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Editorial

About the journal

ETHICS, ECONOMICS, LAW AND POLITICS *Online journal for interdisciplinary discussions on current societal issues* is an academic journal concerned with relevant topics and problems of applied ethics, with its contributions drawing on economic, legal, and political science approaches and perspectives. The journal focuses on current debates and research on justice, morality, responsibility, dignity, rights, and self-determination in relation to socially relevant issues like globalisation, markets, climate change, welfare, migration, and digitalisation. It mainly publishes articles, essays, term papers etc. on pertinent topics written by young scholars and advanced students. In particular, it acts as a journal for students' papers of the MA study programme Ethics - Economics, Law and Politics (MA EELP) at the Ruhr-Universität Bochum.

The international MA EELP provides its students with an interdisciplinary education in applied ethics, practical and political philosophy in combination with the subjects of economics, law, and political science. Thus, knowledge and skills in both normatively oriented practical philosophy and empirically oriented social sciences are brought together. A special emphasis is placed on the qualification of students for independent normative reflection and rational analysis in relation to contemporary ethical problems. The core and the attractiveness of this study programme is the close connection of ethics and law with economics and politics. The content framework for this is provided by the six main topics of the MA EELP, which are reflected in this journal's contributions: globalisation and justice, market and morality, climate change and responsibility, welfare and dignity, migration and rights, and digitalisation and self-determination.

First issue: Democracy in Times of Unstable Conditions

There are strong reasons for organizing societies as democracies and for protecting and defending a functioning democratic constitution. For within a framework of basic rights the decisions on the specific organization of the effective protection of the rights of citizens to the necessary conditions of being able to lead their lives need democratic legitimation of the decision processes and need control of the involved political and administrative positions of might and influence. This requires a separation of powers, regular elections to offices, and the enablement and protection of civil liberties. However, it must be noted that functioning democracies are difficult to preserve. Those in power may misuse the institutions of the state. The political opponents may be demonized, a basic preparedness to seek compromises may be given up. The electoral process gets increasingly influenced by those with money and the interest in continuing democratic control may be lost. Meanwhile, on the societal level, social trust among citizens may erode, the willingness to cooperate may decrease, and as a result the willingness to engage civically might be discouraged. Thus, democracy cannot be taken for granted. Its reality must be critically reflected, and its design must be adjusted.

In the first issue we give students the voice, on the one hand addressing important aspects of the topic *Internal Threats to Democracy* and on the other presenting political instruments

to counteract the climate catastrophe. The short essays by Sebastian Dempf, Sencer Odabaşi, Dimitrios Oikonomou, and Marco Toche Zevallos discuss different internal threats such as: restriction of free speech and opinions in times of digital media and the imperative for more digital literacy, income inequality and unregulated neoliberal markets, the call for a more critical and also louder voice from contemporary political philosophy to respond to the major crises of the time, the restriction of independent courts and their compositions.

All essays were written as part of the essay competition of the *Friends and Supporters of Economic and Climate Ethics*, a non-profit organization associated with the MA EELP. The latter promotes economic and climate ethics by fostering the research and teaching in these fields.

The essays are followed by the article of Svenja Schilling, dealing with the discussion on the effectiveness of a carbon tax and discusses the questions: "Can a carbon tax be considered fair? And is a fair carbon tax feasible?"

With the first volume of ETHICS, ECONOMICS, LAW AND POLITICS, we hope to launch an ambitious publication project so that important student positions and thoughts are published and encourage us to think and discuss further.

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Free Speech & the Postmodern Town Square A plea for digital literacy

Sebastian Dempf (Ruhr-Universität Bochum, Germany)

On April 25, 2022, Twitter announced it would accept Elon Musk's offer to buy the company. His bid for a hostile takeover - following an increasingly critical and outspoken stance on the platform's content moderation policies - had been successful. The deal involving a sum roughly rivalling that of the annual GDP of Lithuania (all at least in parts owed to the rocketenthusiast-turned-capitalist-ad-astra's fidelity to "420"-joke share prices) marked the end of a month-long "will-they-won't-they" which had many an internet user on the edge of their seat. Much was at stake, it seemed. Musk framed his takeover plans as devotion to free speech on a platform which had over time "become kind of a de facto town square" (Silberling 2022) but his track-record in adhering to this same ideal had historically done all but inspire confidence. What's more, there was reason to doubt whether he had fully grasped the very dilemma of maintaining the kind of free speech absolutism many platforms like Twitter were originally built on but had eventually abandoned in exchange for increased user safety and comfort.

On the other side of the Atlantic, meanwhile, the EU passed the Digital Markets Act (DMA) and the Digital Services Act (DSA) roughly around the same time. Aimed at safeguarding both the interests of digital end users and the prerequisites for a continuously competitive digital market, the DMA and the DSA followed suit in a long string of attempts to introduce regulation to our mostly anarchical digital world. Not least through the introduction of the General Data Protection Regulation (GDPR) in 2018 had the Union arguably already cemented itself as regulatorily avant-garde. For services to be legally offered on European digital soil, companies had to start complying with the relevant regulation governing said digital soil. Especially for bigger actors such as Amazon, Google, and Meta this required sizable investments into compliance efforts and an often-fundamental restructuring of their data gathering and processing activities. GDPR effectively became the regulatory gold standard with even the union-weary UK adopting a copy of it into national law post-Brexit.

What makes this story interesting is that it highlights the precarious state of our digital world. Musk is arguably right in calling Twitter a "de facto town square" with it being both an access point for private individuals to connect to one another as well as a platform where politics happen on an ongoing basis. Almost 230 million users visit the site every day for anything from engaging with fellow like-minded, to learning about recent political events, and, of course, contributing to an ever-developing canon of collective meme culture. With his \$44 billion takeover, Musk effectively bought himself not just a ticket to the show but the rights to control ticket sales, ticket admission, and ultimately what the show is going to look like.

With this next stage of techno-feudalism well on its way, the question is how we as political communities want to respond. Arguably, digital platforms like the Musikan Twitter town

¹ At the time of submission, the deal seems to be on hold again: "Twitter deal temporarily on hold pending details supporting calculation that spam/fake accounts do indeed represent less than 5% of users" (Musk 2022).

square play an important role in enabling democratic exchange and opinion formation while, at the same time, posing significant regulatory challenges due to their transnational nature. Mostly limited to the scope of national law, lawmakers are often faced with a dilemma: Be lenient and corporate greed will run rampant exploiting user data for gains and skewing end user perspectives in the process or introduce rules too strict and companies will be forced to withdraw services from your country (or at least threaten to do so, as was the case with Google in Australia in early 2021) (Hern 2021). Luckily, the EU is in somewhat of a unique position in that its market tends to be too large to spur serious corporate backlash against regulations making it difficult for companies to leverage their importance for the public sphere. Combined with the fact that the scale of investment necessary for regulatory compliance often makes a one-size-fits-all approach the most feasible one economically speaking (e.g., companies required to comply with GDPR may not want to invest additional resources towards introducing looser terms of service for their non-European users), the EU's policy apparatus finds itself in a significant position of power.

Even so, however, a regulatory approach faces two major challenges: 1) It assumes that third party actors take seriously their responsibility for regulatory compliance and 2) it will inevitably leave a broad range of operational decision making to the corporations offering their services (as it arguably should). In most cases, platforms that have managed to manifest themselves as an integral part of a society's public sphere intend to maintain their position. Apart from cases like that of the messenger service Telegram, simple non-compliance therefore rarely poses an issue. Operational freedom, on the other hand, is a different story. Ultimately, regulation aims to rule out the very worst of outcomes and behaviours, only constituting the rough foundation on which service delivery can be built according to corporate need, desire, and purpose; which for the town square analogy consequently means its undoing: Where physical town squares are objective, providing the same experience to every visitor, digital town squares adapt. Depending on user preferences, demographics, marketability, and many other factors we can only speculate about at this point, service algorithms individualize the town square experience for every visitor in an attempt to create maximum engagement. And this, it appears, is the central issue: The primary good traded within the digital economy is not a tangible object, or a service, or an ideal like free speech; it is statistically guaranteed end user attention.2

In itself, this is fairly alarming. Putting aside the anthropological conundrum of behavioural predictability, history has famously shown how far reaching the effects of such digital attention machines can be. Facebook, for example, is at this point generally accepted to have played a major role in the outcome of the 2016 US presidential election, having allowed user feeds to be "overrun with hyperpartisan misinformation, some of it Russian, that was amplified by its own algorithms" (Roose 2020). Following public backlash, the platform has since made some strides towards mitigating the political risk its advertising model poses to free elections, but the nature of its algorithmic amplification continues to be confidential. The DSA hopes to

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² One could argue that Musk's plans to increase Twitter's financial stability through optional user subscriptions may do away with the platform's need for ad revenue thereby making redundant the need for a user experience designed for maximum attention and reengagement. Even if that is the case, however, a two-tier service model will likely have its own set of adverse effects on algorithm-constrained free-speech.

be an at least partial response to such practices requiring large companies to make their algorithms transparent and giving users the option to opt out of being presented with a tailored, profile-based service experience; and Musk, interestingly, has already announced similar steps for Twitter suggesting its recommendation algorithm could become open source on GitHub - giving users more insight into (and potentially control over) what they see. Still, one has to wonder about the limits of regulatory power (and proactive transparency) in this context. Free speech that is not absolute is inherently self-contradictory and a delicate balance to get right. What is more, the ease of access with which information can be created, shared, and consumed has not exactly increased the likelihood of a solution either: we need ways to sort and make sense of the content available to us at any given moment, and an inherent part of this process will forever be interpretation: partially, on the side of platforms, and partially on the side of end users.

