UNIVERSITY OF WUPPERTAL
BERGISCHE UNIVERSITÄT WUPPERTAL

EUROPÄISCHE WIRTSCHAFT UND
INTERNATIONALE MAKROÖKONOMIK

25 Years 2020 EIIW

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New Inequality and Late Modernity Analysis: Economic Perspectives and Sociological Misperceptions

EIIW Diskussionsbeitrag 303
EIIW Discussion Paper 303

Europäische Wirtschaft und Internationale Wirtschaftsbeziehungen
European Economy and International Economic Relations

ISSN 1430-5445
EIIW Discussion Papers are registered with RePEc-Econ Papers and in ECONIS

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New Inequality and Late Modernity Analysis:
Economic Perspectives and Sociological Misperceptions

July 27th 2021

Herausgeber/Editor: Prof. Dr. Paul J.J. Welfens, Jean Monnet Chair in European Economic Integration

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JEL classification: D63, F00, O1, O33
Key words: Inequality, global economy, technology, singularity, critical rationalism, evidence, paternoster effect.

Summary:

Since the 1990s, distributional issues have once again become a focus of analysis in OECD countries and elsewhere. It has, however, become less common in the social sciences to engage in vigorous scientific debate about important phenomena and theses or to engage critically with different scientific approaches. This has led to the existence of different analytical findings in the social sciences - for example, in the fields of Economics and Sociology – that at times completely contradict each other; interestingly, this also applies to questions of inequality analysis. Based on a knowledge of key statistics and regression or simulation analyses, as well as thanks to theorems of foreign trade theory, a differentiated picture of inequality developments in the context of globalization has been formed in Economics. However, some experts in the field of Sociology in Germany, such as Andreas Reckwitz in his book "The Society of Singularities", offer contributions to the debate which lack any recognizable theoretical foundation or empirical evidence on such important topics as economic-cultural rise and decline or inequality dynamics. In turn, certain influential actors in the political sphere have been demonstrably influenced by unscientific passages in Reckwitz's book, so that his very questionable claims regarding inequality dynamics - under the heading of a "paternoster effect" could have a destabilizing effect in national politics in Germany, supranational EU politics and even beyond. Policies that do not rely on theory- and evidence-based statements in important fields, but rather on untested assumptions, contribute to the "risk society": endangering the stability and economic prosperity of all strata. It seems desirable to work on the basis of theory and evidence-based foundations in science and to pay careful attention to empirical results in the scientific and political communities; in doing so, also to take critical note of the current Reckwitz debate, which has also been somewhat controversial within the field of Sociology. Moreover, the approach of using lifetime effective income for the purposes of international comparison is both important and innovative.

Zusammenfassung:

Verteilungsfragen sind seit den 1990er Jahren u.a. in den OECD-Ländern wieder stärker in den Fokus der Analyse gerückt. Es ist in den Sozialwissenschaften wenig üblich geworden, sich wissenschaftlich über wichtige Phänomene und Thesen zu streiten bzw. sich mit verschiedenen wissenschaftlichen Ansätzen kritisch auseinanderzusetzen. Das hat dazu geführt, dass in den Sozialwissenschaften – etwa im Blick auf Ökonomie und Soziologie – unterschiedliche Analysebefunde bestehen, die sich zum Teil vollkommen widersprechen; interessanterweise auch bei Fragen der Ungleichheitsanalyse. Basierend auf der Kenntnis wichtiger Statistiken und Regressions- bzw. Simulationsanalysen sowie dank von Theoremen der Außenwirtschaftstheorie hat man in der Ökonomie ein differenziertes Bild von Ungleichheits-Entwicklungen im Kontext der Globalisierung gebildet. Teile der Soziologie in Deutschland arbeiten, wie Andreas Reckwitz im Buch Die Gesellschaft der Singularitäten, ohne erkennbare theoretische Fundierung bzw. empirische Evidenz bei so wichtigen Themen wie ökonomisch-kultureller Aufstieg und Abstieg bzw. Ungleichheitsdynamik. Manch einflussreicher Akteur in der Politik lässt sich wiederum nachweislich von unwissenschaftlichen Passagen bei Reckwitz in den Bann ziehen, so dass dessen sehr fragwürdige Ungleichheitsdynamik-Behauptung unter der Überschrift „Paternostereffekt“ destabilisierend in Bundes- und EU-Politik sowie darüber hinaus wirken könnte. Politik, die in wichtigen Feldern nicht auf theorie- und evidenzbasierte Aussagen baut, sondern auf ungeprüfte Vermutungen, trägt zur „Risikogesellschaft“ bei: gefährdet Stabilität und ökonomischen Wohlstand aller Schichten. Es erscheint als wünschenswert, theorie- und faktenbasiert in der Wissenschaft zu arbeiten und empirische Ergebnisse dort und in der Politik sorgfältig zu beachten; dabei auch die Reckwitz-Debatte, die auch in der Soziologie kontrovers geführt wird, kritisch zur Kenntnis zu nehmen. Im Übrigen ist der Ansatz, das effektive Lebenszeiteinkommen international zu vergleichen, wichtig und innovativ.

Acknowledgements: Preliminary; for technical support and the generation of statistics, I thank in particular Alina Wilke, Juliane Selzer, Tobias Zander, Julia Bahlmann, Marianne Mueller and David Hanrahan (EIIW/University of Wuppertal). The author is solely responsible for the analysis.

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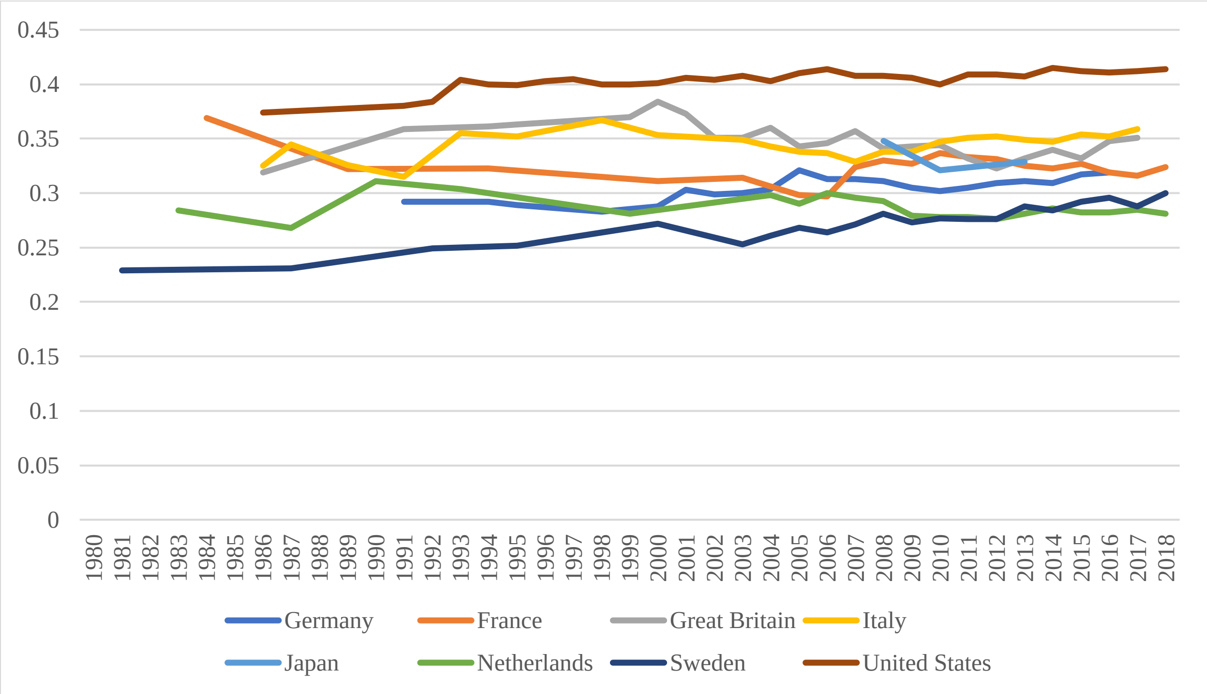
1. Introduction

The global economy has changed in many ways since the 1990s, with the disintegration of the socialist grouping of countries around the Soviet Union and its sphere of influence in 1990/91 being just as remarkable as the long-term economic rise of China and the worldwide globalization of economic relations via trade, direct investment, portfolio capital movements, migration and, above all, the expansion of the Internet and Information and Communication Technologies (ICTs). Within the EU – particularly after the EU's eastward expansion - but also in Asia, much more extensive and complex production networks have become possible in the context of digitalization than before, especially in the ICT sector. A further increase of the global population is expected by around 2050, by which time – at the latest - many OECD countries want to achieve climate neutrality; in 2020, China has announced that they intend to reach this goal by 2060.

Among the trends visible since the 1980s, especially in Western industrialized countries, is a substantial increase in economic inequality: as will become apparent in the following analysis, a development which is much more pronounced in the United States than in Europe. Issues of inequality dynamics have attracted increasing interest amongst social scientists since the 1990s, and in 2018 the United Nations hosted an Expert Group Workshop that addressed national and international inequality perspectives (to which I was invited and at which I presented an original paper). Distributional aspects, along with allocation or production issues, are among the weighty economic topics in this area, and of particular relevance is the growing income inequality in the United States, which has arguably contributed significantly to political polarization over many years and ultimately to the election of populist President Donald Trump in 2016. Such polarization in the US, and an overtly populist president in the White House, can be regarded as somewhat exceptional against the backdrop of nearly 250 years of US history. Whether the election of President Biden and his economic policies for the US can help reset the political clock back to “normal” for the years to come remains to be seen. In Western Europe, too, political processes have changed with the visible decline of social democratic parties since the 1990s and the rise of “green parties” with a focus on environmental issues and climate policy. On both sides of the Atlantic, questions of economic inequality remain high on the agenda.

Analysis in the social sciences can be differentiated between the fields of Economics, Sociology, Political Science and other fields, each of which examines the world around us through the prism of their own research questions and, in part, also with subject-specific methodologies and different theoretical approaches. However, there exists the common core of a basic methodology, at least from the point of view of critical rationalism - namely, that one tries to classify assumed phenomena and relationships with the help of theory and statistical or empirical data analysis. Ultimately, hypotheses are tentatively confirmed or rejected through an analysis of available data. This is also true in the area of inequality and stratification analysis, on which many social scientists have focused in the context of globalization in particular. In the area of income inequality analysis, economists usually focus on international per capita income comparisons on the one hand, or on a broader comparison, for example, using the concept of the Human Development Index (per capita income, educational attainment, life expectancy included as pillars) of the UN (UNDP, 2020); as well as on economic inequality within countries, where, for example, the consideration of wage and profit ratios is a common starting point in the field of functional income distribution - which focuses on the income shares of different factors of production (here, labor and capital). Of course, one can also look at the so-called Gini coefficients, which show rising income inequality for many countries over time since the 1980s (Fig. 1).

Fig. 1: Gini Coefficients (0 = No inequality, 1= Maximum inequality) in the United States, Germany, France, the United Kingdom, Italy, Japan, the Netherlands and Sweden, 1980-2018.



Source: World Bank, World Development Indicators - Gini Index; own presentation based on a conversion from the index (percentages) to coefficients (0-1).

Income shares before and after taxation can differ significantly, with the effective taxation of corporate income from multinational corporations proving difficult in OECD countries and elsewhere for decades. In the end, multilateral negotiations under the umbrella of the OECD, which lasted several years, produced an agreement in July 2021, according to which a minimum tax rate of 15% is envisaged and, moreover, in the case of large multinational companies, an international distribution of tax revenue is also provided for under certain conditions depending on group value-added shares on a country-by-county basis. As for the level of capital taxation, here the empirical evidence points to an important role of membership in international organizations on the part of the host country for cumulative direct investment (BAIER, 2019); such membership apparently leads to reduced direct investment inflows in the context of the inflow country's membership of an international organization such as the Bank for International Settlements (BIS) - perhaps because BIS membership causes increased portfolio investment flows or inflows, and the pressure on the government of inflow countries to seek direct investment inflows through favorable conditions for foreign investors decreases. Countries that are members of the European Bank for Reconstruction and Development (EBRD) - these are

29 post-socialist countries that became members of this European multilateral development bank as well as certain other industrialized countries - may experience reduced direct investment inflows because, at least for the transition countries, EBRD membership is indicative of a kind of Red Cross station for these countries for a decade or two - only in the longer term are EBRD reform impulses likely to lead to sustained institutional reforms in EBRD member countries, which should increase direct investment inflows.

In the following, we largely disregard tax aspects of corporate profits, even though the latter naturally play a role for high-income earners in very many countries. As for the strong increase in income of the top 1% of income earners, in Switzerland, for example, income from abroad plays a particularly strong role (FÖLLMI/MARTINEZ, 2017) - for Switzerland, this thus points to an increased importance of profits from subsidiaries abroad or, for instance, interest income from international portfolio investments. Provided that international tax competition among OECD countries (and other countries) is limited in the future, this may well lead to a global real income gain; assuming that the global allocation of direct investment will, in the future, be increasingly shaped by differences in the physical marginal products of capital than by the complex direct investment decisions of multinational companies, which international tax minimization models have tended to focus on thus far.

Regional income inequalities are also addressed, for instance, in the context of US or EU analyses, with the European Commission having a special focus on assisting regions with less than 75% of the EU average income via structural and regional funds (for an effectiveness analysis of EU funds, see BECKER ET AL, 2010). In the EU, national regional transfers and intra-EU migration flows are likely to play a role in regional income disparities in addition to EU transfers.

Finally, one can also develop income inequality considerations on the basis of particular groups or the division of society into strata or classes - as in Sociology. Here, RECKWITZ (2017) has presented an interesting to read study, "The Society of Singularities", claiming the emergence of a new middle class and the descent of the lower class in the context of, among others, digital modernization developments and changes in "respective economic capital" and "cultural capital": An influential analysis, but one that is not supported by facts (not even in RECKWITZ, 2019) and which has led to significant criticism from colleagues within the field of Sociology, as can be read in the first two issues of *Leviathan* in 2021. The following analysis addresses the cited and other inequality phenomena and presents some important statistical findings, as well as discussing the influence of the economic and sociological inequality debate on policy. In view of the growing importance of digital globalization, it should be noted here that the Internet can temporarily create positions for suppliers which are characterized by significant market power in some fields - think, for example, of Google in the area of search engine services - but technological innovations by competitors, and sometimes also by start-ups, can have a competition-intensifying effect, and potential competition can limit the market power even of currently large digital providers (HAUCAP/HEIMESHOFF, 2014). These digital economy aspects will be discussed only marginally in the remainder of this paper.

