

# Digital Inequality: A Research Agenda

**Julia M. Puauschunder**

*Columbia University, Graduate School of Arts and Sciences, Julia.Puauschunder@columbia.edu,  
<http://blogs.cuit.columbia.edu/jmp2265>*

**ABSTRACT:** We live in the age of digitalization. Digital disruption is the advancement of our lifetimes. Never before in the history of humankind have human beings given up as much decision-making autonomy as today to a growing body of artificial intelligence (AI). Digitalization features a wave of self-learning entities that generate information from exponentially-growing big data sources that are encroaching every aspect of our daily lives. Inequality is one of the most significant pressing concern of our times. Ample evidence exists in economics, law and historical studies that multiple levels of inequality dominate the current socio-dynamics, politics and living conditions around the world. Social inequality stretches from societal levels within nation states to global dimensions but also intergenerational inequality domains. While digitalization and inequality are predominant features of our times, hardly any information exists on the inequality inherent in digitalization. This paper breaks new ground in theoretically arguing for inequality being an overlooked by-product of innovative change – featuring concrete examples in insights and applications in the digitalization domain. A multi-faceted analysis will draw a contemporary digital inequality account from behavioral economic, macroeconomic, comparative and legal economic perspectives. This paper targets at aiding academics and practitioners in understanding the advantages but also the potential inequalities imbued in digitalization. It sets a historic landmark to capture the *Zeitgeist* of our digitalization disruption heralding unexpected inequalities stemming from innovative change. The article may open eyes to understand our times holistically in its advantageous innovation capacities but also potential societal, international and intertemporal unequal gains and losses perspectives from digitalization.

**KEYWORDS:** AI, Artificial Intelligence, Behavioral Economics, Behavioral Macroeconomics, Behavioral Law & Economics, Big Data, Big Data Insights, Coronavirus crisis, COVID-19, Digital Inequality, Digitalization, Disparate Impact, Economics, Equality, Law, Law & Economics, Monetary Policy, Multiplier, Redistribution, Searchplace Discrimination, Social Justice

## Introduction

Digitalization is an innovation that constantly evolves (Puauschunder 2019b). Research on digitalization and inequality exists, although hardly any work combines these major topics into digitalization inequality (Piketty 2014; Puauschunder 2019a, c). International organizations and global governance entities around the world focus on describing the digitalization disruption in the 21<sup>st</sup> century (Puauschunder 2022b). The legal, economic and regulatory status of digitalization is currently developing in jurisdictions and economies worldwide (Puauschunder 2022b).

The United Nations (UN) agencies and regional organizations descriptively report internationally-varying current guidelines, ethics codes, and action statements regarding the digitalization disruption part. The UN is the leading authority on sustainable development, which is targeted by the 2015-incepted Sustainable Development Goals.

Strikingly, none of these global goals directly addresses digitalization and the benefits efficient market transitions can hold for economically-empowered development. Information and Communication Technology (ICT) is mentioned here or there but rather addressed in a descriptive and backward-looking forensic way in simply describing the state-of-the-art after the industry development. The United Nations has been criticized by practitioners to have a backwards-looking approach on digitalization. Regulators have voiced that the UN reporting lacks any forward-looking market-relevant innovation discourse on digitalization.

The United Nations also opened a Centre on Artificial Intelligence and Robotics within the UN system in The Hague, The Netherlands, in 2017. The International Telecommunication Union worked with more than 25 UN agencies to stage the “AI for Good” Global Summit.

The UNESCO has launched a global dialogue on the ethics of AI due to its complexity and impact on society and humanity.

The OECD hosted a Council on Artificial Intelligence in the first half of 2019 to set international AI standards on a global level.

In 2017 the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) created a joint technical committee to develop IT standards for business and AI consumer applications.

Labor unions have also defined critical principles for ethical AI. The United States Library of Congress has comparative e-content and reports on the use of AI in various domains, for instance, healthcare, currency and data management (Puaschunder 2022b).

All these reports and efforts are different and important, but hold a limited view on the role of inequality in digitalization. For instance, none of them addresses the connection between AI and healthcare moderated by anti-corruption and market financialization (Puaschunder 2022a; Puaschunder & Beerbaum 2020a, b). While all these reports include contemporary accounts of AI, they lack a clear focus on the downsides of digitalization in creating and exacerbating inequality. None of the agencies, reports or efforts are covering ethics of digitalization. And no account exists on an analysis of the societal downfalls of innovation if access is restricted – besides the access to affordable medicine debate of the 1990s in the World Trade Organization (WTO) discourse and The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement (Mantl, Puaschunder & Plank 2020).

