

Inclusive Leadership and the Economics of Diversity

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ABSTRACT: This paper addresses COVID-19 and its widespread and lasting inequality impacts around the globe. The paper also introduces the idea of the post-COVID-19 era heralding a new Renaissance that breeds a climate of ethics of inclusion. The economic, ethical and behavioral insights foundations of a vision for ethics of inclusivity advancements are provided in this article and concrete examples how to enact ethical inclusive leadership in the 21st century. Inequality alleviation will become necessary in inclusive leadership domains of the healthcare sector and providing access to affordable medicine. The currently rising gap between finance performance and real-world economic constraints exacerbated inequality and therefore ethics of inclusive leadership may bridge the gap between financial wealth accumulation and real-world liquidity constraints. Education is a driver of positive change that can transform globally in a digitalized learning space and social justice attentive education, which informs tomorrow's inclusive leadership. Digitalization in the 21st century holds enormous implicit inclusive leadership potential to diminishes unnoticed inequality constraints that demand for attention to be overcome. The most pressing concerns over climate change are emphasized in order to then introduce a novel strategy to distribute the prospective economic gains from a warming globe equally within society, around the world and over time. The rest of the paper then discusses innovative methods to address inequality, for instance, through the combined strengths of law and economics.

KEYWORDS: Climate Change, Climate Stabilization, Comparative Law & Economics, Coronavirus crisis, COVID-19, Digitalization, Economics, Economics of the Environment, Environmental Justice, Environmental Governance, Equality, Law & Economics, Healthcare, Monetary policy, Rescue and recovery aid, Redistribution, Social Justice, Socially Responsible Investment, Sustainability, Sustainable Development Goals

Introduction

We live in the age of inclusion. During the 2022 World Economic Forum address of United States Secretary of the Treasury Janet Yellen, the post-COVID-19 economic era was called for inclusive growth in harmony with the environment (The United States Department of the Treasury 2022). Public equality and corporate social justice leadership have gained unprecedented momentum (Zheng 2020).

From the mid-20th century, human advancements have risen steadily. Industrialization, technological advancements, technical inventions and capital accumulation remarkably revolutionized the world. Though looking back to an epoch of enormous economic progress in the 20th century; inequality has risen steadily, quantitatively and qualitatively, sometimes more blatant and in other cases more unnoticeably. The overall improvement of living conditions seemed to be granted to only some. Disparity within society, around the world and over time inbetween generations became apparent as the world evolved. Relative gains and losses distribution patterns shaped and exacerbated with economic and external shocks, such as financial liquidity constraints during the 2008/09 World Financial Recession, climate change and COVID-19 (Puauschunder 2020b). The impact of crises not only exposed unforeseeable

system fragility but complex interconnections and transactions in the age of globalization drove inequalities faster and stronger than ever before in history. Inequality became the ultimate emergent systemic risk in the wake of an exacerbated connectivity and worldwide exchange opportunities during our contemporary digitalized times (Centeno & Tham 2012). What happens in one part of the world today, impacts around the globe and becomes visible and felt instantaneously due to constant communication social online platforms. The global interconnectedness lays open blatant gaps in distribution patterns of wealth, access to affordable healthcare, education and a favorable environment. The COVID-19 pandemic has vividly outlined the distribution inequalities and the disparate impact the same large-scale external shock can have within society, around the world and over time. Inequality arises in the access to quality healthcare that varies dramatically around the world. In addition, climate change requires attention for fairness that the costs of climate change mitigation and adaptation are spread equally within society, between countries and over time inbetween generations. Access to meaningful education is another area of inequality concern and in order to breed social upward mobility, a bundling of excellence with social fairness demands.

Given all these novel and complex inequalities, the 21st century heralded an age of inclusion. Ethics of embracing everyone with the luxuries of our times in harmony with the environmental conditions and natural constraints has become a blatant demand of our times. Obvious inequality creates a need for framework conditions securing parts of the society, the world or generations from negative consequences emerging from inequality. A new web of social, ecological and fundamental transfers on a grand and wide-spread scale may ease the discrepancies rising in the 21st century. The ongoing COVID-19 crisis stresses the need for securing everyone to overcome pockets of virus-struck areas rekindling contagion of a deadly and debilitating disease. The post-COVID-19 resilience and recovery period thus holds the potential to underline the strong pledge that until anyone is safe from the virus, no one is save.

Inequality in the 21st century

In the aftermath of the Coronavirus crisis, the world has the potential to benefit from an exacerbated strive for ethics of inclusion that embraces everyone with lifting and equalizing spirits. The crisis offers an opportunity for innovation in inclusive leadership as the spring feather of equality and social justice heralding in our post-pandemic Renaissance.

Fairness and social justice have leveraged into the most pressing ethics demands in the 21st century post-pandemic era. Inclusive leadership offers a comparative approach to understand the most contemporary responsibility challenges of our time.