One of the interesting recent empirical findings in the literature (CIANI, 2021) is that rising income inequality changes the import structure in such a way that more goods are supplied from exporting countries in the middle - rather than high - price and quality segments; reduced income inequality acts as a positive for high quality exports from OECD countries, for example.

However, the overlap of declining international income inequality (i.e., between countries) and increased income inequality within countries has not been mapped in the aforementioned study.

Beyond the available statistical findings on inequality, it is also made clear here that, from an economic perspective, it is possible to use some theoretically-derived (well-known) theorems to meaningfully assess the relative income and inequality effects of recent economic and inequality-related developments - and to justify the need for policy reform in this way - even though statistical data on current inequality and on changes in distributional positions are not yet available. Theoretical analysis is therefore a very important starting point for timely policy modernization.

The following analysis is directed at questions

- regarding economic and "cultural" inequality dynamics in the global economy;
- the analysis places a critical (from an economic perspective) focus on, amongst other things, the partly strange remarks concerning the "paternoster effect" by Andreas Reckwitz in his book The Society of Singularities; this book is considered here - with obvious simplification - as an influential case study of a theory-poor and evidence-less contribution in the field of Sociology in Germany.

Of course, this is not to deny that there are also very many high-quality analyses, including theoretical and empirical ones, in the Sociology community in Germany. The views developed here are initially only my own as an economist, but they are likely to represent those of many social scientists who reject, for example, the German Historical School and other evidence-poor approaches; and follow Critical Rationalism.

In the following analysis, the following questions are also considered:

- How economic inequality has developed in selected regions of the world and with regard to selected occupational groups and how it is expected to develop further in the medium term. On the one hand, statistics from the research group led by Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez and Gabriel Zucman (namely, the World Inequality Lab/World Inequality Database) are used, and on the other hand, reference is made to my own research (and that of the EIIW);
- the extent to which well-known theorems of foreign trade theory can be usefully applied to economic inequality analysis; these theorems are theoretically derived results from model analysis, which have also proven to be quite robust, i.e. accurate, in later empirical studies.
- In addition, reference can be made to questions contained in the World Values Survey, which can provide indications of economic-cultural aspects of inequality or the respective national (representative) attitude toward inequality issues. WVS data are not used in the remainder of this paper - except for an overview of selected relevant questions in Appendix 1; however, results from the socioeconomic panel in Germany are included.

- It cannot be ruled out that for people in the 21st century - each with their own "digital identity" in the sense of TIROLE (2021), who points to a conceivable new "representative" utility function with per capita consumption and digital reputation as arguments - the hitherto usual simple maximization of per capita consumption should no longer be the yardstick of welfare, but then the reference to a Tirole-utility function with the two arguments mentioned; in this context, the argument digital identity could be seen as part of "cultural digital utility".

In the following, it will be illustrated - on the basis of statistics and with reference to recent empirical studies - that international per capita income differences (measured in terms of purchasing power) have declined since around 1980, while at the same time there are mechanisms of globalization that are giving rise to greater income inequality in many countries - also within the workforce. These new national economic inequalities are not inevitable, however, as can be shown by looking at economic policy experiences or policy options. The Reckwitz theses on the new middle class and the decline of the underclass are rejected here insofar as Reckwitz does not present any evidence for his hypotheses.

It is emphasized here in the overall analysis that it is a new type of risk for Germany, Europe and the world economy if politicians would rely on the inequality hypotheses of individual scientists which are not supported by observations. The Reckwitz publication, which cannot be classified as scientific in important areas, paradoxically become an element of the risk society itself from an economic point of view: For politicians who build important political convictions on the basis of false assessments of reality, which in turn become the basis of reform policies, cannot then meaningfully reduce indirectly perceived problems at all, but possibly exacerbate the overall socio-economic problems.

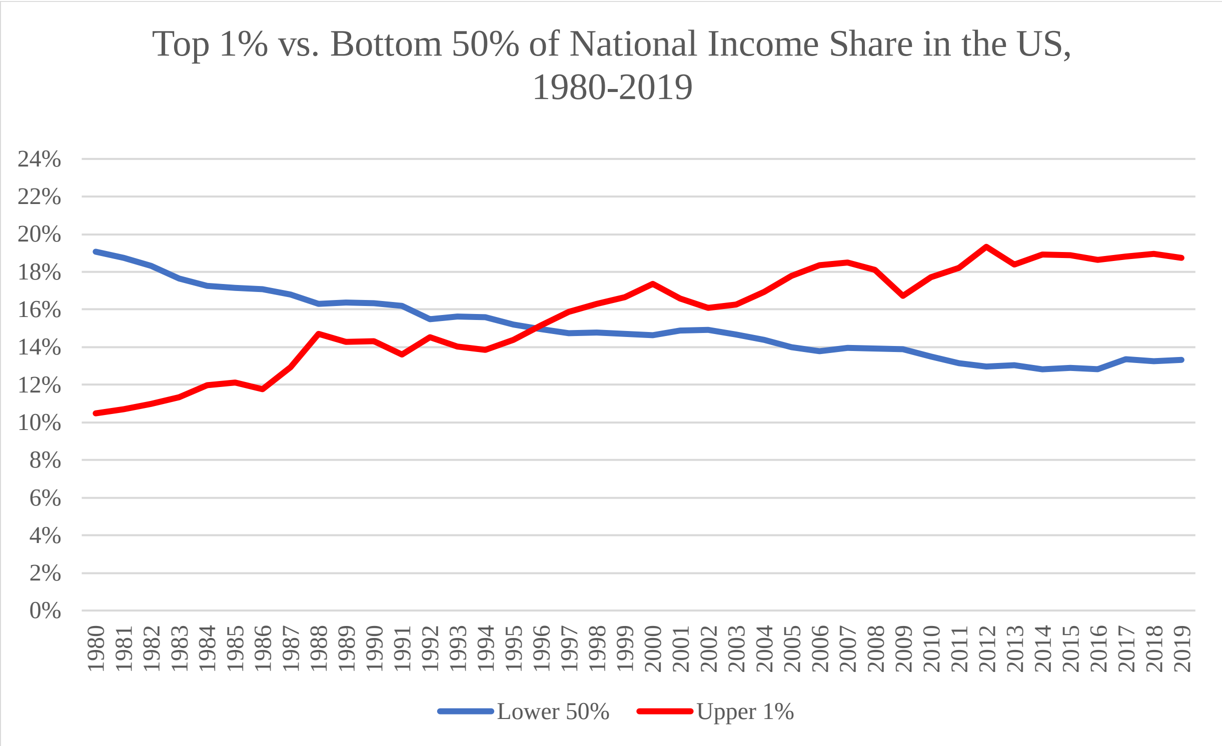
However, people from the lower strata are hardly able to defend themselves against such misguided policies, since they are usually not very well organized and, following the criteria of OFFE (1972; 1973), not very capable of conflict. If, therefore, a critical analysis of imbalances is presented here, it also has a political relevance and it can be a reasonable concern of economic analysis to protect the strata with lower per capita incomes from a serious deterioration of their living situation through misguided policies.

Moreover, the overall analysis takes a critical look at some of Reckwitz's theses; the Reckwitz analyses are rejected as unscientific. The structure of the rest of the analysis is such that it first looks at income inequality in the US and Western Europe over circa three decades (1980-2018). Section 3 takes a comparative look at long-term international economic and educational developments 1870-2015, before the subsequent Section 4 points out inequality effects of an economic nature arising from various globalization or technology effects and in the course of modern globalization dynamics, which can also be complemented by statistics from the KOF Globalisation Index with indicators in the field of politics and culture (a table with selected findings from the KOF Globalisation Index for 2020 in the fields of the economy, politics and culture/society, respectively, can be found in Appendix 2). Section 5 shows that certain income inequality developments in the world economy can be inferred by reference to recent developments in certain areas (e.g., climate change policy as a new field of policy focus in many countries of the world; or Corona shock-related effects in many countries) by making sense of well-known theorems of foreign trade theory. Section 6 asks to what extent the Reckwitz inequality analysis can be classified as scientific, while the last section, Section 7, points to the problems that arise for a country's citizenry when politicians take untested - ultimately often false – claims from certain actors in the academic community as the basis for their policies.

2. Selected Key Points on Economic Inequality Developments

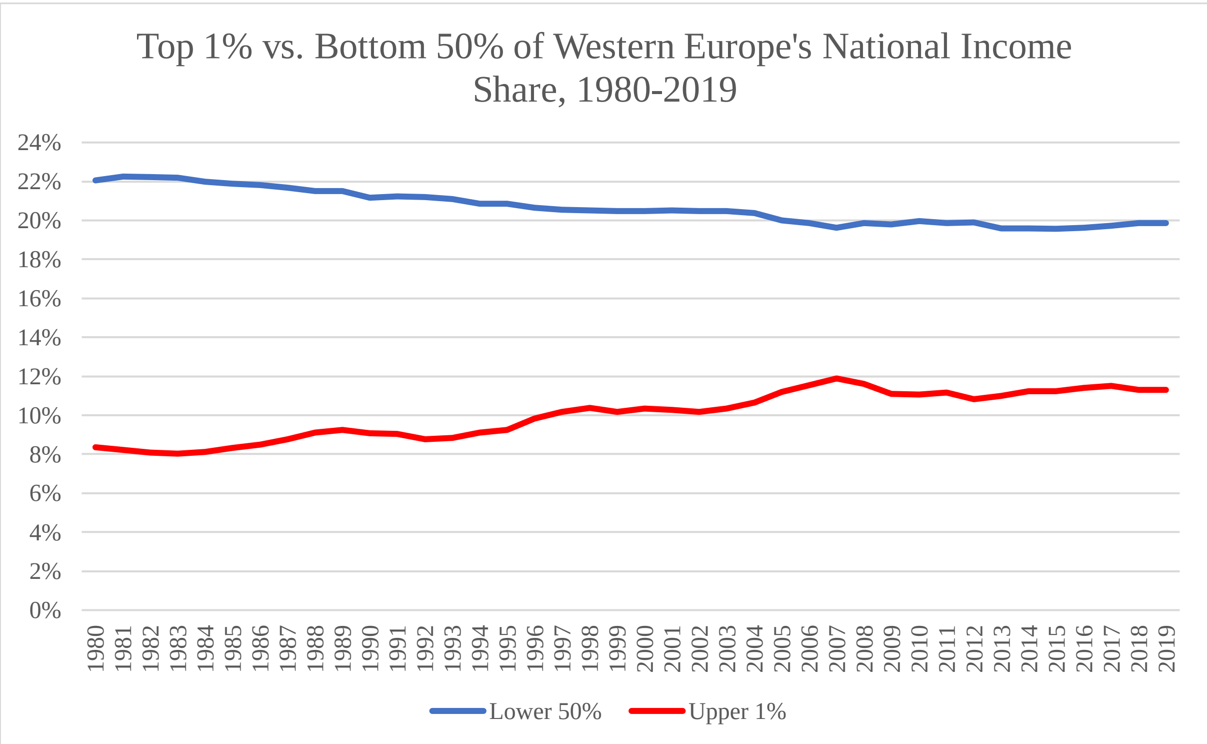
Since the 1980s, income disparities in the US, UK and EU27 have grown. Yet absolute per capita incomes - by purchasing power - have hardly fallen for any group between 1980 and 2019 in the United States, for example. However, the share of the bottom half of income earners in the United States fell from 19 percent to about 13 percent in market incomes from 1980 to 2019 (ALVAREDO ET AL., 2021; World Inequality Database). President Trump's election in 2016 was certainly influenced in part by this trend (WELFENS, 2019; 2020). However, in public speeches during his 2016 presidential campaign, the populist Trump not only invoked the fate of the poor, or the "forgotten men and women", but immediately added that government income redistribution or social policy was not really useful: After all, such policies only benefit the many poor immigrants, which simply does not correspond to the facts (EICHENGREEN, 2018). The income share of the top 1% of income earners in the US (here we are talking about market income shares) almost doubled between 1980 and 2012, from about 10% to almost 20% (see Figure 2). Incidentally, Europe is different from the US in this regard; it saw the income share of the bottom half of income earners fall from 22% to 20% over the same 1980-2018 period, a much less dramatic development compared to the US. The share of the top 1% of income earners increased from 8 to 10% in Western Europe (see Fig. 3). To the extent that the OECD-led negotiations to introduce an international minimum capital tax are successfully implemented by 2030, it is reasonable to expect that the after-tax income shares of the top 1% income earners could fall.

Fig. 2: Income Inequality in the United States, 1980-2019



Source: Own presentation of data from World Inequality Database https://wid.world(accessed 28.06.21). Note: The share of national income refers to income before taxes.

Fig. 3: Income Inequality in Western Europe, 1980-2019



Source: Own presentation of data from World Inequality Database https://wid.world (accessed 28.06.21). Note: The share of national income refers to income before taxes.

Among the aspects of inequality in Germany from the German Socio-economic Panel (SOEP) that are interesting in terms of real disposable income is the finding that the lowest decile (10%) of income earners experienced an absolute decline in real income over the period 1991-2017, while the other deciles showed an increase in income over time; notable findings from surveys in Germany and other countries show that there is a broad misperception with regard to the long-term reduction of global poverty in international country comparisons (NIEHUES/STOCKHAUSEN, 2021): Up to almost 90% of respondents wrongly assume an increasing poverty problem globally.

This could actually raise an interesting research question as to why such misperceptions have repeatedly been found in surveys for over years (with media coverage presumably having an important influence on the perception of inequality). Other survey results from the German Institute for Economic Research (DIW Berlin) on income inequality can also be considered remarkable - for example, hardly anyone in Germany considers themselves to be amongst the 20% richest income group (though, the top 20% of income earners are underrepresented in the Socio-Economic Panel). Research findings of the DIW (GRABKA/GOEBEL, 2020), which are summarized here against the backdrop of the strong economic development from 2000 to 2019, are important with a focus on Germany:

- Real household incomes have increased by 12% since 2000, with the lowest income decile of the distribution also benefiting since 2015.
- In terms of household income, inequality has remained about the same for over a decade.
- In the population without an immigrant background, the low-income rate has remained roughly stable - in certain age groups it has decreased.
- The low-income rate among people with an immediate migration background has risen to around 30%, pointing to the need for policymakers to focus on better language learning and labor market integration with additional measures.
- The Corona economic shocks did not increase income inequality in Germany; short-time allowances and economic policy support measures were effective in limiting negative income effects.
- With a view to social cohesion, one might normatively add that Germany, as a country of immigrants, should indeed be concerned about strongly integrating immigrant groups in the medium term; especially since within two decades the number of immigrants in Germany has reached an order of magnitude of about five million, which in itself corresponds to a population increase of a good 6% over that period.