Alarmingly, it appears, we have thus far mainly focussed on the former. Regulation like the DSA aims to influence the way companies make sense of the anarchical chaos that is our digital world for us; however, where top-down regulation reaches its limits, it may well need to be subsidized with a bottom-up approach. Part of the responsibility for content interpretation will forever be on us, the end users, and it is our duty as political communities to equip ourselves with the tools necessary to fulfil said responsibility. A bigger focus therefore needs to be placed on fostering greater inter-generational sensibility for digital economies, their effect on our views and wellbeing, and how we can participate in them more sustainably. We should take seriously the increased societal fragmentation heralded by political polarization and the very worst a lack of digital literacy has to offer as already seen in splinter groups such as QAnon and Anti-Vax. Illegible as they may be, our answer cannot be an irrationality-implying dismissal but needs to appreciate the weight of the collective educational failure that has brought them about in the first place.

Digital platforms' responsibility in governing our town squares plays an important role -but it would be naive of us to consider it absolute. Both market incentives as well as challenges inherent to the nature of free speech make even well-intended content policies fallible. A new approach will therefore need to place greater focus on equipping end users with the tools necessary to critically engage in our digital economies to avoid their opinions becoming involuntarily skewed over the course of their town square visits. A new approach will need to place greater focus on digital literacy.

References

Hern, A. (2021) Google threatens to leave Australia – but its poker face is slipping, https://www.theguardian.com/technology/2021/jan/22/google-threatens-leave-australia-but-poker-face-slipping (29/04/2022).

Musk, E. (2022) *Twitter Status*, https://twitter.com/elonmusk/status/1525049369552048129?cxt=HHwWgsCqkcqUiKoqAA AA (13/05/2022).

Roose, K. (2020) *Buckle Up for Another Facebook Election*, https://www.nytimes.com/2020/01/10/technology/facebook-election.html (29/04/2022).

Silberling, A. (2022) Elon Musk says he 'doesn't care about the economics' of buying Twitter, https://techcrunch.com/2022/04/14/elon-musk-buying-twitter-ted-talk/ (04/05/22).

How Income Inequality Threatens Democracy

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The 21st century started restless. Maybe not as much as its predecessor yet still, fundamental questions over the very soul of the recently globalizing planet of ours are upon this generation in a background of bloody conflict, looming environmental disaster and a global pandemic. Democracy apparently losing its allure is one such fundamental question; as the tide of global democratization turning upside down, authoritarian regimes with strong leaders recruit new members while democracies have to deal with rising radical reactionary movements, the world is left to wonder what exactly changed with the turn of the century. Modern post-WWII Western liberal democracies justified their existence to their own citizens with personal liberties, extensive political rights and, perhaps more importantly, increasing generational wealth. This 'liberal dream' didn't always work out perfectly and certainly not for everyone, but it was proven to be consistent for a large majority of the citizens in Western democracies and desirable to people outside of its borders strongly enough to come out as the clear victor of the ideological battlefield of the 20th century. Now, shortly after this victory lap and with an apparent lack of opposing grand narratives threatening the ideological hegemony of liberalism, how and from where threats to its integrity can come from becomes a very interesting question.

Liberal democracy, or democracy as a part of liberal ideology, is not the easiest concept to define. Liberalism as a term in contemporary politics became an "ideological vacuum cleaner" (Dryzek, 2009), incorporating most other ideologies on its way with a large portion of the political spectrum paying lip service to it and diametrically opposed political positions claiming ideological ownership of the same term. To be able to have a discussion on the term, to find democracy in the bag of the vacuum cleaner of liberalism, it should be first stripped to its bare bones. When we go back to the very basics to ask the question what makes a modern democracy, we find the ideas of social contract and government-by-consent, core ideas of political liberalism, with other political/personal liberties for minorities and individuals around the concept defined by the same political tradition. Here political and economic liberalism is understood as two different ideological traditions. The individual liberties and political rights regime modern liberal democracies are built on will be considered political liberalism and the principles of the economic system built around the idea of minimal state intervention and free entrepreneurship will be considered economic liberalism. Those two "liberalisms" are historically related and so far, have created the two wings of modern liberal democracies: A democratic regime with guaranteed personal liberties and entitlements with a capitalist economic model creating wealth for the entire society. The Hayek-Friedman paradigm even went far enough to claim that those two liberalisms are one and the same and one necessitates the other. This, however, does not seem to hold true in our day and age as those two ideologies start to show signs of friction and we have examples of market liberalism working very successfully under authoritarian regimes without bringing any visible push towards democratization in examples such as China. The main argument of this essay is that this friction between political and economic liberalism is the biggest internal threat to political liberalism that incorporates modern liberal democracy in our era.

As mentioned, the idea and practice of a society of free individuals working to freely accumulate wealth worked well so far. Now a new reality started to clash with this formula though: growing economic inequality. Income and wealth inequality started to reach such extents that the pie getting bigger started to not translate into their own slice following suit for a growing portion of the society. All over the developed world wealth inequality is increasing (Keeley, 2015), the middle class is disappearing (OECD, 2019), the generational wealth gap is widening, which all lead to the "losers" of the system to look for alternatives outside this ideological umbrella or at the very least consider opinions at its fringes. While the rising economic inequalities belong to the economic liberalism, frustrations created by it are turned towards political liberalism under the umbrella of rising far right³. Starting from the principle that individuals can be judged but societies need to be understood, making normative judgements on masses now flirting with anti-democratic ideologies is not the goal on this essay. Neither is blaming outside forces for funding fringe ideologies inside Western democracies⁴. The very basic intuition is that people do not have a responsibility to actively work against their own interests and political regimes should depend on public consent. Refined a bit, this takes us to the Rawlsian arguments over inequalities that do not benefit the whole population are not justified and people do not have any incentive to legitimize unjustified regimes (Rawls 2005). As the political system starts to lose its legitimacy for those who do not economically benefit from it, social legitimacy of liberal constructs also starts to come to question. Wide reaching in-groups that were created in the modern sense as social constructs by liberalism such as "citizenship" and "humanity" start to lose their meaning as well, being replaced by traditional/primitive tribal identities, strong families and alliances of people who look and talk similarly (Inglehart & Norris 2017). Strong men preaching nativism and protectionism start to gain popularity and fascist ideologies that were thought to be long dead and buried started to rise from their graves, selling their 20th century darkness to brand new audiences displeased with what they have. Or, to restate this argument far more aesthetically than I or Rawls could ever have done, "Food is the first thing, morals follow on" (Brecht 2020, 146).

Inequalities pushed to limits hurt liberal democracies not just indirectly by creating a rallying call against democracy. Economic inequality also directly hurts fundamental liberal democratic rights. In most of the world right now, wages are not rising in tandem with marginal productivity (Mishel 2021), the difference between the two being concentrated in the hands of a small minority who use it to lobby for tax cuts for themselves and carry it to tax havens, in practice lowering taxable income of governments. This results in social spending becoming more and more of a problem for state treasuries, as taxable wealth does not follow the increase in productivity and rising needs of the population, both escalated by technological innovation. We see absurdities like governments around the world racing with each other to

³ For the causation between income inequality and support for far-right movements, see Inglehart & Norris 2017.

⁴ The assumption here isn't necessarily that such outside influences such as Russian help especially for far-right organizations in Europe does not exist - in fact it is clear such attempts do exist (Pabst 2014), but rather that such outside help does not have meaningful results without a likeminded sentiment already existing inside the country as seen in examples such as Iraq and Afghanistan.

increase the age of retirement while rapid productivity increases due to automatization should have resulted in the opposite. Rights to education, healthcare and retirement are under danger. Positive rights/entitlements are universalizable and inseparable from negative rights from a rights-based perspective and ignoring these rights leads to atomism (Steigleder 2017). An atomized society cannot be expected to have a functional democracy which is a regime based on norms as much as it is based on rules and requires a large degree of social cooperation. Moreover, if a political system cannot protect the fundamental rights of its citizens, then it cannot be justified to exist in the first place. In the Global North while the frozen wages are slowly gnawed away by inflation, prices are kept in check by underpaying immigrant workers for cheap services and shifting production to countries with lower wages for cheap products. Neither of those are permanent solutions as immigrants over time start to demand the same rights and wages as the locals and wages eventually increase in the Global South as FDI develops producing countries. Furthermore, economic differences between two groups of people based on their passports creates anger and frustration in both groups leading to ethnic tensions, tendencies for nativism and tribalism. Not only is the current solution ineffective in the long term, but it is also counterproductive.

The assumption that economic and political liberalism are one and the same and the latter does not need any protection against the former lead to a situation where political liberalism is being hurt, challenged and its very existence is threatened by unchecked economic liberalism leading to monopolization and concentration of wealth to the detriment of a large portion of the population in liberal democracies. By rising inequality leading to the whole system losing its legitimacy in the eyes of the masses that are disadvantaged by the crooked relations of distribution, anti-democratic nativist and protectionist ideologies looking for authoritarian strongmen for guidance area rising up. The biggest internal, direct, and indirect, threats towards democracy are stemming from unchecked unregulated neoliberalism. To save liberal democracy, it must be understood not as an extension of economic liberalism, but as a separate regime justified in itself that must be, when necessary, protected against the economic system as well.

References

- **Brecht, B.** (2020) *Collected plays.* (J. Willett & R. Manheim, Eds.). New York: Methuen Drama Bloomsbury.
- **Dryzek, J. S.** (2009) *Deliberative democracy and beyond: Liberals, Critics, Contestations.* Oxford: Oxford University Press.
- Inglehart, R., & Norris, P. (2017) Trump and the populist authoritarian parties: the silent revolution in reverse. In: $Perspectives\ on\ Politics$, 15(2), pp. 443–454, https://doi.org/10.1017/s1537592717000111 (03/04/2022).
- **Keeley, B.** (2015) *Income Inequality: The Gap between Rich and Poor* (Ser. OECD Insights). OECD Publishing.
- **Mishel, L.** (2021, September 2) *Growing inequalities, reflecting growing employer power, have generated a productivity–pay gap since 1979.* Economic Policy Institute.

 https://www.epi.org/blog/growing-inequalities-reflecting-growing-employer-power-have-generated-a-productivity-pay-gap-since-1979-productivity-has-grown-3-5-times-as-much-as-pay-for-the-typical-worker/#:~:text=Productivity%20and%20pay%20once%20climbed,released%20ahead%20of%20Labo r%20Day (03/04/2022).