Inequality research has been rising in the last decade. Foremost, Thomas Piketty's *Capital in the 21<sup>st</sup> Century* (2014) provided a trenchant analysis of the most comprehensive dataset on international wealth inequality over time. Piketty's (2014) work was an important milestone wake-up call for policymakers and governance leaders but also the wider public to realize wealth inequality around the globe having reached a record high.

While the book incepted ample research interests in inequality, most accounts remained in the financial domain backed by quantitative accounts – e.g., see the work of Joseph Stiglitz (2006, 2011, 2012, 2015) and Branko Milanović (2010, 2016, 2019). The book has its clear historic merits but it remains a foremost backward-looking historical account of the evolution of wealth inequality.

Piketty's (2014) *Capital* only provides a brief forward-looking solution in deriving from history that only war and taxation appear as historically-validated global solutions to alleviate wealth inequality. While the first option, war, appears critical and unrealistic from many perspectives – such as the humanitarian, societal and economic aspects of war – the second solution's feasibility in taxation was undermined in the last decade, foremost in revealing information about tax evasion, which was vividly underlined in the Panama Papers, but also the European Union lacking a fiscal pact or fiscal union to this day.

The mentioned books, reports and efforts prepare the stage for research on the historic facets of inequality in innovation as well as uneven advantages and burden distributions in the current state-of-the-art of digitalization.

### **Digital Inequality rising**

Today, the most pressing question of our time is how to use digital innovation to make the world more equitable and align digital efficiency with justice and fairness (Puaschunder 2022b). No international publication exists to this date about the most novel facets of digital inequality around the world, such as the upcoming 5G revolution, digital warfare, COVID-19 Long Haulers' relief through digitalization but also rights to not be forgotten given algorithmic responses to potentially-false competitive claims to remove content from the internet.

Most recently, the COVID-19 pandemic revolutionized digitalization but also opened eyes to social injustices around the world (Puaschunder 2022b; Puaschunder, Gelter &

Sharma 2020). Building on the wave of inequality research, which appears to have even grown in the aftermath of the COVID-19 pandemic, future research could add behavioral and macroeconomic aspects (Puaschunder 2020b, 2021). A more qualitative description of inequalities could be pursued in capturing the uneven changes in access to information, efficiency and dignity – all features that come from or are directly related to digitalization (Puaschunder 2020a, c). Future scientific discovery could capture the most recent developments and theoretical extensions on more future-oriented innovation capital growth prospects (Puaschunder 2019d; 2020e). Clear strategies how to combat inequality imbued in innovation with application in the digital world could be investigated. Research could be aimed at providing innovative law & economics-informed public-private-partnership solutions for policymakers (Puaschunder 2019f, i, j, k).

Connecting all these dots could serve as a unique historic landmark to capture our contemporary digitalization disruption moment in time but also offer ways to harvest the benefits of innovation ethically and sustainably with respect for inequality aspects.

### **Digital Inequality research**

Digital inequality research could add an economic perspective to the legal digitalization analysis with application on inequality stemming from big data. Digital inequality also arises in innovations of artificial intelligence, 5G, the internet of things, robotics and supercomputers.

Topics addressed should expand on innovation-inherent inequalities but also reveal novel facets of inequality that are particular for digitalization. While the literature is abundant on the positive perspectives of digitalization innovations, future research should also feature a deeper theoretical system critique and highlight the societal implications of inequality imbued in the concept of innovation and digitalization (Puaschunder 2019e, h).

Macroeconomic results but also a more internationally-comparative analysis can round up the extension on contemporary efforts to capture the perils of digitalization. Capturing the most novel angles to where digitalization stands today may naturally add to the existing literature a fresh angle and create a historic landmark account of our contemporary post-COVID digitalization disruption.

A positive approach to a global market disruption could feature multidisciplinary analyses. But research should also cover the finance world's potential in a historic market transition that will bring increasing and lasting value to historical research.

Thereby an international outlook but also a wide range of disciplines should be studied including psychology, business, economics, public administration and law from an orthodox but also from a heterodox viewpoint. Research should feature descriptive content coupled with scientifically-informed but written in an easily-understandable way that engages stakeholders to nurture a wide-reaching awareness for digital inequality.