In the medium term, greater income differentiation could result from the expansion of the service sector, in which knowledge-intensive jobs - often with a digital profile - can be found as well as many jobs for unskilled workers. Since the service sector is growing in the long term with regard to the corresponding share of value-added and employees and part of the service sector is not very capital-intensive, low-skill-intensive service jobs generally also have low real wage rates due to low labor productivity. Poverty processes can therefore certainly begin with low-paying jobs in the service sector - but of course they can also be associated with long-term unemployment. Figures from the Socio-Economic Panel in Germany also show high poverty shares for single parents, whereby the trend toward weakening the institution of marriage, for example, has apparently become one of the drivers of poverty expansion. Numerous aspects of inequality have been studied internationally including by international organizations (e.g., OECD, 2018; WELFENS/UDALOV, 2018). As far as immigration is concerned, a wave of immigration can initially lead to an increase in poverty rates, as only after learning the language of the host country do many skilled people then find jobs as skilled workers.

Inequality dynamics in industrialized countries have led to numerous analyses in the social sciences, with Andreas RECKWITZ's (2017) book "The Society of Singularities" (English version: 2020) in sociology in Germany asserting the emergence of a new middle class and linking income distribution aspects with cultural aspects as well as self-stylized perspectives of groups. In his class analysis, Reckwitz combines economic and cultural - usually education-related - capital (following the sociologist Bordieu, who additionally considered social capital) and argues that the old middle class is largely disintegrating into a new well-educated middle class with high incomes and good access to cultural events on the one hand, and a disconnected poverty class on the other (RECKWITZ, 2019). The author does not outline a distribution function derived from statistical analyses, objective data or survey results, nor, for instance, a modified, stratified "Bolte onion" and only superficially picks up Schelsky's word of the levelled middle-class society. According to Reckwitz, this has disintegrated in the early 21st century, with the new middle class emphasizing singularization in the sense of creating unique status characteristics as well as "valorized" activities in addition to a good income position - many things and activities are not supposed to be a means to an end, but valuable per se (RECKWITZ, 2019, p. 93).

Reckwitz claims that society has developed in such a way that the socio-economic rise of a new middle class population group (middle class is also defined with a focus on cultural position) has been accompanied by a decline of another group, creating an enormous polarization or a massive decline of the underclass: This is what the author calls the "paternoster principle" (RECKWITZ, 2017). Reckwitz does not provide any statistical findings to support such a development as an empirical phenomenon. Reckwitz also does not take the trouble to deal with individual OECD countries or groups of countries in a differentiated or exemplary manner (rudimentary exceptions: Germany or the US). But Reckwitz's pessimism with the false assertion of the economic zero-sum game radiates into many countries of the world, where German philosophers or sociologists from Kant to Höffe or from Karl Marx to Max Weber are highly regarded.

However, the losers of industrial modernization and those who may not initially be able to come up with certain competencies in the accelerated digitalization of the service sector have opportunities for further training in many EU countries and Switzerland, including through government funding; in the US and the UK, this does not tend to apply with government spending close to zero. Government spending on continuing education in continental European countries is around 0.25% of Gross Domestic Product (GDP); in Denmark, it even reached 0.6% in 2018.

Tab. 1: Continuing Education Expenditure in Selected OECD Countries (as a percentage of GDP, sorted by expenditure in 2018).

	1995	2000	2005	2010	2015	2018
Denmark	1.21	1.10	0.72	0.99	0.88	0.58
Italy	0.24	0.46	0.4	0.29	0.38	0.35
France	0.63	0.52	0.4	0.4	0.32	0.28
Switzerland	0.16	0.21	0.34	0.27	0.25	0.24
Germany	0.5	0.61	0.44	0.37	0.23	0.2
United States	0.06	0.06	0.05	0.05	0.04	0.04
Great Britain	0.09	0.06	0.03	0.03	.	.

Source: Own presentation based on OECD data, OECD.Stat "Public expenditure and participant stocks on labor market programs".

However, this in no way prevents politicians in Germany - and other EU countries - from polemicizing about ever greater inequality or even developing definitions of happiness that conjure up a kind of permanent state unhappiness in society: In Germany, Robert Habeck, co-leader of the Green Party, has formulated this position with reference to Reckwitz in his new book (HABECK, 2021), comments which at first were little noticed and went strangely uncriticized. The question of political challenges in the context of economic inequality is an old one and has occupied philosophers and economists for centuries. For example, the classical economists and a number of British philosophers posed the question of what distinction should be made between the state and the private economy and to what extent, for example, competition among private suppliers in the production of goods for markets would lead to a development that was not only economically favorable for the suppliers under consideration but also beneficial for society as a whole. It did not take long, at least for Adam Smith, to identify some problems concerning the relationship between the happiness (position) of the individual - possibly also in the context of a social group - and of wider society or that of other groups.

As is well known, Smith advocated competition in markets to be protected by the state, and in the classic "The Wealth of Nations" he also advocates that employees could join together to protect their interests, just as entrepreneurs were already able to do in the British economic order of the time. It was not until about two hundred years later that US philosopher John Rawls addressed the question of what principles might be capable having consensus support in a quasi-natural law perspective - with a neutrality requirement from the perspective that the individual should not know his future economic position when defining state principles for economic and social policy. This, of course, boils down to normative questions, with the answers of RAWLS (1971) that all public offices should be accessible to everyone and thus be subject to the double principle of equality of opportunity and competition; finally, the "Difference Principle" should apply, according to which inequality is to be accepted as long as it is ensured - if necessary by state laws or redistribution - that the incomes of the poorest also increase over time.

Historical and recent selected approaches to happiness and Kantian approaches

In the late 18th century, the British legal philosopher Jeremy Bentham published contributions according to which the goal of state action should be to achieve the greatest happiness of the greatest possible number of citizens. In other words, the aim was to increase the utility of the people in a meaningful way (today, to increase per capita income for as many people as possible). Since around 1880, many political parties in Europe have followed Bentham's and John Stuart Mill's ideas - liberal, socialist and conservative parties - almost always linked to a promise of a quality education, for which the state should also take responsibility.

What would be the best way to achieve the goal-oriented state of happiness formulated by Bentham? The answer of the Scottish moral philosopher and economist Adam Smith was: Through economic freedom and competition on the market - with a broad division of labor and clearly limited state activity. The latter, however, should take care, in particular, of providing good schools, national defense, the court system, the postal service and appropriately high government revenues to fund these activities. This view has been widely adopted by Western economists since the year of publication of Smith's magnum opus, The Wealth of Nations, in 1776. Kant as a philosopher, on the other hand, was less directly utility-oriented: His "Categorical Imperative" demanded such behavior as would be acceptable to the general public as the principle of a law. A common idea of enlightenment and progress, as has been shown in the case of Europe and the US, can hold countries and societies together and, in addition, create the prosperity or national income that can also be the basis for redistribution by the state. From a modern point of view, the state, in turn, has further tasks, namely to internalize positive external effects - for example, in corporate research (via research subsidies) - and negative external effects (via special taxation) of corporate production.

If one wants to have a solid assessment of how further inequality dynamics in the US and substantial parts – that is, individual countries - of the European Union will develop, then one can make an assessment on the basis of certain economic modelling (of a macroeconomic kind, for example); for example, in the context of DSGE macro-models, whereby the inclusion of direct investment - that is, ultimately, of multinational enterprises - has only recently succeeded, also in connection with the consideration of both the usual process innovations and the otherwise hardly considered product innovations (ROEGER/WELFENS, 2021). Instead of using models and simulations, however, one can also rely on well-known theorems of foreign trade theory when including important technological or other change trends, such as relative factor endowments (think, for example, of the capital intensity K/L, i.e., the use of machines and capital per hour worked): Here, three theorems for open economies are emphasized below:

- The Heckscher-Ohlin theorem, which makes statements about factor price relations - such as the ratio of the real wage rate to the real interest rate (market interest rate minus inflation rate) - in the context of a country's opening to foreign trade; consider, for example, the opening of China in 1978: How does the wage-interest ratio in the US and the EU – and indeed in China itself - develop following China's opening? In China, the wage-interest ratio rises, while in the US and the EU it falls.

- The Samuelson-Stolper theorem, which allows an analysis to be made in the event that the relative price of a certain group of goods increases exogenously: Consider, for example, relative price increases for climate-friendly goods, which have increasingly come into the focus of analysis in the slipstream of a global intensification of climate protection policies since the 2015 UN Climate Change Conference in Paris.

- The Rybczynski theorem, which allows one to formulate a theory-based finding in the context of the Corona pandemic shock of 2020 for given goods prices, namely in terms of how working-from-home, which is suddenly increasingly prescribed by the state for epidemic protection, will affect production and employment structures (ultimately, many home office workers also use private PCs available at home). In the long run, this will also have consequences for factor price ratios and the wage ratio of skilled workers to unskilled workers. This is because the relative labor demand of companies for qualified workers will increase.

It will be necessary to show how these theorems are useful in understanding international economic developments and, in this context, also with regard to inequality dynamics of a new kind.

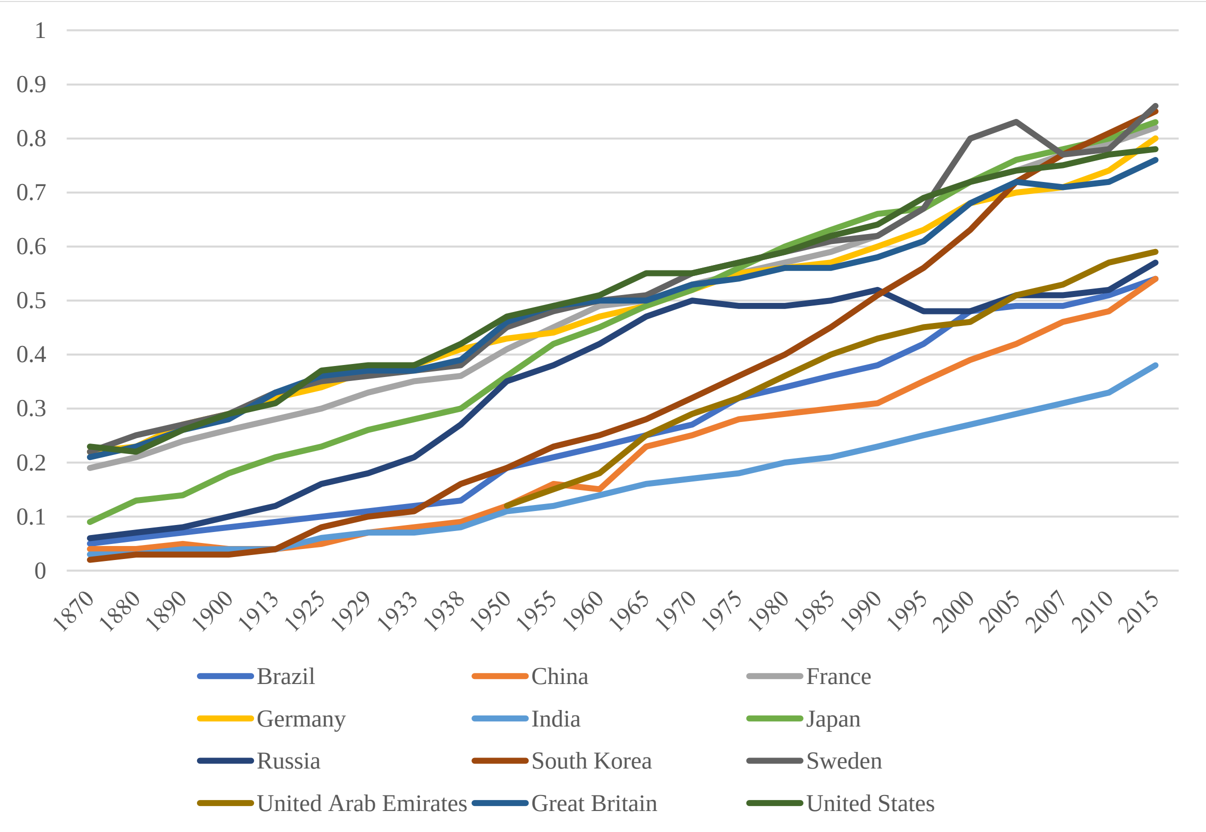
3. International Inequality Dynamics, 1870-2015

Amongst the interesting long-term economic trends is that of real per capita income, available for a range of countries from 1870-2015. More interesting still is to look at the Human Development Index, which links real per capita income, educational attainment, and life expectancy into a synthetic index. The UN has published the HDI for decades as an important index of international economic and social development. The extent to which the synthetic index value has converged over time can be illustrated by looking at selected countries.

As far as an international consideration of income and cultural differences over the long term is concerned, it is obvious to look at the Human Development Index from 1870 to 2015, which combines per capita income, educational attainment and life expectancy with equal weighting as an overall index (see Fig. 4). Here, we see that the United Kingdom has only caught up over time or achieved an international leadership position, if we follow the calculations of PRADO DE LA ESCUSORA (2018). Russia's position has fallen back internationally since about 1970, mainly because of only slowly increasing life expectancy and then in the 1980s and 1990s because of the economic crisis related to the transition from a socialist economy. Japan and the Republic of Korea exhibit long-term catching-up, while the US has had an international leadership position since about 1870. Thailand and China show clear catching-up processes in the early 21st century, while India's lagging behind is declining rather slowly in international comparison. The seven leading countries in 2015 were Sweden, Korea, Japan, France, Germany, the US and the United Kingdom. Educational attainment is defined here as part of a "cultural position" in society. Cultural inequality is thus expressed here in a compact way via differences in educational attainment; a broader consideration of characteristics is, of course, also conceivable.

These findings do not yet tell us anything more precise about the social strata in the respective countries. In Japan, with its close-knit family image often key in people's perceptions, there is an economic-social stratification not dissimilar to Germany in the 1970s, but a larger proportion of people in Japan consider themselves to belong to the middle class than in Germany, where people's self-perception is characterized by a more individualistic image of humanity and respondents therefore initially look primarily at their own economic and educational position when participating in surveys. With regard to Japan, there are certainly some points that indicate reduced inequality in society in the 1970s and 1980s, while greater inequality begins to characterize Japan after 2000, which is also related to the softening of certain social structures in companies (e.g., the idea of lifetime employment for many employees in large companies) (see CHIAVACCI, 2008).

Fig. 4: Historical Index of Human Development, selected countries 1870-2015



Source: Own presentation of data from Prados de la Escosura, L. (HIHD) and Our World in Data https://ourworldindata.org/grapher/human-development-index-escosura (accessed 06/28/21). See also Prados de la Escosura, L. (2021).