OECD Centre for Opportunity and Equality (n.d.) *Inequality*. OECD.

 $https://www.oecd.org/social/inequality.htm\#:\sim:text=Income\%20 inequality\%20 in\%200 ECD\%20 countries, seven\%20 times\%2025\%20 years\%20 ago (03/04/2022).$

OECD (2019) Under pressure: The squeezed middle class. OECD Publishing.

Pabst, S. (2014, November 29) *Is the Kremlin financing Europe's right-wing populists? DW:* 29.11.2014. DW.COM.

 $https://www.dw.com/en/is-the-kremlin-financing-europes-right-wing-populists/a-18101352 \\ (03/04/2022).$

Rawls, J. (2005) A theory of justice. Cambridge MA: Harvard University Press.

Steigleder, K. (2017) Deontologische Theorien der Verantwortung. In: L. Heidbrink, C. Langbehn, & J. Loh (Eds.) *Handbuch Verantwortung*. Wiesbaden: Springer VS, pp. 171–188.

Essay on Internal Threats to Democracy

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There is abundant worry in recent and contemporary social and political discourse for Western democracy⁵ and its fortunes: the ubiquitous rise of the xenophobic far right, polarization, climate change, economic malaise, fake news, the pernicious influence of social media, the vulnerability to the rising influence of such autocratic countries as Russia and China. This essay will make the argument that the most fundamental threat to our democracies comes from within, indeed is interconnected with the very structure and history of Western democracy, and for that reason all the more ubiquitous and pernicious. In short, and from the outset, the essay will make the argument that the most disconcerting and fundamental threat to democracy is the inordinate amount of power held by big globalized capital, which deprives the peoples of modern states from any say in deciding economic policy in any meaningful way, and thus from a very important lever in steering our common life and controlling our common fortune. In making this argument we shall draw from the recent history of the 2008 economic crisis and its aftermath, as well as from the phenomenology of the average democratic citizen's political life. In the end, a respectful criticism of the inability of contemporary political philosophy to conceive the problem in its proper dimensions shall be offered, along with a tentative proposal for the necessity of a change in outlook and approach.

If we define democracy, as is commonly done, by breaking the original Greek word *demokratia* ($\delta\eta\mu\omega\kappa\rho\alpha\tau(\alpha)$) in its constitutive parts, demos and kratos, the people and power, it is clear that in such a system of government the people need to be able to collectively wield power over their lives, to steer those parts of their individual lives that are commonly shared towards a collectively decided upon and chosen end. In modern representative democracy this power of collective decision is summarily invested in a limited number of elected representatives for a limited time period during which they might as sovereigns collectively decide upon common ends and means. After the end of the Cold War and the collapse of communist regimes, it was reckoned that this sort of liberal democracy had triumphed, and we had reached what Francis Fukuyama famously termed 'the end of history'. The unprecedented welfare and prosperity experienced in democratic polities served to underwrite such a conclusion. All these certainties were irrevocably shaken during the 2008 economic crisis, when, due to the lack of regulation and to the impressively reckless practices of the banking and financial system of the USA and Europe, global economy faced the biggest collapse since the Great Depression of 1929. The crisis was mitigated, short of complete catastrophe, by government

⁵ The adjective 'Western' seeks to denote the variant of liberal, representative democracy that has been the staple of modernity in the West, but by no means the only conceivable or even valid form of democracy.

⁶ Even though contemporary political philosophy has at length developed and explicated theories of democracy that criticize the prevailing representative system as too anaemic and thin, proposing instead the institution of participatory and deliberative procedures of varying degrees which would involve larger and larger segments of the democratic people, the present argument will be that even such an anaemic form of democracy cannot operate in contemporary economic conditions.

bailouts⁷, funded by taxpayers' money, which were handed out to the predominantly responsible for the crisis, banks so that they would not default, spelling doom for the whole economy.

What this experience brought to the fore was that in modern (or postmodern?) oligopolistic and globalized capitalist economy, there are certain institutions and companies that are simply too big to fail. If, indeed, in these dire times, the banks that were responsible for the crisis were left unaided and had defaulted, the repercussions for the average citizen would be much more crushing than the result. This means, in direct terms, that big capital is very able to hold the democratic people hostage to its demands. But their very size, banks, financial institutions, and other big capital companies can demand a handout anytime they are in dire straits, even when the situation is of their very own doing. And the taxpayers are forced to oblige them, if they do not want to face unprecedented poverty and economic destruction. That means that, in the end, democratic citizens are not really in control of their state's economic policy. Besides the natural constraint they face because of scarcity or resources, this scarcity is even more significant because they have to prioritize the salvation of big capital which has become essential for the salvation of the wider economy. Caring for the unemployed, the poor and all that faced the fallout of the economic crisis, necessarily comes as a second consideration, an afterthought. What is even more problematic is that no government control over the bailed-out banks was retained. It was essential that they continued to administer themselves even though it was that very administration that led to their crash. The people became in essence non-voting stockholders of large financial institutions that in a very real sense held their fates in their hands. It was a game where big capital held all the cards and there was no other way but capitulation to its demands.

This historical experience is of course just one facet of the underlying problem. The 2008 crisis was - more or less - resolved, global economy is back on its path to growth and states have adapted and supplemented the previous lack of regulation of the financial sector. But the fact remains that there are certain private companies that retain the characteristic of being too big to fail. Our modern growth and consumption paradigm requires their existence. Oligopolistic capitalism, far from the sort that Adam Smith envisioned in his Wealth of Nations, is a necessary precondition for the most efficient production of a wide range of consumer goods. We can indeed not imagine the existence of small, neighbourhood automobile or energy industries. Such enterprises require, if they are ever to be profitable, such immense investment that they would never even be contemplated in small- or middle-scale terms. The same goes of course for those banks and financial institutions that lend to those big capital players.

One might very well wonder why this poses a problem to democracy. After all, a large share of our prosperity stems from these big companies' operations. The structural problem of our democracies is exactly that we have invested too much of our lives on a few big players

equally crippling austerity programs that were politically negotiated with the European countries that were their

new creditors.

⁷ This happened in the US with the 2008 Emergency Economic Stabilization Act as well as in Germany and France in 2008. Various European countries, such as Ireland, Cyprus, and Greece, followed in the context of the European debt crisis, with bailout money given both to domestic banks and indirectly to international banks to which those countries were indebted. European taxpayers' money was essentially used to buy the unbuyable Irish, Greek etc. bonds that had irresponsibly and speculatively been bought by international banks. These countries thus lost the ability to default on their massive debt, which would cripple these international banks in question, having to accept

of the economic system. This ensures that we are hostage to their preferences in a much more significant way than being simply obliged to bail them out in times of crisis. The peoples of modern democratic states are completely unable to devise any meaningful program of combatting inequality and enforcing distributive justice or to seriously contemplate any change of economic system. Any measure against inequality that would incorporate a significant redistributive element is doomed to fail from the outset. In a globalized world we cannot severely tax big capital in order to redistribute part of its profit to the worst-off and try to close the inequality gap, since with any such attempt of the democratic people big capital is ready to flee the taxing state, if it doesn't already have its holdings in a different jurisdiction. Even worse, our modern growth and consumption paradigm⁸ requires that the big capital remains in our state and gives us employment and a limited amount of taxes and that it continuously innovates and expands its production output. Even if we assume a benevolent capitalist who decided against fleeing the taxing state and participate in the great redistribution, they would most definitely be deterred from further investing in innovation and our economies would stagnate. Democratic citizens are then in a deadlock: any meaningful redistributive policy is off the table.

This is empirically corroborated by the universal corrosion and retreat of the welfare state in the West. Ever since the collapse of communism, the spectre of which was maybe the most significant impetus for the proliferation of social welfare in western states, we have seen a backtracking in very basic social rights and benefits. This escalated during the 2008 economic crisis, where some countries, such as Greece, Spain and Portugal, saw a sweeping deregulation of their labour rights and social welfare systems, resulting in something unseen ever since the 1970s. This complete inability for any meaningful change has also led the traditional centre-right and centre-left parties that alternated in power in Western countries ever since the end of World War II into adopting more and more similar policies, trying desperately to fit their deviating political programs into the asphyxiating frame of there-is-no-alternative economic policy. It can be even more pronounced when the body politic elects a radical left party, such as Syriza in the 2015 Greek elections, which in the end cannot but enforce policies even more anti-social that its right-wing predecessor. This brings us to the phenomenology of powerlessness and meaninglessness faced by the democratic citizen and voter who recognize more and more that their input into the political process has absolutely no impact. The citizen's moral autonomy then is curtailed insofar as they can no longer actually contribute to democratic decision-making⁹. Their power is constrained by a political elite which is in turn constrained by the necessities of the modern economic paradigm which exists in service and in need of big capital.

The voter then either becomes apolitical or decides to support extremist parties, most commonly of the far right, sometimes of the far left, which, when elected cannot enforce any meaningful change either, but are equally constrained by the systemic necessities and are also probably aware of the fact, wishing only to enter a political elite that is, in terms of power, at least better-off than the average citizen and voter. Citizens, in trying to repress the fact that

⁸ This very economic paradigm is of course not unconnected also with climate change and all its results.