Ethics of inclusion have become key in tackling the common Coronavirus crisis and pandemic outbreak situation since 2019. In the COVID-19 era, health and well-being underlying human workforce productivity have become hidden driver of economic growth in the eye of a global contagion risks. Most recent law and economics developments include practical ethical dilemmas arising in justified and democratic access to healthcare around the world. In the medical domain, equal access to healthcare pledge innovations, such as telemedicine and artificial intelligence, robotics and big data insights offer to bring access to affordable quality care and decent standards of living to all.

In the economics and finance realm, inequality alleviation includes the rising finance world and real economy performance gap, which severed with the outbreak of the COVID-19 crisis. In the post-COVID-19 era, the enormous rescue and recovery aid distributed around the world will likely bring unprecedented levels of inflation and low interest rate regimes for an extended period of time. The hidden inequalities in economic circumstances' disparate impacts will require a more in-depth analysis drawing on the power and strengths of the interdisciplinary field of Law & Economics.

With the COVID-19 crisis having changed the educational landscapes around the world in record speed to unimaginable forms of online education and digitalized learning enhancement, educational social transfer hubs with attention to online opportunities serve as a gateway of social justice transformation that account for the most promising international development advancement of our times.

The currently-ongoing workplace revolution into a truly digitalized economy productivity creates novel inequalities and ethical dilemmas arising from digitalization. For instance, the divide between e-skilled labor and e-unskilled labor has become more accentuated than ever before. What is new in the artificial intelligence (AI) revolution is the giving up of decision-making power and the employment possibility of self-learning entities in some parts of the world. So-called AI hubs are likely to become more productive while the relative gap to places on earth that are less connected or less producing but only consuming digitalization will widen and create a new layer of disparity. Transformation starts with access to fair distributions of education. As a spring feather of inequality alleviation, digitalization can serve but therefore needs to be spread equally among all world users.

With climate change arising and given natural resource constraints and irreversible lock-ins, environmental ethics help envisioning a transition to a more inclusive society. Climate change appears as the most complex and wide-reaching external shock of our lifetimes. Current climate change mitigation and adaptation financing efforts are calling for innovative green investment strategies. An emerging literature and awareness on the economic gains and losses of a warming globe being distributed unequally between countries is the basis of redistribution schemes. Environmental demands for a transition to a green economy are met in most novel attempts such as the Green New Deal and European Green Deal including a Sustainable Finance Taxonomy, which are currently crafted and have the potential to change society and the world lastingly.

COVID-19 induced inequality

The COVID-19 external shock created economic disparity between nations, industries and societal groups. Rising inequality trends in healthcare, economics and finance, education, digitalization and environmental conditions exacerbated during the global COVID pandemic. Cutting-edge innovations of our lifetime target at bringing affordable quality healthcare to all, bridging the finance-world and real economy inequality gap, fostering global access to quality education in harnessing digitalization advancements and but also equality in connectivity and tech-skills development and a favorable environment to overcome unforeseen inequality in the shadow of COVID-19.

On an interconnected globe with a highly mobile 21st century population and a most contagious virus, common health and well-being are as internationally-interdependent as never before in the history of modern humankind. The endeavor of a commonly-healthy world with attention for precaution against pandemics is challenged by nowadays unprecedentedly-blatant healthcare inequality around the world. Access to affordable quality medicine and precautionary prevention of widespread diseases depend on economic prosperity and freedom from corruption. Modern healthcare being technologically advanced also requires digitalization and innovation market financialization for modern preventive and precautionary medical care.

The COVID-19 external shock created economic disparity between nations, industries and societal groups. The Union Bank of Switzerland (UBS) currently describes the largest economic gap between world economies for at least 40 years (The Economist 2020a, b). In contrast to earlier economic turmoil stemming from system-inherent crises creating liquidity constraints, the external COVID shock caused “social volatility” – a collectively depressed mood that largely dampened consumption. The difference to previous systemic recessions

becomes apparent in the rapid recovery of well-managed financial funds – for example, the S&P 500 recovered 50% of its pre-COVID value within the first three months after the crisis and reached an all-time high-trend from August 2020 on. Deutsche Bank recorded rising earnings after the onset of Coronavirus crisis in Europe, especially the investment bank branch of 43% or 2.4 billion euros (Smith 2020). The clear distinction between COVID-19 profit and loss industries made it possible for today's highly flexible financial world to quickly exchange weakened market segments – such as oil, public transport and aviation, face-to-face service sectors such as international hospitality and gastronomy – with above-average market options – such as pharmaceutical companies and emergency medical devices for healthcare, digital technologies, fintech, artificial intelligence and big data analytics industries, online retail, automotive and interior design industries.