International real income comparisons: Effective lifetime income as a concept

When making international per capita real income comparisons, the literature almost always makes a comparison for a specific year (e.g., COUNCIL OF ECONOMIC ADVISERS, 2018) or a short multi-year period; in a methodologically very questionable approach, the Council of Economic Advisors appointed by Trump tried to argue that the US enjoys a significant lead in per capita consumption vis-á-vis Scandinavian countries, which are classified as "socialist" economies. For methodological reasons, however, it actually makes more sense to take "effective lifetime income" per capita (WELFENS, 2019; 2020), which focuses on the income one could expect over the course of the expected lifetime: If we look here at the US, Germany and France - and assume equally high long-term growth rates in per capita income for the three countries - we see:

- Lifetime incomes in the USA, France and Germany are the same.
- The effective US income has in fact been reduced by 6% in the calculation here, because the US spends 6 percentage points of GDP more on health than Germany and France - and then has a lower life expectancy (and higher infant mortality than western EU countries); in addition, the holiday advantage in Germany and France over the USA is included as a monetary advantage for the two EU countries on the basis of alternative costs, namely gross value added per hour. The expected effective lifetime incomes for the US, France and Germany – calculated on the basis of 2015 figures - are in fact quite similar as the following table shows.
- The US is not economically significantly ahead of Norway - as the study by the Council of Economic Advisers suggests with regard to its comparative approach - but Norway is ahead of the United States on the basis of effective lifetime income figures.

The following table is a reproduction of Table 2.3 from the book The Global Trump. In the case of the figures for France, a certain caveat should be noted in view of the high unemployment rates, since part of the high French leisure time budget obviously did not arise voluntarily - i.e., it cannot simply be classified as a French advantage in a transatlantic comparison without further ado. According to the considerations presented here, one cannot simply rely on a snapshot of date for a single year for meaningful inequality analysis. Incidentally, it might also be interesting to explore the hypothesis that relatively solid pension systems of country X act as incentives for citizens of country Z to emigrate; pension system solidity, in turn, is largely dependent on the public debt ratio. If the latter exceeds a critical limit, the state will be forced to make significant spending cuts, which will usually affect state pension payments in particular.

Tab. 2: Relative Effective* Disposable Nominal Income (y'; yearly data) of Germany + France Relative to the US, 1995-2015, ('000 US $ Purchasing Power Parity (PPP)); the last column reports expected effective lifetime income

	1995	2000	2005	2010	*2015*	Life Expectancy (L')	L' x y'
France	14,244	16,741	19,549	22,909	*24,576*	82.4	*2,025,056*
Germany	15,221	17,894	19,643	23,580	*25,855*	81.1	*2,096,881*
US	15,706	19,639	22,154	23,826	*26,302*	78.6	*2,067,298*
Average difference; in Percent (FR+DE)/US	6	12	12	2	*4*		

**Note: Here, "effective" means corrected for transatlantic differences in holiday time and health care expenditures: For Germany and France, annual nominal income has been multiplied by 1.1 to reflect a month of extra holiday in these countries, compared to the US; the official US figures have been reduced by 18 percent (expected US health care expenditures relative to GDP) and those of Germany and France by 11 percent (health care expenditures relative to GDP in France and Germany in 2017). The last column multiplies the 2015 annual effective income with life expectancy; this overestimates somewhat the EU advantage and the lead of Germany and France, respectively, since future income should in normal circumstances be discounted by some adequate discount factor.*

Source: EIIW calculations using data available from the OECD Income Distribution Database

4. Modern Globalization: Falling International Inequality, Growing Inequality in Countries

In terms of the changes in income distributions in the global economy and within industrialized and emerging economies, there are several influences that have interacted since the 1990s; among them is the rise of China as a major exporting country and source of innovation and direct investment. For a broader thematic analysis with diverse findings on income trends in the US and selected EU countries, see WELFENS (2019, "The Global Trump", for a presentation of the book at UC Berkeley (see my YouTube lecture; 2020 in German as "Trump global"). An important analytical contribution - incidentally not cited by Reckwitz – is that of JAUMOTTE/LALL/PAPAGEORGIOU (2008), who, with a view to globalization and the question of income distribution dynamics, focus on the interplay of foreign trade, technology dynamics or expansion of the ICT sector, and financial market globalization. In line with the Heckscher-Ohlin approach in economic theory, trade expansion has the effect of reducing per capita income differences between the countries of the world economy. One can add here with regard to China that the increase in the private savings rate also plays an important role for high growth there (in the Solow model, the increase in the savings rate ensures an increase in the level of the growth path; added to this are China's great efforts in modernizing education and increasing spending on research and development relative to national income, as well as its successful efforts to attract foreign investors to the country).

However, from the point of view of the authors and the empirical results in the corresponding IMF study, there are two further insights: The information and communications technology (ICT) sector is classified as a driver of "biased technical progress", which increases the company-side relative demand for skilled - as opposed to unskilled - workers on the labor market and thus causes the wage ratio to rise in favor of the skilled.

As ICT expansion takes place in almost all countries of the global economy, wage inequality or income inequality in favor of the skilled increases in very many countries. However, the authors do not point out that ICT use is particularly strong in multinational companies. In principle, of course, the relatively rising demand for skilled labor can be explained both by increasing ICT intensity and by the growing importance of multinational companies. Their subsidiary value-added share in OECD countries has increased significantly over the period 1990-2019 (UNCTAD, 2020; 2021), so it could also be argued that an increasing role of direct investment or multinationals in the global economy has contributed to greater income inequality within countries. Both the ICT expansion and the relative expansion of multinationals can, incidentally, be linked from an economic perspective to more product differentiation and also to the greater market power of large companies in important sectors in various countries, as well as to a then rising share of the capital factor in national income.

Finally, the authors of the above IMF study point out an important issue in the context of the financial market globalization that has been taking place since the 1970s: This brings a reduced global real interest rate in the context of increased international capital mobility (in this case, portfolio investment), but facilitates greater and cheaper borrowing only for households that have either real collateral (e.g., stocks, real estate) or a good income. Accordingly, capital owners – who can offer real collateral to credit providers or banks - and, on the employee side, the qualified with correspondingly high incomes and also in some cases considerable wealth accumulation, for example in the real estate sector benefit from financial market globalization. This, in turn, is a further impetus for a change in income distribution in favor of the qualified in industrialized and emerging countries. There are a number of complementary economic analyses that point, for example, to the special role of China in the increased income inequality of OECD countries (here, reference can also be made to corresponding remarks in the book The Global Trump/Trump global).

If one follows the summary empirical globalization analysis of POTRAFKE (2015), which includes KOF data, one can conclude on globalization:

- In the longer term, globalization has increased global economic growth and also improved gender equality and contributed to a strengthening of human rights.
- Globalization has not had a strong impact on labor markets and has contributed little to deregulation.
- Finally, globalization has increased income inequality in countries.

Therefore, globalization as a whole seems to have relatively beneficial economic effects. One critical objection, however, can be raised here: The US and the UK, as the main drivers of financial globalization, have brought about excessive financial deregulation via their own national financial deregulations in the decade after 1997, which ultimately led to the Transatlantic Banking Crisis - culminating in the bankruptcy of Lehman Brothers Bank in New York - that almost led to the economic collapse of Western countries in 2008. Globalization, if one follows this view (WELFENS, 2017; 2018), has indirectly increased the risks of large regional financial crises; namely, financial globalization or the broad liberalization of capital flows allowed US banks and UK banks, in the slipstream of national deregulation, to force continental European EU countries and Ireland into excessive bank deregulation through threats of intensified transatlantic takeover bids of the banks in those countries (similar to the pressure from UK banks with regard to takeovers of banks in the Eurozone): Banks in continental European countries therefore appeared strongly engaged in lobbying towards bank deregulation in their own home countries, which ultimately also promoted excessive risk-taking by banks in Europe in the context of softened regulations, which ultimately magnified the Transatlantic Banking Crisis in 2007/08 in Eurozone countries.

If you look at the donation priorities of major European banks, you will notice that many prestigious cultural events and activities as well as some UN-related charities have been given a lot of money. This is obviously a kind of lobbying in the direction of image improvement with a view to better lobbying opportunities in the political system. Here, one can also recognize a certain private-sector redistribution in favor of wealthy consumer groups, for example the regular attendees of theaters and concert halls, which in fact corresponds to a redistribution in favor of groups with high per capita incomes. Here, one could at least recognize a connection between high incomes and increased cultural capital in the sense of Reckwitz.

Stratification results for OECD countries and a group of poor countries

Looking at the results of the 2017-2020 World Values Survey for selected OECD countries (10 of the most economically important countries – see Appendix 4) and other countries - with relatively low per capita incomes - we can see that in the developed countries there is a broad middle class consisting of the upper middle class with a share of 27.4% and a lower middle class of 40.6%. In contrast to this, in the poorer countries the share of the upper middle class is only 17.3%, while the share of the working class (Group 4) is 28.2%, almost five percentage points higher than in the OECD countries. The share of the lower class in the poorer countries was 13.9%, almost 7 percentage points higher than in the OECD countries. It can therefore be assumed that a continued globalization of the economy - with the poorer countries catching up - will lead to a longer-term change in class stratification in developing and emerging countries, which will then more closely resemble that of industrialized countries. There are therefore positive long-term prospects for the world economy, with the proviso, however, that new financial market or banking crises or sovereign defaults in OECD countries do not cause considerable international destabilisation.

As far as problems of economic inequality - or broader inequality aspects that can also include fields such as cultural inequality - in OECD countries are concerned, it can be noted that the interests of, for example, immigrants with relatively low per capita incomes and problems in terms of accessing cultural goods face considerable hurdles in some countries; especially when it comes to equal opportunities. In Germany, for example, this is due in particular to the restrictions on voting rights for immigrants: Only immigrants from EU countries enjoy the right to vote in local elections, while many cultural offerings are essentially determined politically at the local level. However, redistribution of income essentially takes place at the level of federal politics, where non-German citizens have no voting rights at all. With a growing proportion of immigrants in German society, not only do legitimacy problems arise here in terms of democracy, but there are then also inadequate early political conflict resolution approaches, since the groups of those affected and those involved in resolving such conflicts diverge considerably. From an economic point of view, it would also make sense to anchor redistribution policy more strongly at the EU or Eurozone level in the long term.

Tab. 3: OECD Countries Class Stratification – on the Basis of Self-Reported Belonging to Class Groupings, 2017-2020 World Values Survey

1	2	3	4	5
260	5332	7914	4554	1419
1.3%	**27.4%**	**40.6%**	23.4%	7.3%

Tab. 4: Non-OECD Countries Class Stratification – on the Basis of Self-Reported Belonging to Class Groupings, 2017-2020 World Values Survey

1	2	3	4	5
906	9653	21681	15703	7757
1.6%	17.3%	**38.9%**	**28.2%**	13.9%

Note: 1: Upper class; 2: Upper middle class; 3: Lower middle class; 4: Working class; 5: Lower class

Source: Own calculations based on Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020 World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi.org/10.14281/18241.1

5. Some Theoretically-based Inequality Trends in the World Economy

Income developments of different groups can be studied, among other ways, in macroeconomic models with different production factors. In particular, it is possible to analyze how changes in certain model parameters (e.g., technological conditions or certain consumer preferences) or policy interventions (such as monetary and fiscal policy) affect the income development or factor price relations and, if applicable, also the relative incomes of different groups. For the case of open economies, however, there is also a certain level of knowledge from theoretical analyses that allows one to formulate with confidence some statements with a view to certain developments: For example, if the relative prices of certain goods change or if the relative factor endowment (for example, the ratio of capital input per hour worked) of a country changes. In a simple case, technical knowledge, capital and labor can be regarded as factors of production, or knowledge, capital, skilled labor and unskilled labor.

In the early 21st century, there are two important international impulses that can be viewed through the lens of familiar theorems of foreign trade theory (ultimately, international competitive processes). These are, firstly, the influence of climate policy, or the growing concern of the public - i.e., the electorate and the consumer base - that further global warming poses a significant threat or risks to, say, their own wealth or lives or those of family members and friends or other groups. Secondly, it is about the shift, triggered by the 2020 Corona pandemic shock, from office work to the home environment in the context of government epidemic-response policy; that is, an increased focus on work in the digital home office. Relevant in the climate context is the Stolper-Samuelson theorem, which establishes a link between relative price changes (in the simplest case: A model with two countries, two goods, two factors of production) and income distribution in open economies. In the context of sudden - by government regulation - increased home office activity, we are dealing with a phenomenon that fits the Rybczynski theorem: This establishes a link between relative factor endowment change (here, the increased availability of computer or ICT capital) and production structures; and, in further conclusions, also leads to a change in the structure of labor demand among the skilled and thus to income changes of various groups. The above theorems are a basis for a simple first analytical approach to certain phenomena. Extended models can support the conclusions by simulations as well as econometric studies.

On the Stolper-Samuelson theorem: If the prices of climate-friendly goods increase as a result of government regulatory requirements or climate policy, then the relative price of the production factor that is used intensively in the production of the goods in question will increase. Since climate-friendly goods mainly use skilled workers, the demand for skilled workers will increase on the company side: Income inequality in OECD countries and in many emerging economies will rise. This is because the relative wages of the skilled will rise. In this context, it makes little sense for the state to counteract this with increased minimum wages, since - assuming no particular buying power of companies on the labor market for unskilled workers - the minimum wage increase will primarily lead to an increase in the number of unemployed and, at the same time, to a sharp rise in the number of immigrants with low qualifications, which will create or intensify new social and political conflicts; in other words, it may destabilize democracies. However, a sensible remedy against increased income inequality is to strengthen the education sector or to provide more state support for vocational training and continuing education activities.

The Rybczynski theorem is also helpful, as it allows us to make a statement in the context of the Corona pandemic shock of 2020 given the prices of goods, namely in terms of how the sudden regulatory increase in working-from-home imposed by the state to protect workers from the pandemic will affect the structure of production and employment; and, in the longer term, also the factor price ratios and the wage ratio of skilled workers to unskilled workers. Increased home office working in the US and the EU27 countries plus the UK and Japan, and in many emerging economies in 2020, will indirectly increase the number of computers effectively available to many firms. This is because many workers do not only make use of company laptops in the home office, but also their own personal PCs at home: In effect, this means that the effective computer capital of companies increases; especially in the leading OECD countries in terms of PC home availability rates, i.e. the Netherlands, Denmark, Finland, Poland, US, Spain, Israel, which have 80% and more as availability rates. The availability of PCs at home differs considerably by country, as can be seen in the following table for OECD countries - with a number of countries where the PC home availability rate was below 60% in

2019 - as an example, so that the effects of the Rybczynski theorem need to be differentiated depending on the country or group of countries when looked at closely.