⁹ Of course, this is not absolute, but a very significant sector, that of basic economic policy and social structuring, is closed to the citizen's influence.

they share no part in democratic self-governance, fall prey to populist demagogues, are polarized and become vulnerable to fake news and hollow anti-establishment rhetoric. The erosion of the democratic ethos follows the erosion of actual democratic power and leads to a time when the loss of democracy will not even be lamented by the populace.

What is the place of political philosophy in this whole hopeless-looking affair? Ever since its revival in the 1970s analytical political philosophy has not been at all frugal in proposing theories of equality and distributive justice. Whether it is Rawls' difference principle, Dworkin's equality of resources, Sen's and Nussbaum's capabilities approach or any other formulation of distributive justice, the problem of inequality and the demand for equality have been placed in the centre of contemporary liberal political philosophy. The problem is though that none of these philosophers' important theories could ever find a meaningful democratic enforcement in the context of the modern economic paradigm of dependence on big capital. This is the step political philosophers have been very reluctant to take: the realization that at the bottom of socioeconomic inequality lies an inequality of power, the criticism of the prevailing economic system and its myriad discontents. Fortunately, much groundwork for this purpose has been laid down by continental philosophy and critical theory, focusing also on the harmful consequences of the prevailing economic system on the individual's psychological and social wellbeing. What is here proposed then is by no means a solution but at most a research program: a reconnection of analytical political philosophy, with its clear, distinct, and conceptually robust ideas about equality, freedom, and democracy, with its continental and critical-theoretical cousin, which has developed extensive critiques of prevailing social and economic conditions. Political philosophy must rise to the task of reconnecting with current affairs and situations, of offering concrete solutions to concrete problems, of changing its outlook to include interdisciplinarity and critique. After all, political philosophers are, no less and very possibly more than the average democratic citizen, obliged to safeguard democracy against internal threats, wherever they might come from.

A Threat from the Inside: The Appointment of Judges of the Peruvian Constitutional Court

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In 2019, a questionable appointment of judges of the Constitutional Court in the Congress is shut down by a manoeuvre of Martin Vizcarra, then President of Peru. The incident ends with the dissolution of the Congress. Later in 2020, with a new congress installed, another controversial designation process starts. A lawyer requests an ordinary judge to order the halt the election; a preventive measure is issued, and the process is cut off on an early stage. Recently, on 11th May 2022, a newly elected congress gives it another try and, after a suspicious balloting without debate, six new magistrates are appointed to replace the ones with expired tenure. In this essay I will argue that the recent appointment is a threat to the Peruvian democracy and, more importantly, that its source is the Peruvian legal system itself, whose deficiencies render any designation process of the Constitutional Court's judges vulnerable to democratic illegitimacy.

Interpreting the constitution consists of more than simply clarifying the meaning of its text, drafted in general clauses. The essence of interpretation is its normative nature: the interpreter pours convictions and values on the text and weaves them into a reading that accords with a political conception of the best constitutional practice for a state. This normative dimension of constitutional interpretation can be recognized at least in two respects when, for instance, out of a single constitutional text a court can interpret the ban of abortion, in opposition to the former court that understood its permissibility. On the one hand, to modify an interpretation is to arrogate to oneself the correctness of an understanding of the constitutional norm under analysis. On the other hand, and more importantly, a renewed interpretation of a provision imprints a political conception on the constitutional practice.

Although the text may not vary in a single comma, with two opposing interpretations on controversial issues like the one of abortion one can speak, in a broad sense, of two different constitutions put in practice. Therefore, in reality, constitutional interpretation may have a foundational character comparable to constitutional amendment: it can go beyond the text. It is an active review and reconfiguration of the bases of a political community. Constitutional interpretation is in this sense a task of deliberation of essential political matters. Of course, with this representation I do not intend to uphold that the interpreter acts as a constituent power, whose only limit is its own will. It is undeniable that constitutional interpretation cannot tend to distort the text or water it down with capricious readings, but it can expand it considerably, for better or for worse.

In Peru, the constitution can be interpreted by virtually all governmental bodies and, of course, by the citizens themselves. By way of example, the mere parliamentary discussion

¹⁰ The Congress gave no justification for the decision. See Centro de Noticias del Congreso. (2022).

about the constitutional adequacy of a bill, or the enactment of a so-called law of constitutional development¹¹ are in themselves interpretative exercises. Likewise, the claim of unconstitutionality that citizens can file against laws¹² presupposes interpretation. However, the last word on the meaning and scope of constitutional norms is held by the Constitutional Court¹³. This attribution, without constituting an impediment to critical judgment and deliberation, represents a delegation, and thus a restriction, of the power to carry out and enforce normative judgments of the highest relevance in political life. Somehow, to delegate the power of constitutional interpretation amounts to a partial up giving of public reason about fundamental issues.

Clearly, in a democracy such an entrustment must be consistent with the value of public justification. That implies, among other things, that the appointment of the judges ought to comply with high technical and ethical conditions, and that the process must enable the greatest transparency and controllability possible. It is worth noting that the decisions of a constitutional court, apart from being of the highest hierarchy within a state, are not constantly checked by the citizens. In reality, decisions encompass so high a degree of technicality that they must be generally assumed to meet the standards of public justification. Actually, that a decision by a constitutional court must be revisited would be a bad symptom. What is required, then, is that the delegate of public reason be justified in his holding the position.

The Peruvian Constitution has two normative provisions directly related to the public justification of the appointment the Constitutional Court judges. First, the eligibility criteria for a constitutional magistrate are the same as those that apply to aspiring supreme judges¹⁴, ensuring a minimum of expertise to conduct legal trials and make relevant decisions. Second, magistrates are appointed by an absolute majority vote by the Congress¹⁵. While criticism can be posed regarding the suitability of such a political and partisan body as the congress to carry out the designation, the idea behind the rule is that the congress, being elected by direct vote and composed of several political parties, exercises the legitimate representation of the people, and can imprint its legitimacy on the court. As that rationale is of undoubtful democratic spirit, it is in principle possible to attain public justification of the appointment process.

However, a realistic account of parliamentary politics must note that partisan interests, lobbies, and mere ineptitude can result in designations with low or null public justifiability. It may well occur that parliamentarians vote in favour of the election of a magistrate claiming that she has merits, but in reality, they be moved by surreptitious interests. Of course, pointing out such duplicity in a parliamentarian's reasons is difficult, but there must be the possibility of evaluating them as exhaustively as possible. In this regard, the Peruvian legal system is not fully unregulated. The appointment process begins with a call for candidatures, is followed by a relatively controllable evaluation conducted by a special parliamentary commission and concludes with the vote of in the plenary¹⁶. There are also rules that avoid partisanship. For

¹¹ A law that specifies a constitutional provision.

¹² Constitutional Assembly (1992); Political Constitution of Peru (1993) Article 202.

¹³ Ihid

¹⁴ Constitutional Assembly (1992); Political Constitution of Peru (1993) Article 202.

¹⁵ Ibid.

¹⁶ Congress of the Republic of Peru (2021) Legislative ordinance N° 001-2021-2022-CR.

instance, eligibility prerequires resigning partisan militance 17 . Furthermore, the selection process is part of a regulated public competition, with technical criteria for scoring, and so forth 18 . In addition, the list of applicants is published and there is a period for objecting candidatures practicable by virtually all citizens.

Beyond the objections that could be raised against the efficacy of the control mechanisms of the evaluation phase, there is a fundamental juridical flaw regarding the final and truly decisive stage: the vote. Before presenting the argument, two preliminary clarifications are in order. It is worth noting, first, that the transparency requirement is not met if the reasons for the appointment are not permanently accessible. Reasons are truly accessible if there is at least the possibility of hearing them from the parliamentarians themselves. Secondly, there must be an independent mediator who transmits the parliamentarians' reasons in such a way that citizens can assess and evaluate them beyond technicism; this is, a free press. Only from a dishonest view on the knowledge of the average, lay citizen could it be said that it suffices to publish the technical guiding criteria for the evaluation and then proceed to vote. All the more considering that technical criteria are only requirements for eligibility that display with independence of each congressman's reasons for electing them. After all, each may have good political reasons to refuse a high-scoring candidate. Individual reasons are thus owed to the public.

That said, the Peruvian legal system lacks a provision for forcing congressmen to carry out a public and transparent vote. In consequence, true accessibility and, in turn, public justification of the appointment of constitutional magistrates, cannot be warranted. Quite the contrary, it can be agreed that the vote is secret and even worse, that it takes place without a proper open debate¹⁹. Moreover, according to the Constitution itself, parliamentarian vote cannot be questioned or turned into a reason to hold congressmen accountable²⁰. The congressional vote is almost sacred within the Peruvian constitutional framework. Consequently, there is no way to question the agreement of parliamentarians (by their vote) to vote on the election of judges of the constitutional court without prior debate. The Congress can decide to go against the spirit of any parliament: discussion. But even more dangerous, it can deprive the public of reasons.

Without a pre-voting debate, citizens cannot apprehend which reasons were considered for appointing tribunes. Forgoing the debate on such a relevant issue is an unacceptable secrecy for a democracy. It is not enough that, after a review of the profiles of each elected magistrate, it can be concluded that there could be agreeable reasons in favour of the appointment. It is necessary to know if the actual reasons of those who make the choice are agreeable. If a man scratches his finger because he thinks that another finger will pop out, his act is not rational just because the observer believes that he scratches to relieve his itching. Therefore, only the actual reasons for choosing a judge are those that count when evaluating the acceptability of the designation. It need not be said that without debate there is no mediator to talk about. Secrecy violates also press liberty.

 $^{^{17}}$ Congress of the Republic of Peru (2004) Law N° 28301, article 12.

¹⁸ Congress of the Republic of Peru (2021) Legislative ordinance N° 001-2021-2022-CR.

