standard working conditions that will require bold and novel types of social protection. On the

other hand, the fact that power becomes concentrated in a few dominant companies favours the use of monopsonist practices that can hold down wages in these labour markets, further weakening the bargaining power of labour.

It is certain that technological transformations will leave a significant social footprint, but it remains unclear how it will do so. As societies will gain from automating unpleasant tasks and productivity gains, the regulatory framework and speed of the adjustment will be crucial. The intensity of the political backlash will depend on how those that become worse off by these transformations are socially compensated. Ultimately, the question is how will our societies look like after the adjustment of automation takes place –will it be a society we want to live in?

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: https://europa.eu/european-union/contact_en

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: https://europa.eu/european-union/contact_en

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications from EU Bookshop at: <https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

The European Commission's science and knowledge service

Joint Research Centre

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



EU Science Hub

ec.europa.eu/jrc



@EU_ScienceHub



EU Science Hub - Joint Research Centre



EU Science, Research and Innovation



EU Science Hub



Publications Office
of the European Union

doi: 10.2760/034630

ISBN 978-92-76-47158-5