In a simplified analysis, we can assume that the exogenous increase in the computer equipment of companies will lead to computer-intensive sectors realizing an increase in output; in the other sectors, output will fall in absolute terms. In turn, since ICT-intensive sectors are characterized by a relatively strong demand for skilled workers, the Corona pandemic or the expansion of home office work will lead to an increase in the wage ratio of skilled to unskilled workers in the medium term. Empirically, one could test such a hypothesis in the medium term through a regression analysis.

Even if, after the Corona pandemic, increased working from home would remain a permanent effect in most countries of the world economy, it should be clear to policymakers that they are also indirectly increasing the demand for skilled workers and thus causing inequality in the workforce to rise, at least temporarily. This can certainly be countered with continuing education initiatives in digital/ICT areas supported by the state, which specifically targets the modernization losers amongst the workforce. The fact that the above-mentioned correlations are carefully considered in politics is probably an exception.

Tab. 5: Frequency of PC Access at Home in Selected OECD Countries, 2019.

Country	**Percentage of households with a computer**
Netherlands[1]	91.1
Denmark[1]	88.9
United Kingdom[1]	87.5 (91.67 in [2])
Finland[1]	87.4
Poland[1]	83.1
United States[1]	83.1
Spain[1]	80.9
Israel[1,2]	79.5
Czechia[1]	77.9
France[1]	77.5 (84.13 in [2])
Lithuania[1]	76.7
Japan[1]	74.6 (69.1 in [2])
Korea (Rep. of)[1,2]	71.7
Italy[1]	66.2
Turkey[1]	55.3
Costa Rica[2]	49.9
Mexico[1,2]	44.3
Brazil[2]	39,4
Colombia[1,2]	37.2

Source: [1]ITU World Telecommunication/ICT Indicators 2020 database. Households with a computer by urban-rural location and household composition. [2] OECD data (2021). Access to computers from home (accessed 10.06.2021)

Incidentally, one can also formulate the hypothesis that household groups or social strata with high home PC access rates are probably in a better position than those with low home PC access rates, and not just economically or in terms of human capital. PC access rates at home could certainly also be considered a cultural indicator, insofar as a high private PC user rate results in significantly improved user intensity in digital networks with a cultural relevance. It is probably possible to operationalize Reckwitz's vague cultural category with reference to home PC access rates.

It is worth noting, amongst other things, that in 2019 the home PC access rate in Poland was as high as in the US - but around 20 percentage points higher than Italy with its structural growth problems. If Italy is experiencing such growth problems and rising income inequality, it is probably due to insufficient digital literacy rates amongst individuals, but also a lack of (cumulative) direct investment inflows or the insufficient presence of foreign subsidiaries of multinationals, which are very important for international technology transfers and thus growth-relevant innovation dynamics; in the case of Italy, there is also the fact that the ratio of cumulative foreign investment by Italian multinationals relative to the capital stock in Italy is low compared with leading OECD countries, which in turn keeps international technology transfer low in the context of asset-seeking foreign direct investment for Italy (see also ROEGER/WELFENS, 2021). The point here is that German, Swiss, French, or Italian multinationals, for example, can actively absorb US innovation dynamics in certain sectors through foreign subsidiaries in the United States in high-innovation regions or states. Weak growth in Italy - which is obviously also due to institutional weaknesses (for example, in the court system) - then leads to increased social and political conflicts and, in the medium term, to political instability, which in turn weakens investment dynamics with regard to domestic and foreign investors. The inequality dynamics of individual EU countries therefore also have country-specific aspects that need to be taken into account.

Insofar as an expected or observed increase in income inequality is not desired, increased - and state-supported - training activities can be seen as an important starting point for economic policy. However, increases in activity in this regard are hardly visible in the OECD countries, and national and supranational economic policy in this area at an EU-level remained virtually inactive in 2021. This is despite the fact that many EU countries have large government budgets at their disposal, as state aid funds for companies - intended as survival aid in the Corona shock period - have often not been drawn down to a considerable extent for various reasons. In Germany, for example, this involved around €100 billion or 3% of national income in 2020.

6. Reckwitz Analysis of Inequality Dynamics and the "Paternoster Effect"

If one looks at the book publication by Andreas Reckwitz, The Society of Singularities (RECKWITZ, 2017), there are dozens of pages of economic inequality analyses and assertions about the economic-cultural positions of winner and loser groups in Western societies. The author, ignoring the top-income group, concludes that there is a new middle class and a new underclass, whereby the latter is always worse off in such a perspective. Accordingly, it would probably not be possible for a development in Western societies to emerge that corresponds to the Rawls principle and allows inequalities in the economic development to the extent that the real income (and, with Reckwitz, one would probably have to add: Cultural positioning) for the lowest income groups to undergo an improvement over time. It is implausible, at least with respect to the US, that a social stratification analysis or an analysis of changes in inequality in the economy and society can be meaningfully carried out without referring to the enormous income share gains of the top 1% of income earners in particular, as shown here at the beginning.

A main point of criticism here focuses on the so-called "paternoster effect", which in essence suggests that the economic (or "resource-strength" is the term used by Reckwitz) rise of one group is indirectly or directly linked to the decline of that of other groups. This "paternoster effect" hypothesis of Reckwitz must be critically examined here. In the well-known book, the author claims: "The paternoster effect of the late modern social structure results from the development of the rise of a resource-strong and valorized lifestyle of increased demands for the satisfying and at the same time successful "good life" in the new middle class and the counteracting descent of a resource-weak, devalued lifestyle in the new underclass, which hardly meets even reduced demands." (RECKWITZ, 2017, 4th ed, 2021, p. 284f (transl. PJJW)). With his analysis of the new middle class, which builds its position on values such as creativity and authenticity in addition to per capita income, Reckwitz aims to explain, amongst other things, the rise of populism and the decline of social democracy in many Western countries.

Populism Expansion and Shrinking of Social Democracy in Europe

The rise of populism can be explained in a broad economic perspective, especially with regard to the US and Italy as well as the UK, with enormously growing income inequalities, which, however, do not so much concern the "new" middle and lower class, but mainly the divergence of the top 10% (or top 1%) income earners' share and the bottom 10% income earners of the income pyramid base, which then, however, requires one to look at the role of capital income in particular of the top income earners, as is done to some extent in WELFENS (2019; 2020).

The decline of social democracy in many Western EU countries plus the United Kingdom since the late 1990s can be explained in essence (unlike Reckwitz) with reference to the demise of the socialist countries in Eastern Europe and the Soviet Union in 1991, which increased political pressure in Western countries for redistribution as evidence of a reduction in inequality organized among other things by social policy. For decades, social democratic parties have repeatedly claimed that they stand for more redistribution and a kind of economic risk protection, especially for relatively poorer classes. Such parties, with their ideologically-conditioned political relations to leading politicians of former socialist countries or the Soviet Union, which were sometimes quite good compared to conservative Western parties, also stood for credible prospects of a successful peaceful policy in Europe - in the middle of the Cold War. Since for the Western market economies, the system competition had been massively reduced by the crash of the socialist countries since 1991, non-redistribution related issues could gain in political importance, especially in EU countries; among them, for instance, environmental and climate protection issues, which were placed by many green parties as a core political message in elections at a time when apparently a broad consensus of natural scientists worldwide supported the issue of global warming by CO2 emissions and methane etc. as a political priority issue.

The collapse of the Soviet Union and the Warsaw Pact in 1990/91 effectively ended the Cold War and then probably also reduced the attractiveness of social democratic peace-seeking policy approaches in Europe and weakened the profile of social democratic parties more generally; at least in the perception of considerable sections of the social democratic electorate. Social democratic parties in countries such as Sweden, Germany, France and Austria, as well as Italy, have experienced a considerable depreciation of their reputational capital and political capital and have so far largely failed to build up additional political capital by setting out a platform based on innovative and competent new issues - such as digital education and training. In the context of their own positioning, conservative parties have found it easier to hold their own in the voter market in Western EU countries than social democratic parties did after 1991, with the mobilization boost in voter participation that has resulted from Internet expansion typically prompting more risk-averse voters from poorer backgrounds to vote. This, too, has arguably favored more the conservative parties; in the United States, the United Kingdom, France, Italy, Poland and Hungary, as well as Germany, the populist parties.

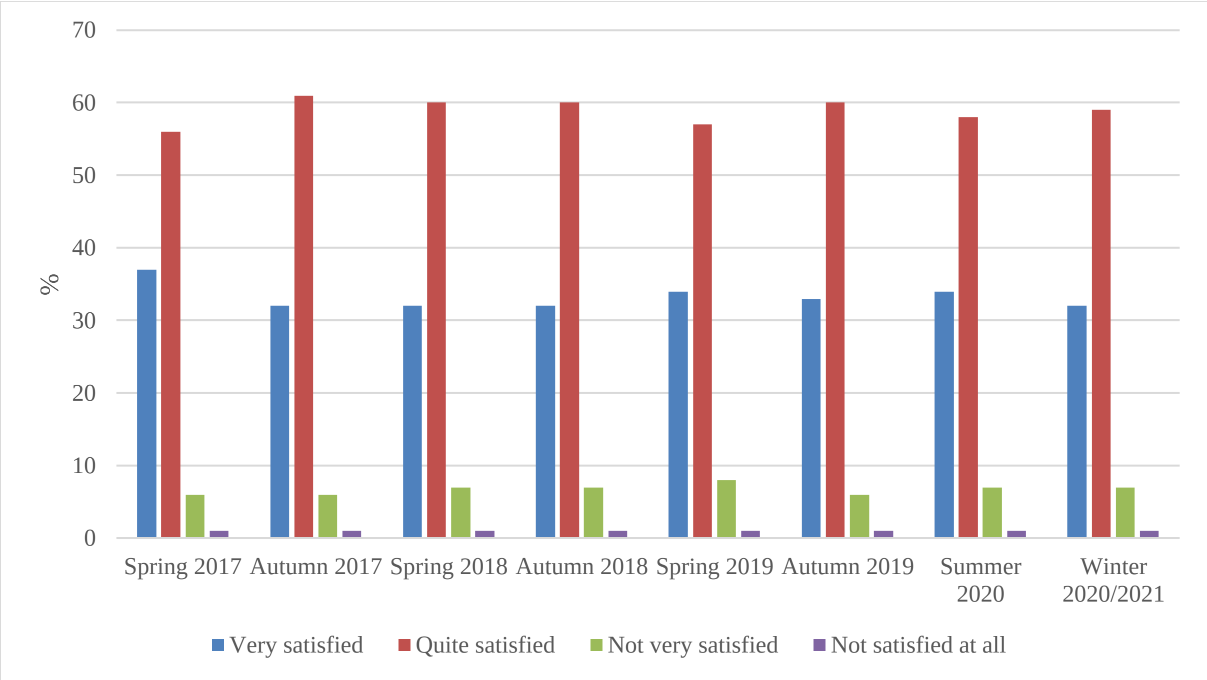
China's rapid economic rise since the 1990s could finally be interpreted as the switch from socialism or a centrally administered economy to a market economy, which largely enabled the end of largescale poverty problems in a big country within barely three decades: The decisive factor for overcoming poverty - as could possibly be discerned from the developments in China on the part of voters - is more market economy; not more political redistribution and a broad welfare state (as in Europe). The latter may well be a partial misinterpretation, which apparently has many adherents in parts of the US political system (WELFENS, 2017; 2018).

From the point of view of the US economist Dani RODRIK (1997), a market economy with social policy has one advantage: Certain redistribution measures in the social market economies of the EU countries, for example, are motivated by the fact that a kind of state insurance against globalization shocks is created (at the EU level, there is indeed a globalization fund that can help member countries with a sharp rise in the unemployment rate in the event of strongly negative international shocks). However, Rodrik points out that globalization, especially in terms of the expanding role of multinationals in the absence of coordination of OECD countries' tax policies, is likely to erode broad tax revenues in the long run, which provide the financial basis for expanded social policies. However, with the new international minimum corporate tax agreement in 2021, the funding base of the welfare state in the industrialized countries should improve, and thus there are actually increased opportunities again to benefit from globalization, i.e., a worldwide division of labor. The Corona shock of 2020 may, however, strengthen the willingness of economic policymakers in economically- and politically-sensitive sectors not to fully exploit the potential for globalization in critical sectors; think of the vaccine supply debate in 2020 in Europe and North America (more so in Canada than in the US).

In the EU, Germany is one of the successful "globalization countries" in that it has achieved structurally high current account surpluses, excluding the first decade of reunification. However, when comparing the investment performance of Germany and Canada in terms of foreign investments, one must again note that German foreign investment returns are oddly much lower than Canadian investments (HÜNNEKES/SCHULARICK/TREBESCH, 2019): Possibly an indication of inadequately trained staff and/or training gaps in leading banks and funds in Germany (compared to the US-Canada-UK benchmark; a key to improving the situation would be to expand banking-related business and economics training courses in universities). Such aspects may - at least at first glance - apply primarily to high-income population groups. However, as a rule, such poor returns are of course also detrimental to ordinary employees who have, for example, purchased life insurance. Here, there is an urgent need for action on the part of policymakers at the federal and state levels to have the quality of investment decisions made by banks and large investment funds examined scientifically for once. In this context, one must hope that the analysis will be of better quality than the iff-ZEW analysis presented some years ago, in which the authors investigated questions of retail lending rates and the appropriateness of overdraft interest rates - also in comparison with other countries - and claimed a supposedly quasi-normal situation without need for much reform (IFF/ZEW, 2012); in reality, the analysis was methodologically flawed and the ZEW was actually biased as a known constructor of the ZEW Financial Market Indicator, where ZEW relies on the input of actors in the field of banking, funds, etc. There was a hidden conflict of interest, but the then Federal Ministry of Consumer Affairs, which commissioned the study, apparently did not care much about it. In fact, the evidence is strong that bank lending in the usual combination with credit insurance by the lending bank (or one of its subsidiaries) has led to sometimes enormously high "total interest rates" - the sum of the effective interest rate plus the quasi-interest rate from the assumption of credit insurance - in Germany, usually at the expense of middle-income groups of employees and low-income groups. In the UK, unlike in Germany, banks were forced by law to reimburse borrowers for special profits realized through the unfair coupling of credit agreements and credit default insurance.