 $^{^{19}}$ Congress of the Republic of Peru (2021) Legislative ordinance N° 007-2021-2022-CR, article 57.

²⁰ Constitutional Assembly (1992); Political Constitution of Peru (1993) Article 93.

To make matters worse, once the voting process is concluded and the constitutional judges are appointed, there is no legal means to question or overrule the decision. The judges of the court cannot be removed from office except for incurring some cause of vacancy or for being constitutionally accused²¹. Moreover, the court's decisions and actions, including the taking of the oath of newly appointed magistrates, are not subject to any kind of judicial control or to the order of any other governmental authority ²². That is, the appointment of the six judges that took place on 11th May 2022 in Peru is not only inadmissibly secret but also irreversible. Virtually, the only possibility for turning over the appointment within the boundaries of the Peruvian Constitution would be a decision by the Constitutional Court itself in an unprecedented constitutional interpretation. Hilariously improbable.

In conclusion, there are deficiencies in the Peruvian legal system that hinders the public justification of the appointment process of the Constitutional Court's judges, because it makes the accessibility of the reasons for appointing them inadmissibly dependent on the will of the parliamentarians. The fact that constitutional interpretation, a partial delegation of the exercise of public reason, is unjustifiably held by judges renders its normative character illegitimate and hurts a democracy. Peruvian democracy is threatened from the inside.

References

Centro de Noticias del Congreso (2022) Comisión Especial del TC informa que proceso de selección de magistrados fue transparente y público, https://bit.ly/3Pr2pBF (13/05/2022).

Congress of the Republic of Peru (2004) Law N° 28301, article 12.

Congress of the Republic of Peru (2004) Law N° 28301, article 16.

Congress of the Republic of Peru (2021) Legislative ordinance N° 001-2021-2022-CR.

Congress of the Republic of Peru (2021) Legislative ordinance N° 007-2021-2022-CR, article 57.

Constitutional Assembly (1992) Article 202.

Political Constitution of Peru (1993) *Article 93 and article 202.*

²¹ Congress of the Republic of Peru (2004) Law N° 28301, article 16.

 $^{^{22}}$ Constitutional Assembly (1992); Political Constitution of Peru (1993) *Article 93*, concordant with article 14 of the Law N° 28301, Congress of the Republic of Peru (2004).

Feasibility of a Fair Carbon Tax Scheme

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1 Introduction

For decades climate change is considered the greatest challenge nature and humanity have to face. There is no doubt that without a change in our current system the global temperature will rise, followed by natural catastrophes, death of humans and animals resulting in political disasters. To tackle this global problem many possible solutions have been discussed. The approaches differ not only among experts but also have altered over time. When it became clear that climate change needs to be mitigated, the early-stage debate was mostly about the fair distribution of emissions per period. In 2007, scientists revealed that carbon dioxide in the atmosphere degrades really slowly. Until then, not the additional carbon dioxide per period, but the cumulative amount of carbon in the atmosphere mattered. It became obvious that a transition to a non-carbon energy regime is an indispensable step in order to fight climate change. Therefore, the current question of climate justice is not about the fair distribution of emissions anymore, it considers who has to take over responsibility for the transition to a non-carbon energy regime (Shue 2014, 50-52).

But not only the normative questions of climate change need to be considered by ethicists, politicians all over the world debate about the right political instruments to induce carbon mitigation. As an essential piece of climate policy carbon taxation is one of the most discussed political instruments to address climate change. In his writing *Carbon Taxes and Economic Inequality* Shi-Ling Hsu calls carbon taxation the "policy keystone" (Hsu 2021, 4) for mitigation and states that a transition to a non-carbon economy "will not happen without a carbon price" (ibid). In contrast, Lukas Tank claims in *The Unfair Burdens Argument Against Carbon Pricing* that "the most politically relevant forms of carbon pricing should be considered unfair" (Tank 2020, 612. In addition, Tank argues that all forms of carbon pricing that include fair burdensharing are not feasible (ibid, 624).

Therefore, this essay aims to examine whether carbon taxation is a fair and feasible instrument to address climate change or not. To be more specific, the following writing deals with two questions: Can a carbon tax be considered fair? And is a fair carbon tax scheme feasible? The first chapter defines "fairness" in the context of this essay. As part of the definition, the link between climate change and increasing inequality as well as the most crucial principles of burden-sharing justice are pointed out. The following chapter refers to the question of whether a carbon tax can be considered fair or not. Being more specific, it examines if a carbon tax has a progressive distributional effect and is environmentally effective. After that, a rough description of how such a fair carbon tax scheme could be designed is given. The fourth chapter discusses the feasibility of this outlined scheme. Lastly, the conclusion summarizes the most important points and answers the mentioned guiding questions.

Through this short introduction, it becomes clear that the scope of this writing is extremely limited. While this essay only focuses on the impact of a carbon tax within a country, carbon

pricing is a wide topic that needs to be considered on an international level as well. Also, topics like the consequences of climate change or economic inequality are discussed from a national point of view. In addition, it is a consensus among scientists and politicians that a carbon tax alone is not a sufficient political instrument to reduce emissions. Even supporters like Hsu admit that a carbon tax always needs to be part of a broader approach (Tank 2020, 613). The last limitation that should be pointed out is that the whole field of climate justice expands the short introduction given as part of this writing. Besides principles of burden-sharing, avoiding harm justice or intergenerational justice are important aspects that cannot be further considered.

2 Definition of Fairness

The question of fairness and justice underlies almost all ethical debates, including this writing. Before implementing a political instrument, it needs to be examined if this investigation can be considered fair. Not only about society in general, but also regarding different kinds of social groups. Society can be divided in many groups, for example according to gender, age, race, or ethnicity. All of them are affected differently by political actions. As part of this writing, the differentiation of social groups by income plays a major role. Not only considering the followings of climate change and its specific harm to low-income groups, but also discussing the implementation of a carbon tax and the burdening of less affluent households. The definition of a fair carbon tax that is given at the end of this chapter especially refers to social justice in terms of income inequality.

2.1 Burdens of Climate Change

The direct followings of climate change, emission mitigation and adaption bring numerous consequences with them that burden individuals on many levels. First, it is necessary to have a look at the direct sufferings from climate change. Namely, rise in temperature, air pollution and natural disasters like floods, erosion, salinity, and mudslides that lead to the death of humans and animals (Hsu 2021, 2). Needless to say, that the effects of climate change harm our earth and humanity in general. But the direct sufferings from climate change are spread unevenly. Less affluent and disadvantaged groups are more affected by adverse followings of climate change than affluent groups (Islam & Winkel 2017, 2). One reason for this is that poor individuals often live in areas that are particularly vulnerable to climate change because they cannot effort to live in safer districts. This applies to rural regions where less affluent people are more likely to live in coastal areas as well as in urban regions where slums are often located in low-lying areas. Due to this, low-income groups are more frequently subject to natural hazards than high-income groups (ibid, 12-13). In addition, a high proportion of less affluent groups are living in extremely dry areas and are often dependent on agricultural production. Therefore, the same problem can be named in the context of greater exposure to drought, heatwaves, and water scarcity (ibid, 14).

Moreover, low-income groups do not only have to deal with a higher level of exposure but also are generally more susceptible to damage from climate hazards (ibid, 15). For example,

imagine less affluent and affluent groups would be hit by the same heatwave. The poor individuals would be harmed more intensively because they have fewer adaptation possibilities. It is more comfortable to deal with immense heat if one is working in an air-conditioned office, whereas less affluent are more likely to work outside, lack access to air-conditioning and cool spaces (Hsu 2021, 2-3). Additionally, droughts lead to water and food shortage resulting in the abbroachement of water rights by the rich. Rising prices for water and food and allocating essential resources through market forces hurt especially the poor (ibid, 3). Moreover, health issues can be named as a following from air pollution. Due to missing health insurance in some countries and a lack of access to expensive medicine, less affluent people suffer the most from diseases. Another important aspect to mention is how climate change affects certain groups in the long run. Due to fewer resources and missing insurance poor groups recover really slow from the adverse impacts of climate change. Because of the slower recovering rate from climate change hazards, less affluent groups are burdened for a longer time period than the affluent (Islam & Winkel 2021, 19).

Besides the direct and indirect effects of climate change, a frequently discussed burden caused by climate change is the financial burden of mitigation and adaptation. The costs of ending climate change are estimated between \$300 billion and \$15 trillion (Adler 2021, 1). Some reasons why climate change mitigation is that costly will be given in the following. First, prevention of destruction through natural hazards and construction measures after such a catastrophe are really expensive. Secondly, a transition to a non-carbon regime needs great investments in non-fossil energy sources like renewable energy. And third, a huge sum of money needs to be spent on CO_2 -reducing technologies and other mitigation instruments. Especially companies and emitting industries need to make immense and costly adjustments which could harm economic growth.

However, climate change mitigation and adaptation burdens not only companies but also individuals. For example, pricing carbon is a needed step to initiate a transition to a non-carbon regime leading to higher prices for carbon-intensive goods because companies could pass on the costs to the consumers resulting in a high financial burden for individuals. Especially, energy and fuel prices are affected by such a tax. Only having a look at the pricing itself, poor individuals have to shoulder a bigger burden due to carbon pricing because they spend a bigger share of their budget on carbon-intensive goods (Hsu 2021, 10).²³ Even if the named examples are only a small extract of the financial followings of climate change, they are sufficient to outline the extent of the monetary burden linked to mitigation and adaptation efforts. These burdens must not only be shouldered by companies, but also by individuals, inter alia the poor.