Future research could prospect future implications or future-oriented policy recommendations on the contemporary international approaches to reap the benefits of digitalization and transform societies worldwide through a digitalization revolution (Puaschunder & Feierabend 2020). A truly international angle of access to digitalization innovation benefits worldwide could offer the first and most needed account of digital social justice as ennobling excellence (Puaschunder 2019g; 2022b).

Empirical macroeconomic research could now add the growing account on digital inequalities. Concrete examples could be investigated in regards to access to the benefits but also exposure to the perils of digitalization in the 21<sup>st</sup> century. Research investigations could portray AI and healthcare and anti-corruption as a future prerequisite of responsible access to markets, finance and societal welfare (Puaschunder 2022a, c).

In all of this, future research could provide an international economic law perspective, which is missing in the market on digitalization and inequality academic research, practitioners' manuals and global governance reports. Outlining the novel connection between

digitalization and inequality worldwide could present a range of innovative and unprecedented empirical insights that have direct implications for academics from multiple fields, global governance officials, innovation catalysts and policymakers around the globe.

First international nuances of digital inequality from qualitative and quantitative viewpoints could lead to derive a future outlook on the digitalization workplace revolution and implications for international trade and development. The emerging field of Behavioral Law & Economics could be fortified with practical examples in order to set a historic landmark in innovation management of global digitalization reflecting a concerted world effort to improve society in regards to novel and unknown facets of inequality together. A vital account on monitoring and evaluation of the current digitalization could be pegged to social, economic and environmental causes. Direct leadership and followership implications could improve our understanding for using novel technologies daily to improve individual lives, group dynamics, and global governance (Puaschunder 2020d).

In its entirety, research aims at breaking the most innovative ground to establish the importance of law and economics for the regulation of a complex and wide-reaching market transition of our lifetimes.

### **Digital Inequality research prospect**

In the last decade, literature and data about digitalization that the digitalization disruption is exponentially growing over time. The qualitative and quantitative rise in digitalization has been even accelerated by the global COVID-19 pandemic, which is still not completely over. The pandemic also bring along a following Long COVID wave, which has already been attributed as a pandemic within a pandemic that will further exacerbate digitalization aiding those with long-term impairments as well as fill a currently rising labor force gap, which has never been as high as of now in the U.S. among the middle-aged population. The number of people doing research on the topic will therefore likely rise globally with more and more digitalization encroaching every aspect of human lives.

Future research could discuss the advantages but also potential downfalls of our contemporary digitalization disruption. Within the next five years, the digitalization disruption is likely to grow exponentially with 5G being rolled out in major economies of the world. Future-oriented research on digitalization inequality could thus be of value for everyone who is interested in innovation but also inequality alleviation.

Future research could primarily be targeted at academic scholars but written in an applied and tangible tone that it is also to appeal for students and practitioners from around the world. As scholars and practitioners of tomorrow could be catered for, given the timeliness of the topics under scrutiny, a widespread audience could include students of business, law & economics, advanced research scholars in the field of management, entrepreneurship and legal regulatory fields, and interdisciplinary practitioners at International Organizations such as the United Nations, World Bank and International Monetary Fund. General management skills and maybe some economic interests but also an interest for public policies and international affairs may be helpful but not necessary to understand the practitioner-oriented book.

The proposed research could offer an international account of digitalization inequalities while paying close attention to the most contemporary trends arising on the horizon. The role of the COVID-19 market transition for digitalization should be coupled with the newest innovations and market advancements. The most significant trends in the digitalization revolution should be interdisciplinarily analyzed. Digital inequalities could vividly be outlined in multiple sectors, such as – for instance – the medical field, cryptocurrencies in the financial world but also access to education and social justice pledges arising worldwide will be a unique contribution for scientists, students and practitioners alike.

Professionals could gain from unprecedented benefits for international professionals in regard to highlighting the worldwide connection between digitalization and inequality. Backing claims by empirical insights that have direct implications for global healthcare, economics academics, and policymakers around the globe; may help professionals derive direct leadership and followership implications for integrating digitalization in the modern workspace. Outlining international nuances of digital inequality but also daring a future outlook on the digitalization workplace revolution, may hold invaluable insights for international trade and global development. Scientific knowledge will be conveyed in tangible and practical examples. In all these features research on digital inequality may be of value for global professionals and international governance executives.