Overall, the question arises as to the life satisfaction of various income groups in Germany. If we take EU studies on life satisfaction - here for Germany - we find that between 2017 and 2020, for example, the proportion of people who are not at all satisfied with their life remains stable at 1%; the proportion who are not very satisfied fluctuates between 6% and 8%, and the proportion who are very satisfied between 37% and 32% (Fig. 5). However, if there is a descent of the lower class - as Reckwitz claims - as an important trend, one could expect the share of respondents who are 'not satisfied at all' to rise over time. From the data, there can be no question of this.

Fig. 5: Self-reported Life Satisfaction in Germany, 2017-2021



Source: Own representation of data available from Statista, 2021; *Standard Barometer data from the European Commission.*

Reckwitz formulates clear hypotheses about certain new phenomena in Western societies - especially about rising inequality with reference to the rising new middle class and the descending lower class - for which the author provides no evidence in his book and certainly no scientific research of his own. The entire book of 480 pages does not feature a single table and is classified here in parts as simply unscientific. Reckwitz does not follow the usual methods of modern social sciences, according to which new views or hypotheses on (distribution) reality - following critical rationalism - would have to be supported by observations or statistics; the 4th edition of his book is no better than the first one. Since Reckwitz does not simply focus on income inequalities, even if these are repeatedly emphasized in his analysis, but also on a growing cultural inequality - often connected with a parallel economic inequality – one can note: If the claimed phenomenon of cultural inequality is not reasonably delimited with a view to statistical measurement (which Reckwitz does not do in his book), then one cannot make any well-founded, evidence-based statements on the development of cultural inequality at all. In the sense of the precept of Critical Rationalism, that for scientific analysis, progress must in principle be based on falsifiable hypotheses, the Reckwitz analysis is simply unscientific. Reckwitz seriously claims on p. 282 (footnote 20) of his book that the "old view" from the Beck book *Risikogesellschaft* (BECK, 1986) is wrong, according to which in the economic growth process in the early 21st century the vast majority of strata can no longer improve their income.

Critics of Reckwitz include numerous authors, including from the field of Sociology, who have raised many individual points concerning the Reckwitz analysis in the first two issues of the journal *Leviathan* in 2021. KUMKAR/SCHIMANK (2021), for example, show on the basis of various findings that the "new middle class" is not so different from the old middle class when one considers the dimensions of income and value focus. SACHWEH (2021) emphasizes as a point of criticism that Reckwitz relies on the private-sector Sinus studies for his class analysis, however they have not disclosed their main criteria at all. The self-description of the interviewees is used uncritically in the Sinus analysis (a Heidelberg institute) - there is no verification by the researchers with regard to material status position and real behavior of the groups classified according to interview answers.

THIEL (2021) notes in the FAZ: “If, for example, Green voters are among the designated frequent flyers according to a study by the Federal Environment Agency (F.A.Z., February 16, 2019), one may wonder whether we are really dealing with a post-materialist clientele”. Reckwitz is not a scientist in one aspect of his analysis: He is more the creator of an eloquent narrative than a scientist in the passages on growing economic and cultural inequalities (why he received the 2019 Leibniz Prize is a question in itself: The DFG website text on the announcement of the awarding of the prize to Reckwitz also explicitly refers to the book The Society of Singularities in a laudatory tone:

"Andreas Reckwitz, one of today's leading and most original social diagnosticians, will be presented with the Leibniz Prize for his outstanding research work. He has produced wide-ranging and detailed analyses of structural change in modern western societies, combining sociological investigations of everyday life, work and consumption and digital subjectification. In his habilitation thesis "Das hybride Subjekt" ("The Hybrid Subject"), published in 2006, Reckwitz developed his central theme of modern subjectivity, which he analyzed with the aid of a series of 'subject cultures' since the 18th century. He further advanced this approach in his widely received book "Die Erfindung der Kreativität" ("The Invention of Creativity") in 2012. Here, he classified processes of social change as dynamics of aestheticisation in art, consumption and the working world. In 2017, Reckwitz's work culminated in the social-theoretical design of a 'society of singularities'. In this work ("Society of Singularities") he details the evolution from an industrial society to a knowledge and culture economy, in which the aim is to increase 'singularity capital'. On this basis, he proposed a new theory of social classes and illuminated the forms of politics that correspond to this society.”

If experts should want to recognize the excellence of a researcher with reference to individual publications, that as of course acceptable, but The Society of Singularities was apparently quite uncritically and positively classified by too many – which is simply difficult to understand. The decision to award a scientific prize may be a complex process, but to award such a prize for a book that is unscientific in essential parts - easily recognizable in its problematic nature - is an alienating process that seriously damages the reputation of science.

7. Bad Science as a Danger to Society and Global Economic Prosperity

Scientific analyses are often complex. Hypotheses are tested, rejected, modified, and retested on the basis of empirical evidence. This is often a laborious process. But it is part of the work of scientists. Scientific truth in the sense of critical rationalism is the meeting of hypotheses and real-world observational data. Establishing a scientific truth and thus contributing to the progress of knowledge is not a private matter, but is a finding that emerges in an inter-subjective process - usually also involving public (expert) discussion. It is preliminary and usually revised, and possibly ultimately rejected, when new data or better theories or methods of analysis become available: If the evidence for the claimed correlations is found to be insufficient.

Policymakers, who in quite a few cases do not deal with routine problems - think, for example, of the problems of German reunification, the Transatlantic Banking Crisis, or the Corona pandemic shocks – must be able to depend on solid theories and empirical studies if politics is to solve serious problems and challenges efficiently and permanently. The new inequality phenomena claimed by Reckwitz will be classified as a relatively novel development, if there is sufficient evidence for them. Then one can ask, on the basis of theory and empirical findings, for meaningful alternative courses of action for politics, for example, to mitigate the growing inequality between the new middle class and the descending lower class.

In the book The Society of Singularities (Reckwitz, 2017; 2020), one can find a number of interesting insights into various phenomena, such as modern culture and the attempts of individual groups to distinguish themselves as a unique special group by referring to certain characteristics or activities: With particular qualities and demands - also on politics. However, in important passages, the book contains questionable misstatements and many pages of text are simply to be classified as unscientific; either no evidence is presented or - at best - findings by economists or sociologists are cited whose analyses are often only bear a distant connection to the author's hypotheses. The Society of Singularities, which was very well received in parts of the press, has been critically received in parts of the fields of both Sociology and Economics; especially with regard to class formation on the one hand and with regard to the Paternoster thesis of an increase in the income of the new middle class (with upscale and differentiated lifestyles), which is linked to a decline of the lower class (whose lifestyle is comparable poor). The Reckwitz inequality analysis is rejected here as unscientific; his method of analysis violates basic scientific principles. The author has not chosen to support the relationships he claims exist with statistics, regression analyses, or model simulations. Reckwitz ignores the issue of immigration which is very important for the development of poverty in the lowest income decile in Germany, not to mention the issue of entrepreneurship and business start-ups by immigrants, on which the KfW (2019) has published important findings.

The easily recognizable significant flaws of Reckwitz's contribution, however, do not prevent influential political actors with little scientific training from claiming the Reckwitz-Paternoster concept as a weighty new insight for current and future German politics and from building strange conclusions based upon it. The German Green Party's Robert Habeck can be regarded here as an example of one such influential politician. In the 2021 federal election year in Germany, there is prominent domestic political support for the Reckwitz view - a new formulation of the zero-sum game thesis: HABECK (2021, pp.70-73) writes that the increase in the student ratio from 10 percent in 1970 to a good 50 percent in 2018 means that at first glance that an educational and income improvement has been achieved. But the other half of society, which has not studied, must be seen on closer inspection as a loser in terms of this economic development, and it is possible that the misfortune of those who have not studied outweighs the increase in the fortunes of those who have studied. The state must now support the loser group and also help to secure the reputation of the people in this group.

But this is a Sisyphean ideology and a paternalistic approach that probably overestimates the role of third-level studies and points to one's own disregard for others. One could, after all, formulate the thesis, in line with a broad view in Western and Asian societies, that every person who works deserves respect. The rise of one is not the misfortune of another. The Habeck thesis is completely misleading and a paean to Sisyphus, who lived in daily unhappiness and, according to classical myth, as punishment from Greek gods was destined to spend a lifetime pushing a heavy stone up the same hill only for it to roll to the bottom before he ever reaches the summit. Incidentally, there are certainly many people without a degree who lead happy lives and who, even in their mature years, do not even think about how much better a degree would have been instead, for example, of training as a craftsman.

Modern happiness research (INGLEHART, 2000; LAYARD/MAYRAZ/NICKELL, 2008) shows that as one's per capita income increases, one's utility increases - up to a certain high income threshold. Divorce and unemployment, for example, reduce subjective happiness according to surveys. Incidentally, one can certainly also earn a high income as a craftsman or skilled worker, without studying; and people with low qualifications will not experience a loss of happiness if the modern Western economic promise of upward mobility through education and diligence works for a larger social group: often also for their own children. The upward mobility of many does not occur via the relegation of other groups. Parents with two children will in the case of the discovery of outstanding musical talents of the older child not usually think that the younger child is now to be increasingly pitied just because the older one has shown an extraordinary level of musicality through talent and diligence – however, this is example is the Habeck principle for a - confused – society at the family level.

In some areas, it is not easy for political actors to secure meaningful policy advice. Frequently, political parties turn to scientists with close political ties for advice, but this is sometimes unwise in controversial areas. Anyone who wants to acquire political competence in the long term will not be able to do so without solid scientific analysis regardless of political viewpoint. In the case of significant new challenges, it is sometimes implausible to simply follow the advice of established research institutes if they are not among the international leaders in the analysis of important new topics.

Normatively, one might formulate it thusly: Efforts by the legislature, the parliament, would naturally be desirable in Germany, for example to further increase the educational opportunities of children from poorer backgrounds. Equal opportunities in higher education must be further improved, but the social market economy in Germany and the EU is also worth defending. If you compare the effective lifetime income of people in the US, France and Germany at the beginning of the early 21st century, the two EU countries and the United States are on a par, as I have shown (WELFENS, 2019; 2020). That the US has efficiency problems in its health care system, by the way, can be seen from the fact that it spends 1/3rd more on health - relative to national income - compared to France and Germany; but US life expectancy is almost 2 years less than in the leading EU countries, and US infant mortality is much higher than in Western Europe. Germany's school education and training system, despite weaknesses in some respects, are well worth exporting; this would be even more true if a little more economic education could be meaningfully embedded in the school system.

The special Habeck view on the subject of educational advancement and happiness in society must be clearly rejected. If EU-Africa cooperation would succeed in raising the per capita income of about half of the people in Africa, we should firstly celebrate the achievement and not argue that it has in fact worsened the happiness situation of the other half of the people. The upward success of one half alone can give the children of families in the less successful income half the courage to achieve their own income advancement in the long term through learning, social cooperation and further education. The education and social advancement of many is possible in Germany, Europe and many countries of the world - and this is advantageous also for society: In contrast to the recent zero-sum philosophy conjured up by some politicians who want to make the electorate believe that a pessimistic outlook is a new, wise discovery. The contradictions of the Reckwitz-Habeck approach must be addressed; the unscientific Reckwitz statements on inequality must be rejected as such.

If politicians wanted to make major policy decisions based on flawed social science analysis, they would be in the position of engineers who wanted to bring new cars to market without careful emissions and crash testing, while promising customers that these cars would be excellent in terms of emissions and safety. After a few thousand accidents with serious personal injuries - much more serious than expected according to the advertised message - the car companies in question would have to deal with the problems of high reputational damage, a collapse in sales and compensation payments (as a rule, one might hope that the car industry in Europe, the US, Japan and China would rely on credible quality promises; the emissions fraud cases actually visible in the years after 2010 at a number of car companies could, moreover, have been solved by stronger, legally-regulated responsibilities that would have enshrined a kind of Sarbanes-Oxley law with regard to the CEO and the chief technology officer of such firms).

Politicians who rely on the superficial, widely flawed and also clearly incomplete analysis of inequality of Reckwitz will be unable to implement efficient economic policies to contain inequality for lack of a sound understanding of inequality dynamics: Actual inequalities will therefore continue to increase, political polarization and radicalization will intensify, and increased political-economic instability will be the result.

Critical analysis among peers is rarely pleasurable, when such argumentation crosses disciplinary boundaries this is even more true; but no scientific progress is possible in the long run from the point of view of Critical Rationalism if one avoids serious debates about scientific misperceptions. Ultimately, this is not about personal debates between individuals, but about methods and facts, about empirical findings and the conclusions to be drawn from them. A broader debate in the early 21st century is therefore desirable. In this context, an interdisciplinary scientific discussion could also be quite fruitful.

In the end, it should be emphasized that knowledge of economic inequalities is strangely limited in important areas of politics in Western countries; and even more so, very little is apparently known about of the significant differences between the US and most EU countries. The shrinking of social democratic parties in many European countries after 1989 has probably made it easier than ever before for conservative parties to experiment with their own profiling and positioning - at times even to move a bit to the left of the political spectrum, as could be observed in Germany, for example. It is not surprising then that there is thus room for expansion for new right-wing parties on the right fringe. Only when social democratic parties stop overemphasizing inequality problems and develop new profiles and content is the party landscape in Europe likely to normalize. If one reads the party programs of right-wing parties in France and Germany, for example, then there, too, is clear language in favor of redistribution - although the state redistribution is supposed to benefit the respective "nationals" preferentially. Finally, it is remarkable that right-wing parties usually position themselves against globalization, which they often suspect of resulting in unfair competition. However, the relevant party leaders are apparently unaware that most of OECD countries' foreign trade is with other OECD countries; only China has become an important new factor, but its export ratio has tended to decline since around 2015.

Here we come full circle with a flawed Reckwitz argument (RECKWITZ, 2019, p. 163), who apparently thinks that OECD countries depend on the countries of the global South as an important part of their global production networks: "It was only the globalization surge after 1990 that made possible the new pattern of global division of labor already mentioned: the post-industrial development of the West presupposes the industrial development of the countries of the global South, so that global production networks can emerge" (tranls. PJJW). Here, the orders of magnitude are not economically correct.

Whether growing inequality or rather economic instability is the most important challenge for modern market economies in the medium term is not easy to predict; especially if China is included as part of the analysis of such market economies. Presumably, apart from the US with its specific problems, it is rather instability which is a major problem. After all, the ultra-low interest rates seen in OECD countries since the Transatlantic Banking Crisis mean high incentives for investors to invest in relatively risky projects in order to achieve halfway normal returns. Risk premiums in 2020/21 already seem abnormally low once again in industrialized countries. Incidentally, the distributional effects of massive instability shocks such as the Transatlantic Banking Crisis and the Corona shock in 2020 have been little studied so far, so there is a need for further research here as well.

Literature

ALVAREDO, F. ET AL. (2021), World Inequality Database https://wid.world.