Having a look at the burdens of climate change and their uneven distribution it becomes clear that climate change and social inequality are closely linked. Besides environmental followings, the exacerbation of inequality can be seen as one of the most troubling consequences of climate change (Hsu 2021, 2). Putting this in the light of economic justice it becomes more than obvious that climate change needs to be arrested as much as possible (ibid, 3). Applying this to the definition of fairness discussed in the scope of this essay, it can be concluded that a fair carbon tax needs to be effective to reduce climate change. Not only considering economic justice but

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²³ See also Klenert, D. & Mattauch, L. (2015), p. 101.

also referring to climate justice. The principles of climate justice which show that it is extremely unfair that especially the poor suffer from the followings of climate change and have to shoulder the burdens of the problem will be outlined in the following chapter.

2.2 Principles of Burden-Sharing

As clearly outlined in the previous chapter, climate change caused an immense burden that goes beyond the monetary dimension. It also became clear that less affluent are affected stronger by the followings of climate change than affluent individuals leading to an increase in inequality. According to typical principles of justice, this can be considered unfair, and it is obvious that the harm of climate change needs to be reduced. How the burden of combating the problem should be shared fairly among the duty-bearers, is one of the most discussed questions in climate justice. Referring to pricing carbon and the implementation of a carbon tax explicitly, Tank argues as part of his *Unfair Burdens Argument* that: "If a carbon mitigation policy burdens more affluent individuals less than less affluent individuals, it is unfair." (Tank 2020, 613) He substantiates this argumentation with three well-known principles of climate justice that concern the distribution of the burden of climate change. Although burden-sharing justice is not the only important part of climate justice and philosophers like Simon Caney called this approach "atomist" and "isolationist", this essay only refers to principles of climate justice that concern the distribution of responsibilities in solving a particular problem (Caney 2012, 260).²⁴

The first principle that can be named is the Polluter Pay Principle (PPP). Roser and Seidel define the PPP in the following way: "A distributive principle according to which agents should bear the burdens of addressing a problem in proportion to their contribution to causing the problem." (Roser & Seidel 2017, 225)²⁵ Putting it in other words, the PPP says that those who had a bigger share in creating the problem of climate change should bear a bigger share of the burden. Now, having a look at emissions caused by different income groups, it becomes clear that the PPP supports Tank's statement that the less affluent should not be burdened more than the affluent. The richest 10 per cent of individuals are responsible for half the global emissions (Tank 2020, 617-618). Therefore, according to the PPP it is obvious that the richest have to bear the biggest burden.

In literature, no strong opinion against applying the PPP can be found. Only some critics claim that this principle should be combined with other principles of burden-sharing justice, for example, the Beneficiary Pay Principle (BPP) (ibid, 619). This approach can be used to substantiate Tank's argumentation as well. The BPP says that "The countries benefiting the most from greenhouse emitting activities in the past bear the greatest responsibility of climate justice." (Page 2008, 562)

In opposite to the PPP, the BPP refers to the effects of emissions, rather than to the causes of the problem. On a global level, the rich countries benefited the most from emissions, for example, through economic growth and increasing wealth. But this principle cannot only be

²⁴ Quoted by Tank, L. (2020), p. 613.

²⁵ Quoted by Tank, L. (2020), p. 619.

²⁶ See also Millward-Hopkins, J. & Oswald, Y. (2021), p. 2.

applied to burden-sharing among countries, it can also be applied within countries. On an individual level, the BPP holds the view that the poor should be less burdened than the rich because they did not benefit from emissions linked to economic wealth as much as the affluent did (ibid). Those individuals who benefited most from emissions have to bear a proportional burden.

The third principle Tank names to support his reasoning is the Ability to Pay Principle (APP). In general, ability is often defined in a monetary way like Henry Shue states: "Among a number of parties, all of whom are bound to contribute to some endeavour, the parties who have the most resources should contribute the most to the endeavour." (Shue 1999, 537)²⁷ In this sense, it is needless to say that higher-income groups have a higher ability to pay than low-income groups.

But as Tank argues the term ability is not only about resources and money, rather it is about excess capacity (ibid). It is not only necessary to ask who has the greatest ability to pay the price, it is also necessary to ask who has the greatest capacity to bear the burden of climate change mitigation. Obviously, the answer is not "the poor".

Having a look at the effect of a price increase caused by instruments to reduce emissions, it becomes clear that the poor's well-being is threatened more than the rich's. Higher prices lead to the necessity of lifestyle changes because people can no longer afford their previous lifestyles. Problematically, the poor cannot substitute the products as easily as the rich. Also, the types of goods different income groups have to cut out differ from each other. While more affluent might have to cut out the second holiday in a year or have to switch from a sports car to a less emitting model, poor individuals might not be able to buy basic goods like food or shelter anymore. Therefore, what affluent people lose can be considered as less important for a person's well-being than what the less affluent lose. Being not able to satisfy basic needs can be seen as a bigger burden than not being able to maintain a luxurious lifestyle.

Consequently, it can be argued that the rich not only have more resources and, therefore, the ability to bear the burden of climate change mitigation, they also have the higher capacity to deal with this burden in terms of substitution and adaption to the price increase (Tank 2020, 616). Applying the APP to a carbon tax, it says that the affluent should not shoulder a smaller burden than the less affluent in a monetary sense. But it is also important to make sure that the burden the poor have to bear is bearable for them beyond the financial aspect.

All in all, there is no single principle or approach at present that identifies less affluent individuals as the entities that should shoulder the burden of mitigation and adaptation (Page 2008, 573). Because a carbon tax itself without having a look at the use of revenue burdens the less affluent more than the affluent, a fair carbon tax scheme needs to be designed in the way that the poor get compensated so that they, firstly, not bear a bigger burden than the rich, and, secondly, can shoulder the burden of a carbon tax. A tax scheme that forces higher-income groups to pay more than the low-income groups is called progressive. But as Tank points out in his writing, a fair carbon tax scheme does not only mean that the rich have to pay a higher amount of money. Rather, it needs to be progressive in the way that the poor have the make smaller lifestyle changes than the rich (Tank 2020, 623).

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²⁷ Quoted by Page, E. A. (2008), p. 561.

To sum the whole chapter and the definition of fairness as part of this essay up, a fair carbon tax scheme needs to meet two aspects: First, it has the be environmentally efficient because climate changes and its followings itself lead to increasing inequality and burdens the less affluent more than the affluent due to certain circumstances. And second, it has to be a progressive carbon tax that compensates the less affluent in the way that they are able to bear the burden of increasing prices and have to make fewer changes in behaviour than the rich. In the end, the less affluent need to be less burdened than the affluent by a carbon tax because they did contribute to pollution in a smaller proportion, benefited less from emissions and have a smaller ability to shoulder the burdens of climate change mitigation and adaption. How a scheme has to be designed to meet the stated criteria is part of chapter three.

3. A Fair Carbon Tax Scheme

Before examining if a carbon tax scheme can be progressive and environmentally effective, it is necessary to give a short introduction about the functionalities of a carbon tax. In general, a carbon tax can be described as the following:

"A carbon tax is a tax levied on one or several greenhouse gas (GHG) emissions associated with the combustion of fossil fuels (...) that aims to internalize the cost of the externalities into the market price in order to achieve a reduction in GHG emissions and hence to mitigate climate change." (Wang et al. 2016, 1123)

In other words, a fixed price of carbon dioxide per ton is set by a central authority. This leads to a price increase of carbon-intensive goods resulting in a change in consumer behaviour. The payments in form of a tax generate revenue for the central authority which can be spent differently (Tank 2020, 614). In practice, many variations of carbon taxation exist. They differ in who the taxpayers are, what the basis of the tax is, the size of the tax rate, when the tax is imposed, the use of the revenues and the enforcement of the tax (Wand et al. 2016, 1125). Because a detailed design of a carbon tax scheme needs to consider many regional factors, this chapter gives only a rough overview of some aspects that need to be taken into account implementing a fair carbon tax scheme.

3.1 Progressiveness

Even though a carbon tax is known as an efficient instrument to mitigate climate change, many countries hesitate to implement such a tax. Much resistance against carbon pricing arises from the concern that it has "regressive distributional effects in terms of income or consumers' purchasing power" (Baranzini et al. 2017, 7). Many people fear that due to higher prices low-income households get more burdened than high-income households. One reason for this is the fact that less affluent people spend a larger fraction of their budget on fossil fuel-intensive energy than affluent households (Hsu 2021, 10).²⁸ With a rise in energy prices especially poor households would be hurt. Studies show that this concern is justified, especially taxes on domestic energy caused an overall weak regressive effect in European countries that implemented the tax (Baranzini et al. 2000, 405). Even Hsu admits as part of this writing that a carbon tax without revenue recycling makes poor households worse off (Hsu

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²⁸ See also Klenert, D. & Mattauch, L. (2015), p. 101.

2021, 12). But Hsu also argues that well-designed recycling of the revenues should be able to outweigh the economic harm from higher energy prices and lead, in the end, to a progressive distributional effect (ibid, 10).

Two options of relieving the poor from the burden of a carbon tax exist: First, ex-ante approaches that disburden vulnerable groups through lower tax rates or exemptions. Secondly, ex-post approaches that compensate vulnerable groups by reducing other distortionary taxes or transfer payments coming from the general national budget or more specifically from the revenue generated by the carbon tax itself (Wang et al. 2016, 1125). Because the latter is more frequently used in practice to reach a progressive distributional effect, the further examination will focus on different designs of revenue recycling and its distributional impact.