Inequality has increased in society since the 1990s as a result of the wave of US financial market deregulation (Piketty 2016). The financial world performance began to diverge massively from the real economy in 2008/09 and experienced the greatest divergence so far with the Coronavirus crisis that widened the gap between top performance of financial markets and negative fallout in the real economy (The Economist 2020a, b). The strong contrasts between COVID-19 winners and losers as well as the deep gap between strongly positive financial market developments and the negative performance of the real economy induced by lockdowns, which is currently exposing the real economy to a wave of private bankruptcies and liquidity bottlenecks, therefore call on governments around the world to reboot financial markets to return to be a service industry – to serve the real economy.

Government bailout packages are likely to be financed over the long term by the historically-lowest, never-so-long-low key interest rates. Low key interest rates will continue to allow the capital market to flourish. But this is based on the cost of a weakening of the potential of the interest rate as a monetary policy tool, which John Maynard Keynes (1936/2003) already described as a “liquidity trap.” The low interest rate policy brings along long-term external financing of past ideas, which impairs the flexibility of investors to allocate funds towards future-oriented innovations and may hold back societal progress. Low interest rates on savings accounts in the real economy keep people trapped in the debt financing of past dreams (Arora 2020). Household debt traps are causing massive psychosocial burdens, a so-called ‘deaths of despair’ trend is already noticed in the US for mid-career death spikes induced by alcoholism, drug use and suicide (Case & Deaton 2020).

One clear winner industry of the pandemic is the current market transitioning to digitalized economies (Puaschunder forthcoming b). Already before the outbreak of the pandemic, Artificial Intelligence, algorithms, robotics and big data entered healthcare with booming health self-tracking devices and preventive medical care enhanced by big data insights (Puaschunder forthcoming b). COVID peaked attention for hygiene, pharmaceuticals and emergency medicine (Puaschunder forthcoming b). COVID-19 healthcare apps now estimate individual contagion risks and derive large-scale health trends from big data (Puaschunder forthcoming b). Digitalized healthcare heightens demand for privacy protection of vulnerable patients and anti-discrimination based on health status. Bluetooth-cartography of medical devices helps overcome bottlenecks and prevents fraud while protecting privacy (Puaschunder forthcoming b). Telemedicine cures remotely all over the world (Puaschunder forthcoming b). With pre-existing prevalence, such as obesity and diabetes, but also the immune system influencing the COVID disease trajectory, preventive care and whole-rounded lifestyles gained unprecedented attention (Puaschunder forthcoming b).

When it comes to the currently exacerbated online digital disruption in the wake of COVID-19, less discussed are currently opening inequalities based on international time zones that create natural barriers. Natural day and night time conditions currently implicitly connect or separate continents. Online knowledge transfer is favored due to the time harmony. Common daytimes flourish exchange, while a day-night divide disconnects us for real-time

exchange. Direct exchange in work relations, telemedicine or innovation ideas exchange are facilitated within a time zone. If the digitalized exchange persists, this may create new time zone bundles. North and South America, Europe-Africa and Central Asia-Southeast Asia-Australia are emerging as new time-harmonious clusters, which operate in the same time zone. This may finally improve the north-south divide by facilitating the exchange of information and fostering common projects – such as virtual conferences and digital outsourcing subsidiaries. Opening the online window to a different, better world, however, will likely increase already rising mobility trends. Europe will be pegged to Africa, where digitalization ranks lowest and European officials will likely face the predicament between infrastructure development in Africa for the sake of rising migration from Africa and instigating brain drain.

Other industries booming in the wake of the COVID-19 pandemic are healthcare precaution. Concrete wellness and healthcare trends are emerging in the contemporary pandemic. COVID-19 triggered a de-urbanization in the US – a trend to move to environmentally-pleasant surroundings. Given the contagion risk in crowded metropolitan areas and air purification being challenged in city skyscrapers with closed ventilation and elevators, corporate headquarters currently move to remote work or suburbs. Retail shifted online to lower fixed cost of real estate and health risks. Hygiene and health leveraged into core business of contemporary city scaping – as visible in the New York public transport cleanup and consumer trends to own personal cars or bikes. Art and culture events scaled down to more rural communities or are currently re-curated for social distanced performances or even are staged in virtual luxury worlds. Gastronomy order-ins and shared virtual eating experiences are socially-distanced service sector innovations. The sharing economy started offering workspace closer to nature. Moving to cheaper suburbs now allows a remote workforce to build wellness cocoons with attention for healthy living embedded in nature. The environment is also represented in biophilic architecture trends that resembles nature. One of the innovations for broad-scale environmental change were addressed during the most recent COP-26 in sustainable clothing lines made out of natural material. For instance, fungus clothing offers a carbon-negative organic alternative to fast fashion. Hygienic antibacterial surfaces for cleanability and technologically-enhanced kitchens are booming. With precise online retailing and people spending more time at home, minimalism is trending as people are getting rid of unnecessary items at home. The de-urbanization is yet not a ruralization, as people are not giving up luxuries of metropolitan areas, such as exchange of goods, services and ideas in highly specialized markets with diverse market actors.