The research may also hold beneficial insights on management facets of global digitalization that could aid sustainable development advocates to reflect a concerted world effort to improve novel facets of inequality in strategic stakeholder management. Practitioners may also learn from the first monitoring and evaluation planned of the current digitalization pegged to social, economic and environmental causes. The research would benefit from interest in technology and digitalization innovation but should also be targeted to be presented in such a tangible way that any professionals may easily follow its course.

In all these features, the proposed research could be of timely and historically valuable as a trace how important decisions were made during our economic transition time that potentially set the world on a trajectory in regards to the introduction to digitalization into society.

### **Concrete concepts under scrutiny**

A comparative Behavioral Law & Economics approach could help to understand the most contemporary trends in digitalization around the world with particular attention to inequality. Research on digital inequality should start with a description of digitalization and inequality. Empirically-driven, the prospective research will make the case for rising digitalization encroaching our societies around the globe. In historical overviews and backed by research results, readers should be taken onto a journey throughout the history of digital efforts starting from the first mechanical operators to today's most recent advancements of the marriage of finance and digital currencies, social media activity remuneration and the financing of space exploration with cryptocurrencies.

The scientific endeavors could then shed light on a concurrent development of inequality as one of the most significantly pressing concerns of our times. Inequality could be captured in its origins, forms and layers within society, around the globe and over time. While the standard economic innovation literature assumes constant improvement of digitalization being available to the coming generations, future research could draw the heterodox case of a connection of innovation and inequality backed by empirical evidence – for instance, before the rise of the internet in the 1990s, there was no correlation noticeable between Gross Domestic Product and life satisfaction (Kirchler 2011). But with the opening of the internet window to the world, a comparatively lower GDP led to unhappiness, which may also have triggered a migration wave to follow in the subsequent decades.

Attempts to alleviate the impacts of inequality in law, economics and politics should also be debriefed upon. The role of the internet in raising awareness, mobilizing e-social pressure and crowd control but also the negative aspects of online comparison and cancel cultures and the loss of classic media control in the age of digitalization should become discussed.

As for concrete examples, research could bring together digitalization and inequality in empirical evidence, theoretical advancements and vivid real-world relevant examples. After introducing a working definition of digitalization inequality, the emergence and historical evolution of inequality in innovations should be discussed. A historical snapshot of

contemporary digitalization pressures could cover the aftermath of the 2008 World Financial Recession and our fading post-COVID-19 economy in regards to digitalization.

The planned research could also consider rescue and recovery funding, a governmental tool currently applied to support the private sector and use market incentives to lead public transitions to a more equitable world and, therefore, a more harmonious society.

Most recent developments in 5G, cryptocurrencies, democratization of information and social media revenue repatriation as well as digital space exploration should become part of the planned research. An analytic framework to dissect inequality in digitalization could be proposed comprised of qualitative and quantitative parameters in order to guide on a monitoring and evaluation agenda to see if the digitalization disruption can be delivered in an ethical and inclusive way.

Behavioral Law & Economics rational but also disparate impact analysis tools should be presented in order to outline potential digital inequality alleviation strategies – such as creatively being found in education, skills development, institutional adjustment and favorable societal norms changing capacities.

A comparative analysis of some of the most dominant digitalization hubs in Asia, Europe and North America will round up the multi-faceted research agenda ending in a global outlook and future-oriented extraterrestrial space exploration vision.

Paying homage to the innovative character of digital inequality, research should also capture the most recent developments in digitalization with particular attention to hidden inequalities. Societal divisions in access to digitalization but also global disparities are obvious inequalities on the surface. Below the obvious inequality, the readers are meant to discover – in Socratic writing – digital competition in the age of online searchplace dominance. Digital currencies and reclaiming economic growth and remuneration potential but also taxation revenue in the age of tangible and intangible online transactions should be discussed. The economic sanctions imposed in political conflicts should become subject to scrutiny.

The role of digitalization in supporting COVID-19 prevention but also in integrating COVID Long Haulers back into the economy could be envisioned. Digital exploration of extraterrestrial territories should become thematized alongside raising attention to digital ethics in these novel colonization efforts. Lastly, to pay tribute to future generations, the contested relation between digitalization and sustainability should be reflected upon. Digitalization could be understood as the remedy but also a burden in regards to the Sustainable Development Goals opening up the final reflection upon potential digitalization inequality alleviation strategies.