BAIER, F. (2019), Foreign Direct Investment and Tax: OECD Gravity Modelling in a World with International Financial Institutions, EIIW Discussion Paper No. 261.

BECK, U. (1986), Risikogesellschaft. Auf dem Weg in eine andere Moderne, Suhrkamp: Frankfurt am Main.

BECKER, S.; EGGER, P.; VON EHRLICH, M. (2010), Going NUTS: The effect of EU Structural Funds on regional performance, *Journal of Public Economics*, vol. 94, 9-10, 578-590.

CHIAVACCI, D. (2008), From Class Struggle to General Middle-Class Society to Divided Society: Societal Models of Inequality in Post-war Japan, *Social Science Japan Journal*, Vol. 11, No. 1, 5-27 https://dx.doi.org/10.1093/ssjj/jyn022

CIANI, A. (2021), Income inequality and the quality of imports, Review of World Economics, 157, 375-416 https://doi.org/10.1007/s10290-020-00401-2

COUNCIL OF ECONOMIC ADVISERS (2018), The Opportunity Cost of Socialism, October 2018, Washington DC.

EICHENGREEN, B. (2018), The Populist Temptation - Economic Grievance and Political Reaction in the Modern Era, Oxford University Press: New York.

EUROSTAT (2018), Living conditions in Europe, 2018 Edition, Publications Office of the European Union: Luxembourg

EUROSTAT (2021), Living conditions in Europe - poverty and social exclusion, Statistics explained, last updated on 13.04.21 (last accessed 07.07.21) https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_poverty_and_social_exclusion&oldid=502929#Key_findings

FÖLLMI, R.; MARTINEZ, I. (2017), Volatile Top Income Shares in Switzerland? Reassessing the Evolution Between 1981 and 2010, *Review of Economics and Statistics*, 99(5), 793-809 https://doi.org/10.1162/REST_a_00644

GRABKA, M., GOEBEL, J. (2020), Realeinkommen steigen, Quote der Niedrigeinkommen sinkt in einzelnen Altersgruppen [transl: Real incomes rise, low-income ratio falls in individual age groups], DIW Wochenbericht 18/2020, Berlin.

GYGLI, S.; HAELG, F.; POTRAFKE, N.; STURM, J.-E. (2019), The KOF Globalisation Index - Revisited, *Review of International Organizations*, 14(3), 543-574. https://doi.org/10.1007/s11558-019-09344-2

HABECK, R. (2021), Von hier an anders, Cologne: Kiepenheuer & Witsch.

HAERPFER, C.; INGLEHART, R.; MORENO, A.; WELZEL, C.; KIZILOVA, K.; DIEZ-MEDRANO, J.; LAGOS, M.; NORRIS, P.; PONARIN, E.; PURANEN, B. ET AL. (Eds.) (2020), World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat https://doi.org/10.14281/18241.1

HAUCAP, J.; HEIMESHOFF, U. (2014), Google, Facebook, Amazon, eBay: Is the Internet driving competition or market monopolization?, *International Economics and Economic Policy*, 11, 49-61 https://doi.org/10.1007/s10368-013-0247-6

HÜNNEKES, F.; SCHULARICK, M.; TREBESCH, C. (2019), Exportweltmeister: The Low Returns on Germany's Capital Export, Kiel Working Paper No. 2133, Kiel Institute for the World Economy IfW: Kiel.

IFF/ZEW (2012), Studie zu Dispozinsen/Ratenkrediten, Forschungsvorhaben zur Bereitstellung wissenschaftlicher Entscheidungshilfe für das Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz (BMELV), Institute for Financial Services e.V.. (iff) and Zentrum für Europäische Wirtschaftsforschung GmbH, July 18, 2012 https://ftp.zew.de/pub/zew-docs/gutachten/StudieDispoZinsRatenKredit2012.pdf

INGLEHART, R. (2000), Globalization and postmodern values, *The Washington Quarterly*, 23(1), 215-22.

JAUMOTTE, F.; LALL, S.; PAPAGEORGIOU, C. (2008), Rising Income Inequality: Technology, or Trade and Financial Globalization, IMF Working Paper WP/08/185, Washington DC.

KEISLER-STARKEY, K.; BUNCH, L. (2020), Health Insurance Coverage in the United States: 2019 - Current Population Reports, US Department of Commerce, US Census Bureau, US Government Publishing Office: Washington DC

KfW (2019), Gründungen durch Migranten: größerer Wunsch nach Selbstständigkeit [transl: Start-ups by migrants: A greater desire for self-employment], KfW Research Fokus Volkswirtschaft No. 240, January 20, 2019.

KUMKAR, N.; SCHIMANK, U. (2021), Drei-Klassen-Gesellschaft? Bruch? Konfrontation? Eine Auseinandersetzung mit Andreas Reckwitz' Diagnose der »Spätmoderne [tranls.: A Three-class society? Rupture? Confrontation? A discussion of Andreas Reckwitz's Diagnosis of "Late modernity"], *Leviathan*, Vol. 49, Issue 1, 7-32.

LAYARD, R.; MAYRAZ, G.; NICKELL, S. (2008), The marginal utility of income, *Journal of Public Economics*, Vol. 92, Issues 8-9, 1846-1857 https://doi.org/10.1016/j.jpubeco.2008.01.007

NIEHUES, J.; STOCKHAUSEN, M. (2021), Inequality Revisited, IW Report 18/2021, IW Cologne https://www.iwkoeln.de/fileadmin/user_upload/Studien/Report/PDF/2021/IW-Report_2021-Inequality-Revisited.pdf

OECD (2018), A Broken Social Elevator? How to Promote Social Mobility, Paris: OECD Publishing http://dx.doi.org/10.1787/9789264301085-en

OFFE, C. (1972), Strukturprobleme des kapitalistischen Staates, Aufsätze zur Politischen Soziologie [tranls.: Structural Problems of the Capitalist State, Essays on Political Sociology], Frankfurt am Main.

OFFE, C. (1973), Krisen des Krisenmanagement - Elemente einer politischen Krisentheorie, In: Martin Jänicke (Hg.), Herrschaft und Krise, Beiträge zur politikwissenschaftlichen Krisenforschung [tranls.: Crises of Crisis Management - Elements of a Political Theory of Crisis], Opladen, 197-223.

PARDOS DE LA ESCUSORA, L. (2021), Augmented human development in the age of globalization, *The Economic History Review*, https://doi.org/10.1111/ehr.13064 online 18.03.2021

POTRAFKE, N. (2015), The Evidence on Globalization, *The World Economy*, vol. 38, 3, 509-552 https://doi.org/10.1111/twec.12174

RECKWITZ, A. (2017), Die Gesellschaft der Singularitäten [tranls. The Society of Singularities], Suhrkamp: Frankfurt am Main.

RECKWITZ, A. (2019), Das Ende der Illusionen. Politik, Ökonomie und Kultur in der Spätmoderne [tranls.: The End of the Illusion. Politics, Economy and Culture in Late Modernity], Suhrkamp: Frankfurt am Main.

RECKWITZ, A. (2020), The Society of Singularities, Wiley.

RAWLS, J. (1971), A Theory of Justice, Harvard University Press/Belknap: Cambridge, MA.

RODRIK, D. (1997), Trade, Social Insurance and the Limits to Globalization, NBER Working Paper Series No. 5905, National Bureau of Economic Research: Cambridge, MA.

ROEGER, W.; WELFENS, P.J.J. (2021), Foreign Direct Investment and Innovations: Transmission Dynamics of Persistent Demand and Technology Shocks in a Macro Model, EIIW Discussion Paper No. 300 https://uni-w.de/7oy37

SACHWEH, P. (2021), Klassen und Klassenkonflikte in der postindustriellen Gesellschaft. Soziale Spaltungen und soziokulturelle Polarisierung in den Mittelklassen [tranls.: Classes and class conflict in postindustrial society. Social divisions and sociocultural polarization in the middle classes], *Leviathan*, Vol. 49, Issue 2, 181-188.

SEMEGA, J.; KOLLAR, M.; SHRIDER, E.; CREAMER, J. (2020), Income and Poverty in the United States: 2019 – Current Population Reports, US Department of Commerce, US Census Bureau, US Government Publishing Office: Washington DC

TIROLE, J. (2021), Digital Identity in Economic Perspective, presented at the Markus Brunnermeier Princeton Webinar Series. https://scholar.princeton.edu/markus/news/princeton-webinar-series-covid-economics

THIEL, T. (2021), Der Hipster als politische Lebensform [transl: The Hipster as Political Being] in Frankfurter Allgemeine Zeitung, June 23, 2021, p. N4.

UNCTAD (2020), World Investment Report, New York: United Nations Publications.

UNCTAD (2021), World Investment Report, New York: United Nations Publications

UNDP (2020), Human Development Index, United Nations Development Programme http://hdr.undp.org/en/content/download-data

WELFENS, P.J.J. (2017), An Accidental BREXIT, London: Palgrave Macmillan.

WELFENS, P.J.J. (2018), BREXIT aus Versehen – Europäische Union zwischen Desintegration und neuer EU, 2nd updated and expanded ed., Springer Fachmedien: Wiesbaden

WELFENS, P.J.J. (2019), The Global Trump - Structural US Populism and Economic Conflicts with Europe and Asia, Palgrave Macmillan: London

WELFENS, P.J.J. (2020), Trump global – Struktureller US-Populismus und Wirtschaftskonflikte mit Europa und Asien, Springer Fachmedien: Wiesbaden.

WELFENS, P.J.J.; UDALOV, V. (2018), International Inequality Dynamics: Issues and Evidence of a Redistribution Kuznets Curve, EIIW Discussion Paper No. 250 https://uni-w.de/7f24u ; Presented at the Expert Group Meeting on "New Research on Inequality and Its Impacts", United Nations, New York, September 2018.

Appendix 1: World Values Survey 2020; Selected Questions on Inequality

Q50. How satisfied are you with the financial situation of your household? Please use this card again to help with your answer [Completely dissatisfied - completely satisfied; 1-10].
In the last 12 months, how often have your or your family...? [1-4; Often, Sometimes, Rarely, Never]

Q51. Gone without enough food to eat

Q52. Felt unsafe from crime in your home

Q53. Gone without medicine or medical treatment that you needed

Q54. Gone without a cash income

Q55. Gone without a safe shelter over your head

Q56. Comparing your standard of living with your parents' standard of living when they were about your age, would you say that you are better off, worse off or about the same?
1. better off
2. worse off
3. or about the same

Q106. Incomes should be made more equal [1] - There should be greater incentives for individual effort [10].

Q108. Government should take more responsibility to ensure that everyone is provided for [1] - People should take more responsibility to provide for themselves [10].

Q109. Competition is good [1] - Competition is harmful [10].

Q110. In the long run, hard work usually brings a better life [1] - Hard work doesn't generally bring success-it's more a matter of luck and connections [10].

Q149. Most people consider both freedom and equality to be important, but if you had to choose between them, which one would you consider more important?
1. Freedom
2. Equality

Q241. Governments tax the rich and subsidize the poor [1-10, Not an essential characteristic of a democracy - An essential characteristic of a democracy].

Q247. The state makes people's incomes equal [1-10, Not an essential characteristic of a democracy - An essential characteristic of a democracy].

Q286. During the past year, did your family:
1. Saved money
2. Just get by

3. Spent some savings
4. Spent savings and borrowed money

Q287. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the

1. Upper class
2. Upper middle class
3. Lower middle class
4. Working class
5. Lower class

Q288. On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in [1-10; 1 Lowest group - 10 Highest group].

Source: HAERPFER, C.; INGLEHART, R.; MORENO, A.; WELZEL, C.; KIZILOVA, K.; DIEZ-MEDRANO, J.; LAGOS, M.; NORRIS, P.; PONARIN, E.; PURANEN, B. ET AL. (Eds.) (2020), World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat
https://doi.org/10.14281/18241.1

Appendix 2: KOF Globalisation Index 2020; Top 20 countries ranked by overall index and sub-indicators

Tab. 6: KOF Globalization Index: Top 20 countries ranked by overall index and sub-indicators, 2020

Ran k	Country	Global-isation Index, overall	Rank	Country	Economic Global-isation, overall index	Rank	Country	Social Global-isation, overall index	Rank	Country	Political Global-isation, overall index
1	Switzerland	90.79	**1**	Singapore	93.63	**1**	Monaco	91.50	**1**	France	97.98
2	Netherlands	90.68	**2**	Netherlands	89.58	**2**	Luxembourg	90.89	**2**	Germany	97.90
3	Belgium	90.46	**3**	Belgium	87.89	**3**	Liechtenstein	90.78	**3**	Italy	97.80
4	Sweden	89.44	**4**	Ireland	87.81	**4**	Switzerland	90.35	**4**	United Kingdom	97.08
5	United Kingdom	89.39	**5**	Luxembourg	87.36	**5**	Norway	89.83	**5**	Belgium	96.62
6	Germany	88.83	**6**	U.A.E.	86.90	**6**	Canada	89.42	**6**	Netherlands	96.59
7	Austria	88.56	**7**	Switzerland	86.41	**7**	Andorra	89.24	**7**	Sweden	96.43
8	Denmark	87.96	**8**	Malta	86.15	**8**	United Kingdom	89.18	**8**	Switzerland	95.62
9	Finland	87.70	**9**	Cyprus	85.77	**9**	Singapore	88.70	**9**	Austria	95.45
10	France	87.69	**10**	Estonia	85.62	**10**	San Marino	88.38	**10**	Finland	93.65
11	Ireland	85.54	**11**	Hong Kong SAR, China	84.67	**11**	Hong Kong SAR, China	88.35	**11**	Portugal	93.18
12	Norway	85.47	**12**	Denmark	84.35	**12**	Sweden	88.30	**12**	Turkey	92.70
13	Czech republic	84.88	**13**	Sweden	83.59	**13**	Australia	88.22	**13**	Russian Federation	92.69
14	Portugal	84.88	**14**	Finland	83.09	**14**	Germany	87.99	**14**	Denmark	92.63
15	Canada	84.18	**15**	Czech Republic	82.69	**15**	Austria	87.54	**15**	United States	92.59
16	Hungary	83.83	**16**	Austria	82.68	**16**	Macau SAR, China	87.34	**16**	Canada	92.32
17	Spain	83.81	**17**	Mauritius	82.65	**17**	Ireland	87.30	**17**	India	92.13
18	Singapore	83.49	**18**	Slovak Republic	82.52	**18**	Denmark	86.90	**18**	Greece	92.04
19	Cyprus	83.06	**19**	Hungary	81.98	**19**	Belgium	86.69	**19**	Spain	91.49
20	Estonia	82.91	**20**	Bahrain	81.96	**20**	New Zealand	86.65	**20**	Egypt, Arab Rep	91.47

Source: KOF Globalisation Index 2020; Gygli, Savina, Florian Haelg, Niklas Potrafke and Jan-Egbert Sturm (2019): The KOF Globalisation Index - Revisited, Review of International Organizations, 14(3), 543-574 https://doi.org/10.1007/s11558-019-09344-2

Appendix 3: Poverty Ratio Developments in the EU and US

According to US Census Bureau data, poverty rates declined in 2018/19 as part of a multi-year improvement process (SEMEGA ET AL., 2020), which appears to have been helped significantly by a long-term economic recovery after 2011. According to the data, the poverty rates of the African American population as well as the Latino population in the US are higher than average, while the poverty rate of Asian Americans is slightly below the average for the population as a whole. If one calculates a methodologically-modified poverty rate that is close to the EU methodology for measuring poverty, then the US poverty rate would be slightly higher than the official poverty rate for the United States.