Today's cosmopolitan luxury shifted into virtual online spaces as COVID-19 has also perpetuated the online tech world. Physically distant, we came closer digitally than ever before. Worldwide data traffic exploded on a flat digital globe. An online multitasking workforce gained global reach, while technology reduced bureaucracy. Digitalization kicked in all industries.

As North American universities currently face high revenue losses from international students staying away and closed campus housing, universities are exploring hybrid education in larger international network consortia. Students from all over the world could thereby flexibly take courses in large international education hubs with participating institutions being far spread out over the world. Without relocation costs and visa requirements, students will also be free to study longer. Education of the future could thus become truly global, individually-specialized and life-long. Global access to online education could become an international development transformation game changer. Overall expected price adjustments for education in the United States may lift the education debt burden in the US that has already curbed large-scale consumption of the generation internship since the beginning of the millennium. For Europe there is the potential to partner with North American elite institutions or create multi-lingual European consortia to bundle excellence.

With the digitalization disruption, however, come along novel inequalities. Inequality in internet connectivity, tech-skills and digitalization-affinity, leverages AI-human-compatibility as competitive advantage. Digital online working conditions that make individual living conditions transparent emphasize social hierarchies in our educational and work-related interactions. On a global scale, problems arise from a dominance of digital innovations and online communication tools being centered in the United States, which imposes a data deficit, revenue losses and problems to enforce European privacy protection.

The new use of digitization in the healthcare sector increases the demand for online data protection for particularly vulnerable patient groups and anti-discrimination in big data derived inferences. Taxing digital economies could create the fiscal space to offset technology disruption fallouts and ensure education and trainings honing mindful use of new technologies. Healthy and informed access to new media needs to address the dilemma between the individual benefit from information exchange online versus the human dignity of privacy on the Internet. In the digital age, we cannot estimate what effects the sharing of private information, tranche-by-tranche, over time has in merging, in relation to large amounts of data and over time.

The anonymous participation in new virtual realities currently also brings with it completely new problems such as cybercrime, hate postings and social censorship by the online masses. Governments and traditional media have lost control of online censorship in the digital age. In an attempt to uphold ethics and responsibility in virtual global online worlds that are currently open to us on the Internet, the European Union has launched the General Data Protection Regulation, GDPR, and taxation attempts of online revenue. European legal scholars and activists are defining legal rights of individuals to be forgotten online and the dignity of conscientious data protection and e-privacy (Schönberger 2009).

Never before in the history of humankind have environmental concerns in the wake of economic growth heralded governance predicaments as we face today. Global warming is having an extraordinary impact on the economic, social and eco-system effects of market economics. In the financing of climate change mitigation and adaptation efforts, the most recent United Nations Conference of the Parties (COP26) on climate change revealed the need for climate justice (Sachs 2021). Climate change presents societal, international and intergenerational fairness as challenge for modern economies and contemporary democracies all over the world. The economics and politics of climate change recently gained attention of economic gains and losses in a warming climate being distributed differently throughout the world rising inequality concerns (Puaschunder 2020b; Sachs 2021).

In today's climate change mitigation and adaptation efforts, high- and low-income households, developed and underdeveloped countries as well as overlapping generations are affected differently (Puaschunder 2016). To address the economic effects of climate change, individual decision making and discounting offer insights in light of environmental impacts and framework conditions. Current empirical trends and international efforts to combat climate change have also shed attention to the role of financing climate change mitigation and adaptation efforts (Sachs 2021). Climate change induced inequalities are proposed to be alleviated with a climate taxation-bonds strategy that incentivizes market actors to transform the energy sector and mitigate as well as adapt to climate change. In the financialization of climate policies, fair climate change benefits and burden sharing within society, inbetween countries all over the world but also over generations are introduced in a novel taxation and bonds strategy (Puaschunder forthcoming).

Ethics of inclusion in the post-COVID-19 new renaissance

In light of the multi-faceted inequality that opens widespread qualitative and quantitative gaps, social justice has become a blatant demand. We are entering the age of corporate social justice and inclusive leadership. Ethics of inclusion as a forerunner to inclusive rights and privileges

opened to everyone are natural behavioral ethical laws that could dominate the heralding post-COVID-19 novel Renaissance.

Discrimination is unjust or prejudicial treatment of different categories of people. Long-standing, ample evidence of discrimination and most important attempts exist to legally abolish, economically counter-weight and societally alleviate the negative impacts of discrimination around the world. In the wake of the rising social justice movement, social justice plays a crucial role in pushing for societal change. Social justice striving is the excellence of our times.