In its entirety, digitalization inequality research should also bring forward solutions to combat digital inequality in regulation (with particular emphasis on the Brussels effect), the economic impetus of taxation but also global governance institutions' role in monitoring and evaluating the concerted efforts to deliver a fair digitalized world. A plaidoyer for Law & Economics analytics but also stakeholder management in the concerted action of a widespread digitalization disruption could become emphasized. The need for targeted internet oversight agencies but also favorable behavioral social norms imbued in digitalization ethics could round up the future-oriented, interdisciplinary and wide-reaching research agenda.

## **Discussion**

The rising digital inequality gap is a potential and hidden source of societal and international tensions as well as intergenerational imbalances. This article was targeted at proposing a research agenda for those who strive for innovation and work to improve digitalization market disruptions.

The size, scope and dimensions of inequality was proposed to be explored in a truly multi-modal way covering different disciplinary angles and various regions of the world. International and interdisciplinary perspectives on digital inequality could be rounded up with

multi-dimensional analysis that outline the qualitative and quantitative facets of societal divides that open up and exacerbate during our contemporary digitalization disruption.

The proposed research should come to life in vivid examples and easily-understandable case studies that are timely but also allow deriving deeper analytic skills that can be applied to future digitalization leadership challenges. A Socratic writing style could be pursued that rather provides insights and evaluation options with curious audiences being triggering to evaluate the most pressing contemporary predicaments of our time on their own.

A positive approach to innovation could feature multidisciplinary analyses. The contemporary discourse on the advantages of digitalization should be balanced with information about the unknown digitalization disruption's potential to widen existing inequality gaps or even open up novel, potentially unforeseen inequalities. Interdisciplinary and heterodox economic viewpoints may aid practitioners of Finance, Governance, Public Policy, and International Development and Leadership to alleviate the most pressing contemporary societal predicaments. Discussing digital inequality from different angles for a broad audience is probably unique at this stage. International audiences are likely to be interested as international perspective predestines the research to be of value for a worldwide academic audience but also international student bodies, global governance scholars or corporate executives, who focus on driving cutting-edge innovations. Outlining the blatant but also hidden inequalities imbued in digitalization within society, between countries but also over time promises to bring increasing and lasting value to historical research.

## References

- Kirchler, Erich Maria 2011. *Wirtschaftspsychologie: Individuen, Gruppen, Märkte, Staat*. Göttingen: Hogrefe.
- Mantl, Josef, Julia Margarete Puaschunder & Bernd Plank, B. 2020. „Communication in the digital century.” *Proceedings of the 1<sup>st</sup> Unequal World Conference: On Human Development*, United Nations, New York, New York, September 28-29.
- Milanović, Branko. 2010. *The haves and the have-nots: A brief and idiosyncratic history of global inequality*. New York: Basic books.
- Milanović, Branko. 2016. *Global inequality: A new approach for the age of globalization*. Cambridge, MA: Harvard University Press.
- Milanović, Branko. 2019. *Capitalism, alone: The future of the system that rules the world*. Cambridge, MA: Harvard University Press.
- Piketty, Thomas. 2014. *Capital in the 21<sup>st</sup> Century*. Cambridge, MA: Harvard University Press.
- Puaschunder, Julia Margarete. 2019a. “Artificial Diplomacy: A guide for public officials to conduct Artificial Intelligence.” *Journal of Applied Research in the Digital Economy* 1”: 39-54.
- Puaschunder, Julia Margarete. 2019b. “Artificial Intelligence evolution: On the virtue of killing in the artificial age.” *Journal of Sociology* 3(1): 10-29.
- Puaschunder, Julia Margarete. 2019c. “Artificial Intelligence in the healthcare sector.” *Scientia Moralitas: International Journal of Multidisciplinary Research* 4(2): 1-14.
- Puaschunder, Julia Margarete. 2019d. “Artificial Intelligence market disruption.” *Proceedings of the 13<sup>th</sup> International RAIS Conference on Social Sciences and Humanities organized by Research Association for Interdisciplinary Studies (RAIS)* at Johns Hopkins University, Montgomery County Campus, pp. 1-8, Rockville, MD, United States, June 10-11.
- Puaschunder, Julia Margarete. 2019e. *Big Data, algorithms and health data*. Vienna, Austria: The New Austria and Liberal Forum Lab Blog.
- Puaschunder, Julia Margarete. 2019f. “Big data, Artificial Intelligence and healthcare: Developing a legal, policy and ethical framework for using AI, big data, robotics and algorithms in healthcare.” Report on behalf of the European Parliament European Liberal Forum in cooperation with The New Austria and Liberal Forum Lab. Vienna, Austria, European Union.
- Puaschunder, Julia Margarete. 2019g. “Big data ethics.” *Journal of Applied Research in the Digital Economy* 1: 55-75.
- Puaschunder, Julia Margarete. 2019h. “On Artificial Intelligence’s razor’s edge: On the future of democracy and society in the artificial age.” *Journal of Economics and Business* 2(1): 100-119.
- Puaschunder, Julia Margarete. 2019i. “Organizational Artificial Intelligence behavior.” *Journal of Applied Research in the Digital Economy* 2(1): 1-14.