The US poverty rate in 2019 was officially 10.5%, about 1.3 percentage points lower than the 2018 rate of 11.8%. Yet 2019 still represented the fifth consecutive year of decline in the poverty rate. The 10.5% poverty rate is the lowest in the US since 1959. The absolute number of poor persons in the US was 34 million in 2019, a good 4 million fewer people than in 2018. Incidentally, the median income of native-born (US-born) US citizens was $69,000, while that of foreign-born US citizens was $65,000, a 9% gap for the latter, with the growth rate of income for foreign-born US citizens in 2019/2018 being slightly higher than for native-born citizens. 8% of US citizens had no (or minimal) health insurance in 2019 (KEISLER-STARKEY/BUNCH, 2020). The proportion of the citizenry without standard health insurance is likely to be closer to 15%, and severe family illness - with hospitalisation - is one of the important economic risks of decline in the US, as OECD studies have already shown (OECD, 2018).

Poverty risk rates in EU countries differed significantly in some cases, with a remarkable number of countries showing higher poverty rates in the case of families with children than for married couples without children; such a structure (also visible in the UK, amongst others) in social assistance and tax policy can obviously be viewed critically. Poverty risk rates were relatively high in Bulgaria (poverty rate 32.5%) Romania, Lithuania, Estonia, Latvia, Portugal, Italy, Greece, Spain and Cyprus (see figure below); a particular dynamic in the EU among young unmarried men, who then also represent a considerable potential for emigration. The Scandinavian countries, Germany, Austria, the Netherlands, but also Poland and the Czech Republic (12.3%) showed a relatively low risk of poverty. Among single parents with minors as children, 40% were at risk of poverty. The average poverty risk rate in the EU was 21.1% in 2019 (EUROSTAT, 2021).

Social transfers reduced the EU28 poverty risk rate from 25.9% to 17.3% in 2016, indicating the important role of social policy in the vast majority of EU countries. Educational deficits and prolonged unemployment are major contributors to poverty risk in EU countries, with the former also likely to increase the long-term unemployment rate. Among those aged 18 and over, the share of people at risk of poverty was 30.7% for those with a low education (ISCED levels 0-2) in 2016, while the corresponding figure for people in the same age group but with a high education (ISCED levels 5-8) was only 11.5%. In the EU28, people aged 18 and over were at risk of poverty for 2/3^{rds} of the unemployed; by contrast, the share of people with a job was only 12.4%. Ultimately, in the EU, this points to the major role of education and stability policies in significantly limiting the poverty rate (EUROSTAT, 2018).

Eurostat's report in the first half of 2021 highlights some differentiation across the EU, but also improvements over time (EUROSTAT, 2021 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_poverty_and_social_exclusion&oldid=502929#Key_findings; with coverage of the EU27):

- *"The risk of poverty or social exclusion varies considerably between the EU Member States, but also within individual Member States. For example, in some Member States — predominantly in the Baltic Member States, eastern or southern parts of the EU — the risk of poverty or social exclusion was higher in rural areas than it was in urban areas (cities or towns and suburbs), whereas in many western Member States poverty or social exclusion was more common in cities.*

- *As noted in an article on income distribution and income inequality, social protection measures, such as social transfers, provide an important means for tackling monetary poverty: in 2019, social transfers reduced the EU-27 at-risk-of-poverty rate from 24.5 % (before social transfers, pensions excluded) to 16.5 %, bringing the rate down by 8.0 percentage points.*

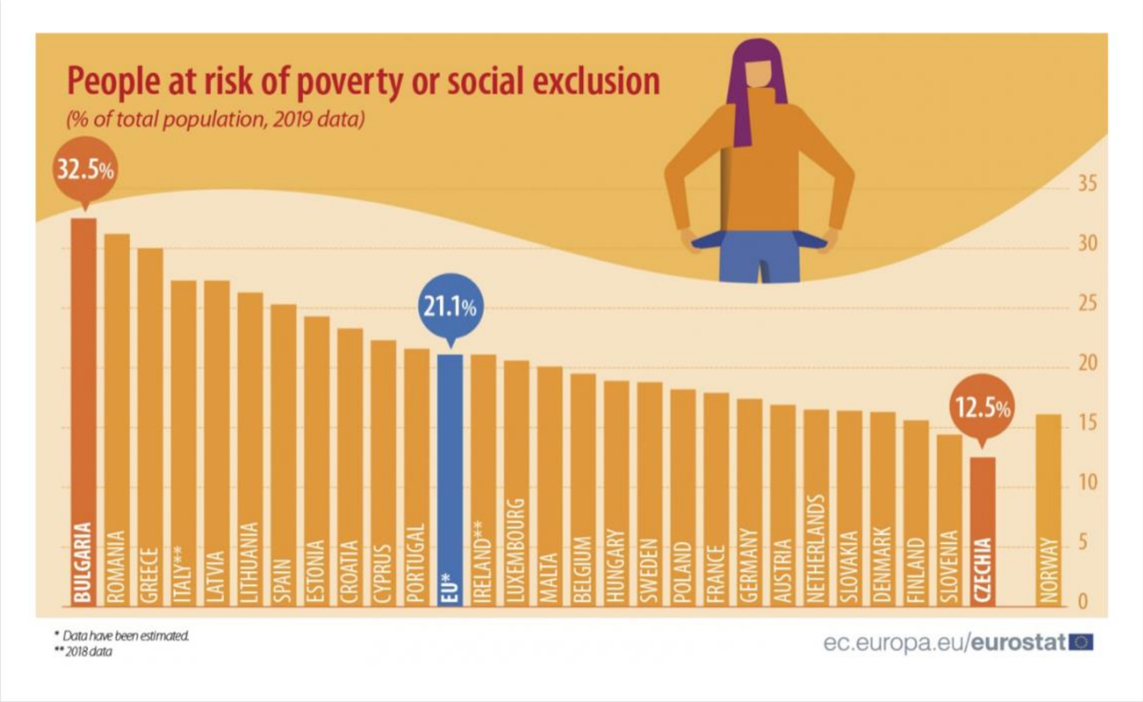
- *In much the same way as long-term unemployment has a greater impact on lives than shorter periods of unemployment, the persistent risk of poverty is inherently linked to a disproportionately higher risk of social exclusion. The persistent at-risk-of-poverty rate shows the proportion of people who were below the poverty threshold and had also been below the threshold for at least two of the three preceding years. This is of interest insofar as it allows a longitudinal analysis of whether the risk of poverty is transitory in nature (shared among various members of society) or whether it is a more structural phenomenon (whereby an unlucky part of the population are persistently poor). The persistent at-risk-of-poverty rate was more prevalent among the population living in single adult households, particularly those with dependent children (many of these households are characterised by income levels that are persistently below the poverty threshold). On average, more than one fifth (21.4 %) of single adult households with dependent children in the EU-27 was at persistent risk of poverty in 2018.*

Poverty and social exclusion

Around one in five people in the EU-27 were at risk of poverty or social exclusion

In 2019, there were an estimated 92.4 million people in the EU-27 at risk of poverty or social exclusion, which was equivalent to 21.1 % of the total population. The number of people at risk of poverty or social exclusion, which may be abbreviated as AROPE, corresponds to the sum of persons who are (i) at risk of poverty (as indicated by their disposable income); and/or (ii) face severe material deprivation (as gauged by their ability to purchase a set of predefined material items); and/or (iii) live in a household with very low work intensity. Having peaked at 108.7 million in 2012, the number of persons who were at risk of poverty or social exclusion in the EU-27 fell during seven consecutive years. There has been a decrease of 16.3 million in relation to the number of people who were at risk of poverty or social exclusion since the 2012 peak.

Fig. 6: Living Conditions in Europe; Poverty and Social Exclusion



Source: Living Conditions in Europe – Poverty and Social Exclusion https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_poverty_and_social_exclusion (last accessed on 07.07.21)

Appendix 4: World Values Survey – Survey Results on the Self-Reported Class Identification of Respondents in OECD and Non-OECD Countries, 2021

Tab. 7: Country List (OECD = 1)

Countries	OECD
Andorra	0
Argentina	0
Australia	1
Bangladesh	0
Bolivia	0
Brazil	0
Canada	1
Chile	1
China	0
Colombia	0
Cyprus	0
Ecuador	0
Egypt	0
Ethiopia	0
Germany	1
Greece	1
Guatemala	0
Hong Kong SAR PRC	0
Indonesia	0
Iran	0
Iraq	0
Japan	1
Jordan	0
Kazakhstan	0
Kyrgyzstan	0
Lebanon	0
Macao SAR PRC	0
Malaysia	0
Mexico	1
Myanmar	0
New Zealand	1
Nicaragua	0
Nigeria	0
Pakistan	0
Peru	0
Philippines	0
Puerto Rico	0
Romania	0
Russia	0
Serbia	0
Singapore	0
South Korea	1
Taiwan ROC	0
Tajikistan	0
Thailand	0
Tunisia	0
Turkey	1
Ukraine	0
United States	1
Vietnam	0
Zimbabwe	0

Q287. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the

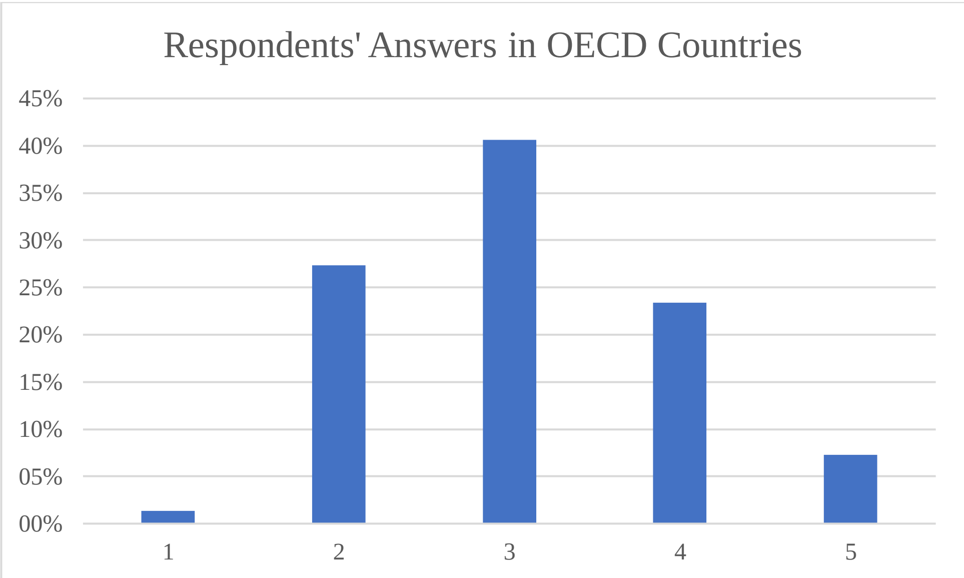
1. Upper class
2. Upper middle class
3. Lower middle class
4. Working class
5. Lower class

Tab. 8: Self-classification of Respondents based on Class Affiliation in OECD Countries, World Values Survey 2020

1	2	3	4	5
260	5332	7914	4554	1419
1.3%	27.4%	40.6%	23.4%	7.3%

Source: Own calculations based on: Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020. World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi.org/10.14281/18241.1

Fig. 7: Graphical Representation of Class Affiliation in OECD Countries, World Values Survey, 2020



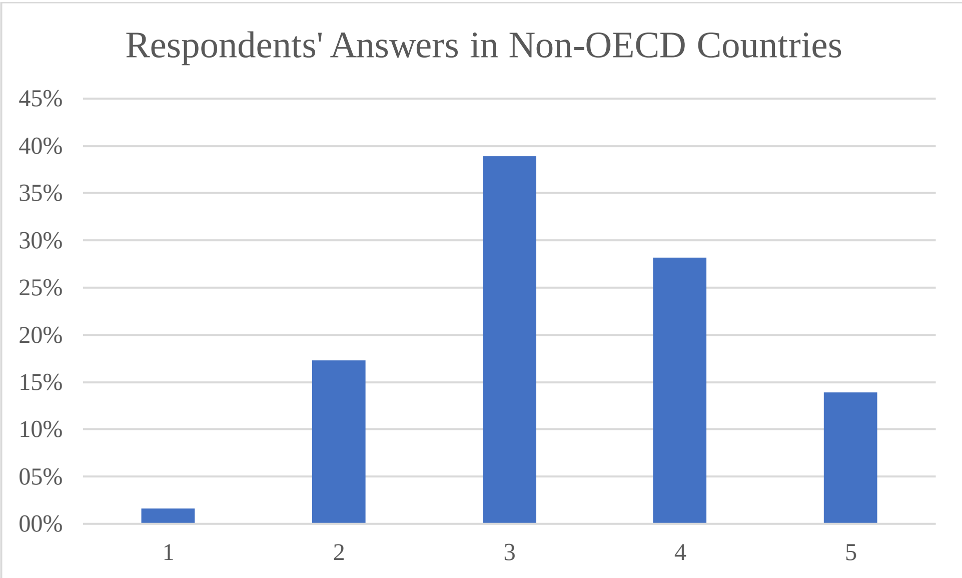
Source: Own calculations based on: Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020. World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi.org/10.14281/18241.1

Tab. 9: Self-classification of Respondents based on Class Affiliation in Non-OECD Countries, World Values Survey 2020

1	2	3	4	5
906	9653	21681	15703	7757
1.6%	17.3%	38.9%	28.2%	13.9%

Source: Own calculations based on: Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020. World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi.org/10.14281/18241.1

Fig. 8: Graphical Representation of Class Affiliation in Non-OECD Countries, World Values Survey, 2020



Source: Own calculations based on: Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020. World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi.org/10.14281/18241.1

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