In the wake of the rising social justice sentiment all over the world, social justice is defined as luxury in offering the hope of a better, more equal society. Social justice pioneers are the heroes of our times and their excellence should be celebrated as luxury moment that needs to be protected to trickle down in society.

Excellence in inclusivity ethics embraces a wide range of actors. Ethics of inclusion include areas of healthcare, economics and finance, education, digitalization and the environment. Inclusivity can be rooted in ethical notions and economic argumentations but also in behavioral customs. Fairness and justice have been attributed as a natural behavioral law over time that unites countries around the globe and connects our common humankind's past to our future (Pope Francis 2015; Puaschunder 2016). Inequality concerns drive a demand for rescue and recovery redistribution focus with respect for offsetting the losses implied by global crises.

Future research could study the antecedents of social transformation and change in order to cultivate a better understanding how *en vogue* trends are first only accepted by only a few pioneers, who are then over time followed by the masses. Retrospectively, these new ground-breaking trends survive in history and are considered as excellent and brilliant innovation that ennobled society and advanced societal welfare.

Ethical foundations of inclusion

Ethical foundations of inclusion provide the groundwork for access to equal opportunities and redistribution to offset relative disparities. In the distribution allocation decision, philosophical foundations serve to back the demand for sharing the positive externalities of crises. Acknowledging the need for global common solution finding leads to redistribution in order to alleviate imbalanced losses and disproportionate commonly-shared collective goods burdens.

With reference to Immanuel Kant's Categorical Imperative proposing to 'not impose on other what you do not wish for yourself' and suggesting to 'treat others how you wish to be treated,' the ethical imperatives fortify the idea of a common but differentiated responsibility to ensure a stable community and decent living conditions around the world (Kant 1785/1993; Puaschunder 2017b). Based on ethical imperatives, in the environmental domain ethical imperatives lead to the need for fairness in the distribution of the global earth benefits among nations based on Kant's (1788/2003) imperative to only engage in actions one wants to experience themselves being done to oneself. Passive neglect of action on climate mitigation is therein considered as an active injustice to others (Chichilnisky 1996, Chichilnisky, Heal & Vercelli 1998; Puaschunder 2017b).

The German philosopher and New School professor Hans Jonas, a proponent of philosophical biology, addressed the underlying predicament between biological life and economic striving. Jonas (1979) insists on paying tribute to dignity in nature to raise the living human, who only developed within nature. In Jonas' philosophy not only human are bestowed with freedom but also plants and animals are characterized by their own freedom and striving. Human thus have to pay tribute to the ethics of human responsibility in relation to nature, which implies an underlying affinity in the relation of human with nature (Jonas 1979). Jonas (1979) builds on Immanuel Kant's categorical imperative but extends the scope of responsibility and ethics to the entire biosphere. The power dominance of human over nature coupled with self-

realization forms a natural responsibility to protect the earth, in which human are embedded. Who is the strongest also has the greatest ethical obligation to protect the weakest, which includes other human, the environment and future living and being on earth (Jonas 1979). Extending parental care for children, in Jonas' philosophy there is also the future-orientation of care for future existence. Ethical considerations also involve the well-being of future generations within environmentally-favorable conditions and prosperity of humankind. Moral obligations arise from the co-existence but also the mutual care as well as inequality between human and nature in terms of power and self-awareness (Jonas 1979).

COVID-19 and climate change produce climate change winners and losers concurrently. John Rawls' veil of ignorance (1971) can aid society to agree on supporting stabilization efforts without the consideration of the position one may find her- or himself in a relatively better position. John Rawls' veil of ignorance (1971) suggests that one should not weight in whether being a winner or lower from external shocks when analyzing the overall societal problem. In light of the overall damage caused by COVID-19 and global warming, one should abandon considering the personal gain and loss perspective. A market incentive blind position clearly goes against utilitarian arguments of the rational agents always striving to maximize expected outcomes. The idea of a veil of ignorance over the economic gains of climate change pays homage to behavioral economics attempts to bring in ethics and social care into the standard utility function (Puaschunder 2020a).

Evaluating the overall climate justice problem behind a veil of ignorance leads to the conclusion to take action concertedly against COVID-19 and a warming globe as soon as possible. At the same time, shedding light at the economic gain and loss prospects of global warming can help find a well-balanced redistribution system that bestows fairness perception to all parties involved (Puaschunder forthcoming). As for redistributing the gains of a warming globe in order to offset losses incurred by global warming, a climate change bonds-and-tax finance strategy was recently proposed to bear the burden of climate change in a right, just and fair way within society, around the globe and over time (Puaschunder 2017a).

The currently ongoing COVID-19 crisis challenges health around the world, public and private sector healthcare provision differs between countries. On an interconnected globe with a highly mobile 21st century population and a most contagious virus, healthcare appears as internationally-interdependent as never before in the history of humankind. More than ever before pandemic precaution requires globally-carried solutions and risks management based on internationally-harmonized action. The endeavor of a commonly healthy world is challenged in light of the nowadays unprecedentedly-blatant healthcare inequality around the world.