As in the introduction of this chapter shortly shown, the design of a carbon tax scheme includes numerous factors. Therefore, carbon tax systems differ from country to country. Even only considering revenue recycling many approaches exist. As part of this essay, the different revenue recycling schemes are categorized into three types: The first one is called "fiscal reform". In this case, the revenues become part of the overall national budget and are used to decrease other taxes, for example, labour, property, personal or corporate income taxation. In the end, the national budget remains the same and taxation is shifted from economic "goods" to environmental "bads". The second approach, named "earmarked", uses revenues to finance environmental programs. For example, research and development activities to reduce emissions, infrastructure programs to expand renewables or other environmental projects. Lastly, the revenues can be used to compensate those who are most affected by the tax. With the "compensation measures" carbon tax proceeds get returned to households on a lump-sum or modified per-person basis (Hsu 2021, 13).³⁰

Every carbon tax scheme brings its advantages and disadvantages with it. While reducing corporate income tax or the tax on capital would lead to the highest economic growth, fiscal reforms are less favourable in compensating the poor because the affluent owners of firms and capital would benefit from the revenues the most (ibid, 13 and 16). The same holds for the second type of revenue recycling. Investments in environmental programs might be most effective to reduce emissions, nevertheless, they have a regressive impact as well (Baranzini et al. 2000, 400-401).

Depending on the study and the local circumstances of different countries, slightly different recommendations for implementing a carbon tax scheme are given. But all experts and studies agree on one fact: Aiming a progressive effect of a carbon tax the lump-sum scheme is the most effective type of revenue recycling. To be more specific, a uniform lump-sum scheme is recommended by most experts (Baranzini et al. 2017, 7).³¹ While poorer households spend a higher share of their budgets on carbon-intensive products, the total costs of richer households are higher. Consequently, a uniform lump-sum payment would be higher than the costs of poor households for energy and lower than the costs of rich households. By this per-

²⁹ See also Tank, L. (2020), p. 622.

³⁰ See also Baranzini, A., et. al. (2000), p. 400.

³¹ See also Hsu, S. (2021), p. 13. and Fried, S., Novan, K. & William, B. P. (2016), p. 6.

person or per-household payment less affluent would be overcompensated and more affluent undercompensated resulting in a redistributive effect. Implementing a carbon tax of \$30 per ton, "households in the three lowest quintiles of income would, on average, be better off" (Hsu 2021, 13). But it is necessary to underline the term "on average". With no system, every single individual can be insulated from the burden of a carbon tax (ibid).

Additionally, the given studies state that the less affluent get less burdened than the affluent by a uniform lump-sum scheme in a monetary sense. As part of the research in the scope of this essay, there are no studies found which examine the lifestyle changes one have to make due to carbon taxes. Tank argues that

"Take, for instance, a slightly progressive emissions trading scheme that makes the very affluent pay double the price per unit of emissions than the least affluent, with a progressive rise in prices for those in between. This might still result in more affluent people having to make smaller changes in behaviour than less affluent people. As long as wealth is more unevenly distributed than financial burdens under carbon pricing, the more affluent will be burdened less. The fact that a pricing scheme can be considered progressive is therefore not a sufficient condition for it being fair." (Tank 2020, 623)

The statement that the higher the unequal distribution of income in a country, the higher the regressiveness of a carbon tax, can be substantiated by other studies (Andersson & Atkinson 2020, 1).

Nevertheless, the research and already implemented schemes show that a carbon tax scheme with a uniform lump-sum transfer can be considered progressive (Baranzini et al. 2017, 7).³² If the compensation is sufficient to avoid strong lifestyle adjustments of the poor, might depend on the size of the transfer and cannot be further examined as part of this essay. However, the poor likely suffer more from the followings of climate change than from a uniform lump-sum carbon tax. Additionally, there is no doubt that a uniform lump-sum scheme is the most progressive way of implementing a carbon tax. Because climate change increases inequality heavily, a slightly progressive carbon tax that includes some behavioural changes of the poor can be considered acceptable if it is the most effective instrument to reduce climate change and its harmful followings. If this condition is given will be examined in the following section.

3.2 Environmental Effectiveness

Implementing a carbon tax is considered the most efficient way to reduce emissions (Baranzini et al. 2000, 405). But as explained in chapter two, fair climate change mitigation is not about efficiency. First of all, it needs to be effective in reducing the harmful followings of climate change. Therefore, this chapter deals with the question of whether implementing a carbon tax is an environmental effective tool to reduce emissions or not. Being more specific, it examines whether the uniform lump-sum scheme can be considered fair because it is progressive and effective at the same time. What environmental effectiveness means exactly is a debate on its own. To find out if a carbon tax is the most effective way to reduce emissions, all political approaches to climate change mitigation would need to be compared. As part of this essay,

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³² See also Hsu, S. (2021), p. 13. and Fried, S., Novan, K. & William, B. P. (2016), p. 6.

effectiveness means having a significant impact on reducing emissions in comparison to emission reduction without a carbon tax.

Since 1995 many countries introduced a carbon tax from Finland, Poland, Sweden, Norway, Denmark, and Slovenia over Switzerland up to China and South Korea. Besides numerous research modellings and forecasts, some ex-post studies have been conducted (Wang et al. 2016, 1123). One of these studies is the survey of Andersen who analysed twenty Nordic countries that already implemented a carbon tax and compared the result with business-as-usual forecasts. For example, this study shows success in Norway with a reduction in household emissions of 3 to 4 % between 1991 and 1993, a decrease in industrial emissions of 7 % in Denmark between 1991 and 1997 as well as a 9 % decline in emissions in Sweden between 1990 and 2007 (ibid). Having a look at Andersen's results, it becomes clear that a carbon tax can be environmentally effective.

In contrast, an evaluation done by Chinese researchers using the "difference in difference" statistical method showed less promising results. In order to overcome methodological difficulties and correct the data, they compared five countries that already implemented a carbon tax with a control group that did not. Out of these five countries only in one country, a statistically significant emission reduction could be discovered, namely in Finland. In Sweden, the Netherlands and Denmark a decrease in emissions were visible as well but not in such a way that it could have been considered statistically significant (Baranzini et al. 2000, 408).³³

In general, it can be said that discovering the causal link between implementing a carbon tax and a reduction in emissions is really difficult. It is linked with many complexities and methodological difficulties. Also, depending on the countries and implemented schemes the success of a carbon tax differs. Nevertheless, all studies show that implementing a carbon tax scheme can lead to emission reduction and environmental effectiveness. The aim of this section should be to examine the most effective approach. But, comparing different types of a carbon tax to examine the most effective one is proving difficult because the impact of a carbon tax is strongly linked with many regional factors. However, some key success factors of an environmental effective carbon tax can be outlined.

First of all, the size of a carbon tax plays a big role. It ranges from $10\text{-}30\$ per ton of CO_2 which is the most common price range in European countries up to \$130 per ton in Sweden. (Patt 2015, 77) As Anthony Patt explains more detailed in his book *Transforming Energy. Solving Climate Change with Technology Policy*, the price increase caused by a carbon tax aims to lead to a change in consumer behaviour. But due to the low elasticity for carbon-intensive goods like gasoline (-0.31 in the long run), the price has to rise a lot to make a difference. With a carbon tax of \$10 to \$30 per ton, the price increase for gasoline is between 2 and 7 per cent per litre (ibid, 86). Normal price fluctuations are much higher. To be more specific, as high as a tax of \$258 per ton of CO_2 would have been induced (ibid, 80). To cause a significant change in consumer behaviour of 10 per cent demand fall, a carbon tax of minimum \$157 per ton would need to be implemented (ibid, 85-86).

As the comparison between Sweden and Finland shows, the environmental effectiveness of a carbon tax is not only dependent on the price, but also on the question of who has to pay

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³³ See also Patt, A. (2015), p. 78.

the tax. One crucial reason why the carbon tax in Finland is more effective than in Sweden is the small number of firms that are exempt from the tax. In Sweden, many high emitting companies are excluded from paying the carbon tax. The fact that the tax in Finland is more effective than the one in Sweden with a higher tax rate shows that the number of involved companies can make a huge difference in terms of effectiveness (Patt 2015, 78).

The same reasoning can be applied to households and individuals. A uniform lump-sum scheme that prevents low-income groups from lifestyle changes and has a progressive distributional effect might be considered fair in the sense of progressiveness, but it is not the most effective scheme to reduce emissions. If only the rich have to change their behaviour and the less affluent are not touched by lifestyle changes at all, this scheme is really likely to be inefficient in mitigating climate change. Even if not everybody needs to stop emitting, a carbon tax is only environmental successful if the majority of society is influenced by mitigation policy (Tank 2020, 623). This argument can be summarised by a short statement from Tank:

"Using some of the revenue from carbon pricing to refund less affluent people can play a role in a fair and effective carbon pricing scheme, but too-generous refunds might threaten its effectiveness if they allow too many individuals to keep on emitting like before." (ibid)

Additionally, some studies support this statement by showing that the most environmentally effective type of using revenues is to subsidise renewables or invest in energy savings and research and development (Baranzini et al. 2000, 406).

Summing the previous chapters up, it seems that implementing a carbon tax is a trade-off between compensating poor households and environmental effectiveness. In the end, a fair carbon tax needs to be high enough to induce a significant price increase resulting in a behaviour change. In addition, as many companies and individuals need to be included and forced to behavioural changes as possible to reach environmental effectiveness. Investing revenues in environmental programs is favourable for emission reduction as well. In contrast, the less affluent have to be compensated insofar that the burden of the price increase is bearable, and their lifestyle changes are less significant than those of the rich. A uniform lump-sum scheme is the best way of revenue recycling in terms of progressiveness. But still, some changes in the behaviour of the poor are needed to achieve a successful mitigation policy. How this equilibrium of compensating the poor and reducing emissions can be achieved in specific, needs to be examined in studies that refer to a specific national case. While examining this, one needs to keep in mind the long-run effects of climate change and emission reduction. It is necessary to weigh up the burden the poor living in the present have to bear due to climate change mitigation and the increasing inequality as well as the harm caused by climate change the poor in the future will suffer from. But in the end, this is a question of intergenerational justice that cannot be adequately examined in the scope of this writing.