In the healthcare domain and with respect to globally contagious viruses, ethical notions of Immanuel Kant (1785/1993) and John Rawls' (1971) address the world's fragility in global viral pockets that re-ignite and modify contagious diseases. The cases of COVID-19 contagion potential and virus modifications lead to the conclusion that collective action and a universally-COVID-free world are aspirational goals. Given the contagion and virus modifications, any alteration of the virus in any part of the world will eventually impose novel risks onto everyone. In the case of the virus and its transmission, Immanuel Kant's imperative and John Rawl's logic lead to the conclusion that no one will be save from the virus until everyone is save. John Rawl's veil of ignorance serves as basis of the realization that the overall problem of the Coronavirus or any other highly contagious disease should be evaluated as such problem for the entire world and not only from a singular perspective.

Health inequality in the 21st digital century becomes apparent in the international data on COVID-19 responses, digitalization, economic prosperity, healthcare standards and innovation market financialization (Puaschunder & Beerbaum 2020b). International datasets reveal that Europe and North America feature excellent starting positions on economic productivity and relatively low levels of corruption (Puaschunder & Beerbaum, 2020b). Internet connectivity and high Gross Domestic Product are likely to lead on AI-driven big data insights for pandemic

prevention, of which Europe, Asia and North America have optimal global healthcare leadership potential (Puaschunder & Beerbaum 2020b). Europe benefits from highest standards on public preventive medical care, while the United States has the most prosperous market financialization to advance medical innovations (Puaschunder & Beerbaum 2020b). Oceania performs well on general healthcare but has comparatively less international medical market power (Puaschunder & Beerbaum 2020b). Asia and the Gulf region are in the middle ranges of healthcare provision and market innovation financing but are critical on corruption, which also appears to hinder access to quality healthcare in South America (Puaschunder & Beerbaum 2020b). Africa ranks low on healthcare and raising funds for medical purposes in corruption-prone territories (Puaschunder & Beerbaum 2020b).

The currently ongoing COVID-19 crisis has created awareness for the global interconnectivity of healthcare but also heightened attention to the drastic medical standard differences around the world, which unprecedentedly leverages the sustainable development mandate to grant equal access to healthcare (Puaschunder & Beerbaum 2020a, b). In the redistribution demand for equal access to affordable healthcare, economic rational may be applied.

Economic foundations of inclusion

In order to alleviate inequalities between market actors, countries and inbetween generations, Kaldor-Hicks' compensation criteria can guide a prospective redistribution scheme (Law & Smullen 2008). The Kaldor-Hicks test for improvement potential within a society is aimed at moving an economy closer towards Pareto efficiency (Law & Smullen 2008). Kaldor-Hicks's criteria assume that any change usually makes some people better off and other worse off at the same time. The Kaldor-Hicks' then tests if this imbalance can be alleviated by winners compensating losers for the change in conditions. In the Kaldor-Hicks's criteria both, winners and losers, must also agree that the benefits exceed the costs of redistribution.

The Kaldor-Hicks compensation can be applied to access to common goods and environmental constraints. As economic gains and losses from an external shock, such as COVID-19 or global warming, are distributed unequally around the globe, ethical imperatives lead to the pledge to redistribute gains to losing territories in the quest for fairness and justice. Following the rationale of the Kaldor-Hicks compensation and to alleviate injustices, redistribution can enact fairness between market actors, countries but also over generations in a gains and losses distribution strategy.

In order for the Kaldor compensation to work effectively, economic winners and losers must also agree that the benefits of a commonly-agreed upon compensation scheme exceed the costs of such action. Tax-and-bonds transfers could also be used to incentivize industry actors for choosing clean energy. The revenues raised from taxation and bonds would thereby be allocated to subsidize corporations choosing clean energy. This market incentive could shift the general race-to-the-bottom regarding price cutting behavior and choosing dirty, cheap energy to a race-to-the-top hunt for subsidies for going into clean energy and production.

Fairness and justice within a country should also pay tribute to the fact that low- and high-income households share the same collective burden of crises rescue and recovery aid funding proportional to their dispensable income, for instance enabled through a progressive carbon taxation (Puaschunder 2020b).

In COVID-19 predicaments, those industries having gaining prospects due to the pandemic – e.g., such as finance, healthcare, pharmaceuticals, hygiene products and interior design – could be taxed in order to compensate the losing market segments – e.g., such as the real economy, gastronomy, tourism, aviation and arts mass entertainment.

Finding the optimum balance between consumption tax adjusted for disposable income through a progressive tax scheme also promises to foster tax compliance in the sustainability

domain. Those who caused climate change could be regulated to bear a higher cost through carbon tax in combination with retroactive billing through a corporate inheritance tax to reap benefits from past wealth accumulation that contributed to global warming.

All the mentioned ethical and economic foundations lay the ground for a deeper understanding of the ethics of inclusion in the 21st century. Future wealth of nations will be determined by social stability and the societal social glue, which can be enhanced when individuals feel to live in a society that is right, just and fair and will take care of them in the social compound if being disadvantaged.

For instance, in the environmental domain, climate change winning countries are thereby advised to use taxation to raise revenues to offset the losses incurred by climate change. Climate change winners could share their economic growth via taxation transfer to global warming losing territories that could be incentivized to receive bonds that have to be paid back by future generations (Puaschunder forthcoming a). Governments in global warming loser countries should receive tax transfers in the present from the winning countries (Puaschunder forthcoming a). The climate change loser countries could become beneficiaries of transfer payments that fund loans or the issuance of bonds could be enacted to be paid back by future generations (Puaschunder forthcoming a). Taxing future generations is justified as future generations avoid higher costs of climate change long-term damages and environmental irreversible lock-ins (Puaschunder forthcoming a). Overall, this tax-and-transfer mitigation policy appears as a Pareto-improving fair solution across the world and among different generations.

Behavioral insights foundations of inclusion

The implementation of social justice accounts for the most challenging contemporary global governance predicament that seems to pit societal members and world countries against each other but also today's generation against future world inhabitants. In a collective action problem, only collective coalition could establish social justice. The most recent attention to ethics of inclusion drives a global urge to search for redistribution schemes that are carried by the masses. Finding global gains and losses being distributed unequally around the globe urges to search for a well-balanced public policy mix guided by micro- and macroeconomic analysis results.

One of the most prominent forms to create revenues for public long-term investment causes are taxes. Tax compliance has been studied in the context of competitive games (Engwerda 2014). On environmental concern, taxation can grant redistribution potential between countries in the macroeconomic predicaments around economic growth and climate change (Greiner 2014). Taxation is codified in all major societies and a hallmark of democracy. Aimed at redistributing assets to provide public goods and ensure societal harmony, taxation improves societal welfare and fairness notions within society.

Tax compliance is a universal phenomenon based on cooperation in the wish for improving the social compound. Taxpayers voluntarily decide to what extent to pay or avoid tax that limit the personal freedom. In a social dilemma, individual interests are in conflict with collective goals. From a myopic economic perspective, the optimal strategy of rational individuals would be to not cooperate and thus evade tax. Short-term the single civilian tax contribution does not make a significant difference in the overall maintenance of public goods – if only a few taxpayers evade taxes, public goods will not disappear or be reduced considerably. But if a considerable number of taxpayers do not contribute to tax over time, common goods are not guaranteed and ultimately everyone will suffer from suboptimal societal conditions (Dawes 1980; Stroebe & Frey 1982).

Contemporary economic research has focused on costs and risks of tax evasion (Tyler & De Cremer 2006). Coercive means – such as audits and fines – were found to crowd out tax morale and ultimately result in greater non-compliance as people feel controlled and not being

trusted (Cialdini 1996; Feld & Frey 2002; Frey 1992; Hasseldine 1998). In the last decade, researchers have started to recognize the importance of incorporating morals and social dynamics in economic theory on tax behavior (Andreoni, Erard & Feinstein 1998). When analyzing tax behavior, recently behavioral economics insights have drawn attention to social influences (Puaschunder 2019, 2020a).

Behavioral economists widen the lens of incorporating sociological and socio-psychological notions of fairness stemming from social comparisons regarding tax burdens. Fairness perceptions could be positive drivers of tax compliance to overcome the ‘burden of taxes’ and associations of losses when being tax compliant. The cases of voluntary, self-chosen tax ethics and situational influences on social tax compliance norms have just recently been covered by behavioral approaches towards public administration (Puaschunder 2019). In general, social comparisons determine social norms that define internalized standards how to behave. Yet internalized social norms are based on comparisons with others that may determine tax morale (Frey 1997; Mumford 2001; Schmolders 1960). Social norms elicit concurring behavior when taxpayers identify with the goals of a group but also if they feel being treated in a fair manner by that group. Social fairness considerations in a tax reference group may further taxpayer compliance. If taxpayers believe that non-compliance is widespread and socially-accepted, then it is more likely that they will not comply as well. Non-compliance may stem from the notion of unfairness in how the tax burden is weighted heavier on some parts of society.

In previous climate financing models through taxation, the distributional imbalances were considered as problematic in green taxation since the current generation often carried a higher burden. One standard taxation approach was used for all countries and societal members. The resulting intertemporal, inter-societal and intergenerational predicaments led to political constraints and implementation hesitancy of the many involved stakeholders around the globe. Inequality appeared in the disproportionate burden of taxation within a society but also over time.