Honestly, just describing the criteria of a fair carbon tax reveals how complex and difficult the implementation of a fair carbon tax scheme is. Unfortunately, it sounds more like a utopia than a real political instrument that can be implemented. Especially, having in mind that this writing only refers to two important variables out of numerous aspects that need to be considered. Narrowing this inaccurate description of a fair carbon tax scheme down to a political approach that could be implemented in a specific country, is linked with many further challenges. Furthermore, real implementation brings up numerous additional issues. In the next

section, some specific problems that might occur while implementing such a fair carbon scheme will be pointed out.

4. Feasibility of a Fair Carbon Taxation

The previous chapters showed that designing a carbon tax scheme that can be considered fair is extremely difficult and complex itself. Nevertheless, it is not impossible. Also, Tank does not deny that some forms of carbon taxation can be named fair. But he claims that fair carbon taxation is really unlikely to be politically feasible. (Tank 2020, 624) The numerous cases of failed tax initiatives like the energy tax in the US in 1993, the French carbon tax in 2010 or the abolition of the tax in Australia, show that carbon pricing often faces political opposition from industry and the public (Wang et al. 2016, 1124). Therefore, this chapter aims to answer the question of whether the previously outlined carbon tax scheme would be politically feasible or not. Feasibility in this examination is defined as "being likely to happen".

One reason why the implementation of a carbon tax often leads to opposition is that such market-based instruments create relatively direct negative, economic effects, whereas the positive impacts of a carbon tax are harder to pin out (Patt 2015, 80). For example, a lump-sum scheme is a more favourable choice in terms of a progressive distributional effect but considering economic growth or macroeconomic variables in general it can have negative effects (Baranzini et al. 2000, 405). In addition, implementing a carbon tax in only one country could cause a huge competitive disadvantage resulting in the relocation of businesses (Patt 2015, 97). Comparing these relatively direct effects with a future positive effect through climate change mitigation, it can be hard to convince why such an instrument should be implemented. Also considering the distributional effect of a carbon tax, the outweigh between some lifestyle changes right now and having an immense increase of inequality in the future caused by climate change, is hard to explain to the public.

This so-called "Golden Rule" of climate policy which means that "lots of people support doing something about climate change, but almost nobody supports doing something that will cost them anything substantial in the short term" (ibid, 80) is reflected in public polls as well. Implementing a carbon tax has a really bad public reputation because many people only see the price increase and financial burden that would come with it (Hsu 2012, 4-9). Even if a fair carbon tax scheme with a positive distributive effect would be implemented, good political communication and educational work is needed. And even with a uniform lump-sum scheme that compensates the poor, to achieve environmental effectiveness lifestyle changes of the majority of society are indispensable. Without the willingness of society to make some behavioural changes, a carbon tax that reduced emissions will not be feasible. The aspect of public reputation becomes more difficult having in mind that an effective carbon tax scheme includes a high tax rate. Without a significant price signal, no lifestyle changes will be induced.

Finally, the last and biggest problem of implementing a fair carbon tax is the fact that in the end the rich have to bear the burden of climate change mitigation to consider the tax fair. Examples like Sweden show that even if the public is willing to implement a carbon tax that in theory is high enough to reduce emissions, lobbying enables companies to be exempted. In

Sweden, many industrial sectors do not have to pay which leads to less effective emission reduction (Patt 2015, 81). And Sweden is only one example: In many countries, energy-intensive industries managed to receive favourable treatment even if the tax is not as high as in Sweden (Baranzini et al. 2017, 8). Political opposing voices not only from companies but also from wealthy individuals are likely to destroy the implementation of a tax that effectively burdens the affluent and compensates the less affluent. They will argue: If we have to bear the biggest burden, why do others get compensated?

Therefore, as part of this essay, it can be argued that is quite unlikely that such a recommended fair carbon tax will be implemented. Either the tax will not be high enough and/or too many companies will be excluded so that the tax will not be environmentally effective and, therefore, not fair. Or an effective tax is aimed to be implemented by the government which would burden the majority of society and, therefore, also the poor. Even if this could be tolerated by a normative point of view having the whole picture in mind, it is likely to result in a strong opposition of the public.

5. Conclusion

The aim of this essay is to answer two main questions: Can a carbon tax be considered fair? And is a fair carbon tax feasible? Before referring to both of them, the term fairness has been defined. First, a fair carbon tax needs to reduce emissions effectively because climate change is closely linked to increasing inequality and harm to the poor. Secondly, a carbon tax scheme can be considered fair if it has a progressive distributional effect. The less affluent have to be burdened less than the affluent, in a monetary sense and terms of lifestyle changes.

The third chapter stated that in theory a carbon tax scheme can be considered fair if it is designed in the following way: To reach a progressive distributional effect, revenues need to be recycled in form of a uniform lump-sum scheme so that the poor get overcompensated, and the rich get undercompensated. In terms of environmental effectiveness, the tax rate has to be high enough to induce a sufficient behavioural change. Moreover, almost all companies and individuals have to be affected by the price increase so that they reduce their emissions. Additionally, the most effective way of mitigation is to reinvest a part of the revenues in environmental programs. Having a look at this description it becomes clear that designing a fair carbon tax scheme is a trade-off between compensating the poor or reducing emissions. From a normative point of view, the first can be neglected if the emission reduction prevents more harm and inequality than the missing compensation causes. But in the end, this is a question of intergenerational justice that cannot be addressed in the scope of this essay.

Lastly, the feasibility of such a fair carbon tax system has been questioned. Besides the numerous difficulties that come along with concretising the imprecise description given as part of this essay, some other problems are likely to occur. The most important issue is that most people are not willing to change their behaviour in the short term to prevent long-term consequences. Especially the affluent who have the power to implement such a carbon tax, will not fight for a tax that burdens them the most. This shows that putting a fair carbon tax scheme into practice is not impossible but also far from "likely to happen". Therefore, as the conclusion of this writing, it can be said that a fair carbon tax scheme is not feasible.

6. References

- **Adler, S.** (2021) *How much would it cost to end climate change?* Global Giving (ed.), https://www.globalgiving.org/learn/cost-to-end-climate-change/ (15/03/2022).
- Andersson, J. & Atkinson, G. (2020) The Distributional Effects of a Carbon Tax: The Role of Income Inequality, Climate Change Economics and Policy Working Paper 378/ Grantham Research Institute on Climate Change and the Environment Working Paper 349, London: London School of Economics and Political Science.
- **Baranzini, A., et. al.** (2000) A Future for Carbon Taxes. In: *Ecological Economics*, Vol. 32, No. 3. pp. 395-412, https://doi.org/10.1016/S0921-8009(99)00122-6 (17/03/2022).
- Baranzini, A., et. al. (2017) Carbon Pricing in Climate Policy: Seven Reasons, Complementary Instruments, and Political Economy Considerations, WIREs Climate Change. Wiley Periodicals, Inc.
- **Caney, S.** (2012) Just Emissions. In: *Philosophy & Public Affairs*, Vol. 40, No. 4, pp. 255-300, https://www.jstor.org/stable/23323980 (04/07/2022).
- **Caney, S.** (2014) Two Kinds of Climate Justice: Avoiding Harm and Sharing Burdens. In: *The Journal of Political Philosophy*, Vol. 22, No. 2, pp. 125–149.
- **Fried, S., Novan, K. & William, B. P.** (2016) The Distributional Effects of a Carbon Tax on Current and Future Generations. In: *Finance and Economics Discussion Series 2016-038*. Washington: Board of Governors of the Federal Reserve System, http://dx.doi.org/10.17016/FEDS.2016.038 (17/03/2022).
- **Hsu, S.** (2021) *Carbon Taxes and Economic Inequality*. Harvard Law & Policy Review. Forthcoming. https://ssrn.com/abstract=3760667 (04/03/2022).
- Islam, S. N. & Winkel, J. (2017) Climate Change and Social Inequality. DESA Working Paper No. 152. UN Department of Economic & Social Affairs, https://www.un.org/sites/un2.un.org/files/1597341819.1157.pdf (04/03/2022).
- **Klenert, D. & Mattauch, L.** (2015) How to Make a Carbon Tax Reform Progressive: The Role of Subsistence Consumption. Amsterdam: Elsevier B.V.
- Millward-Hopkins, J. & Oswald, Y. (2021) 'Fair' inequality, consumption and climate mitigation. In: Environmental Research Letters, Vol. 16, No. 3, https://iopscience.iop.org/article/10.1088/1748-9326/abe14f/pdf (12/03/2022).
- **Page, E. A.** (2008) Distributing the burdens of climate change. In: *Environmental Politics*, Vol. 17, No. 4, pp. 556-575, https://www.tandfonline.com/doi/pdf/10.1080/09644010802193419?needAccess=true (20/03/2022).
- **Patt, A.** (2015) Getting the Price Right. In: A. Patt *Transforming Energy. Solving Climate Change with Technology Policy*. New York: Cambridge University Press. Chapter 4, pp. 55-97.
- Roser, D. & Seidel, C. (2017) Climate Justice: An Introduction. London: Routledge.
- **Shue, H.** (2014) Changing Images of Climate Change: Human Rights and Future Generations. In: *Journal of Human Rights and the Environment*, Vol. 5, Special Issue, pp. 50-64.
- **Shue, H.** (1999) Global Environment and International Inequality. In: *International Affairs*, Vol. 75, Issue 3, pp. 531-545.
- **Tank, L.** (2020) The Unfair Burdens Argument Against Carbon Pricing. In: *Journal of Applied Philosophy*, Vol. 37, No. 4, pp. 612-624.
- **Wang, Q., et. al.** (2016). Distributional Effects of Carbon Taxation. In: *Applied Energy*, Vol. 184, pp. 1123-1131, https://doi.org/10.1016/j.apenergy.2016.06.083 (10/03/2022).