Having found that there are gains from a warming earth allows for redistribution schemes to transfer benefits into areas of the world that will be primarily losing from climate change (Puaschunder, 2020b). Thereby a taxation-and-bonds transfer strategy could allow to lift the negative impacts of climate change hindering economic growth by compensation funded out of the gains of global warming (Barro 1990; Puaschunder 2020b). In the implementation, a climate change bonds but also taxation strategies are recommended. An as such bonds-and-tax transfer strategy would require governments and global entities to promote taxpayer collaboration and enhance tax morale in the environmental domain (Puaschunder 2020b).

In the macroeconomic growth literature regarding government actions, a zero emissions tax is not necessarily considered welfare-improving (Greiner, Grüne & Semmler 2010) but appears as one of the most powerful means to curb harmful emissions and set positive market incentives for a transition to renewable energy (Hansen & Sato 2016; IPCC 2007; Mankiw 2007; Nordhaus 2008, 2013; Semmler, Braga, Lichtenberger, Toure & Hayde 2021; Uzawa 2009). A substantial increase of green investments is still required to reach the Paris Agreement’s emission targets (Braga, Semmler & Grass 2020). A widespread energy transition will require innovation but also governmental efforts to imbue incentives into market economies to innovate and change energy resource usage patterns (Semmler, Lessmann & Tahri 2020). Technological change appears as a driver of the transition to clean technologies but has proven to be unpredictable and uncertain (Acemoglu, Aghion, Barrage & Hémous 2019; Acemoglu, Akcigit, Hanley & Kerr 2014). The implementation of climate-friendly technological change around the world faces several constraints, such as international consent, national willingness and ground-level implementation constraints (Chappe 2021; Popp 2014).

A carbon tax allows for an instant and relatively stable broader application to generate tax revenue. Carbon taxation also lowers harmful emissions and can steer market dynamics towards a fair climate change burden and benefits distribution. Tax funds can thereby be used to fund large-scale investments for the future, such as enacted in green bonds and development

economics (Braga, Fischermann & Semmler 2020; Semmler et al. 2021). Carbon tax policies and the issuance of climate bonds has therefore risen steadily within the previous decade (Flaherty, Gevorkyan, Radpour & Semmler 2017; Semmler et al. 2021).

Taxation models can aid to share the burden of climate change within society in a fair way. Regarding concrete climate taxation strategies, a carbon tax on top of the existing tax system could be used to reduce the burden of climate change and encourage economic growth through subsidies for a transitioning into renewable energy (Chancel & Piketty 2015; Greiner, Grüne & Semmler 2014; Wirl & Yegorov 2014). Within a country, high- and low-income households should face the same burden of climate stabilization adjusted for their disposable income. Finding the optimum balance between consumption tax adjusted for disposable income through a progressive tax scheme promises to aid unraveling drivers of tax compliance in the sustainability domain.

Besides progressive taxation schemes to imbue a sense of fairness in climate change burden sharing, a corporate taxation is also a flexible means to reap past wealth accumulation, which potentially caused environmental damage (Puaschunder 2020b). Those who caused climate change should bear a higher cost through carbon tax in combination with retroactive billing through a corporate ‘inheritance’ tax (Puaschunder 2020b). Industry-specific taxation attempts could also curb harmful emissions in sectors of the economy that emit high levels of CO₂ (Puaschunder 2020b). The burden of climate change mitigation and adaptation could also be allocated in a fair way within society through contemporary inheritance tax in order to reap benefits of past wealth accumulation (Puaschunder 2020b). But also developed and underdeveloped countries as well as various overlapping generations are affected differently and this inequality could be met with a combined tax-and-bonds strategy to even out the differences (Puaschunder 2020b).

If a taxation-and-bonds strategy is perceived as fair and just allocation of the climate burden, this could convince tax payers to pay one’s share. A novel ‘service-and-client’ atmosphere could promote taxpayers as cooperative citizens who are willing to comply if they feel their share as fair contribution to the environment. Taxpayers, who understand that there is an inequality in the way external shocks effects the earth and that there are some countries that some market actors and countries or even whole generations have rising economic prospects which can be redistributed, may be more prone to contribute to the financing of social justice if they are incentivized by behavioral changes. Educating taxpayers about the gains and losses of global warming could thus foster cooperative citizens who are willing to comply voluntarily to common goals. International comparisons of tax behavior also reveal tax norms being related to different stages of institutional development of the government, which is an essential consideration in sharing collective burden in a fair manner within society, between countries and over time.

Future outlook

Future methods development may bloom to detect disparate impacts and find creative redistribution means to share the benefits and spread the risk alleviation patterns equally within society, around the world and over time. New methods may detect unnoticed and less discussed inequalities in the 21st century in order to lead leadership guided by the ethics of inclusion to adjust for relative disparities in the hope for equal improvement opportunities for all.

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