- Puaschunder, Julia Margarete. 2019j. *Stakeholder perspectives on Artificial Intelligence (AI), robotics and big data in healthcare: An empirical study*. Report on behalf of a European Parliament Agency. New York, New York.
- Puaschunder, Julia Margarete. 2019k. *The legal and international situation of AI, robotics and big data with attention to healthcare*. Report on behalf of a European Parliament Agency. New York, New York.
- Puaschunder, Julia Margarete. 2020a. “A utility theory of privacy and information sharing.” In *Encyclopedia of Information Science and Technology*, Hershey: IGI Global.
- Puaschunder, Julia Margarete. 2020b. *Behavioral economics and finance leadership: Nudging and winking to make better choices*. Cham, Switzerland: Springer Nature.
- Puaschunder, Julia Margarete. 2020c. “Data fiduciary in order to alleviate principal-agent problems in the artificial big data age.” In K. Balachandran (Ed.), *Information for Efficient Decision Making: Big Data, Blockchain and Relevance*, pp. 41-90. World Scientific.
- Puaschunder, Julia Margarete. 2020d. “On freedom in the Artificial Age.” Proceedings of the *16th Research Association for Interdisciplinary Studies Conference*. Princeton, New Jersey, United States, pp. 75-80, March 30-31.
- Puaschunder, Julia Margarete. 2020e. “Revising growth theory in the Artificial Age: Putty and clay labor.” *Archives in Business Research* 8(3): 65-107.
- Puaschunder, Julia Margarete. 2021. *Verhaltensökonomie und Verhaltensfinanzökonomie: Ein Vergleich europäischer und nordamerikanischer Modelle*. Wiesbaden: Springer Gabler.
- Puaschunder, Julia Margarete. 2022a. “Artificial Intelligence hubs: How to catch the next pandemic early.” *DeGruyter blog, Science & Technology*, June 27, 2022.
- Puaschunder, Julia Margarete. 2022b. *Ethics of inclusion: The cases of health, economics, education, digitalization and the environment in the post-COVID-19 era*. London: Ethics International.
- Puaschunder, Julia Margarete. 2022c. “The future of Artificial Intelligence in international healthcare.” In Herta Nagl-Docekal and Waldemar Zacharasiewicz (Eds.), Proceedings of the *Transatlantic Dialog Conference on Artificial Intelligence and Human Enhancement: Affirmative and Critical Approaches in the Humanities from both sides of the Atlantic Conference, Austrian Academy of Sciences, Austria, European Union*, De Gruyter.
- Puaschunder, Julia Margarete & Dirk Beerbaum, D. 2020a. „Healthcare inequality in the digital 21<sup>st</sup> century: The case for a mandate for equal access to quality medicine for all.” *Proceedings of the 1<sup>st</sup> Unequal World Conference: On Human Development*, United Nations, New York, New York, September 28-29.
- Puaschunder, Julia Margarete & Dirk Beerbaum. 2020b. „The future of healthcare around the world: Four indices integrating technology, productivity, anti-corruption, healthcare and market financialization.” *Proceedings of the 18th Research Association for Interdisciplinary Studies Conference at Princeton University*, Princeton, New Jersey, United States, pp. 164-185, August 17-18.
- Puaschunder, Julia Margarete. & Dieter Feierabend. 2020. „Ancient legal codes as basis for Artificial Intelligence regulations in the 21<sup>st</sup> century.” *Scientia Moralitas – International Journal of Multidisciplinary Research* 5(1): 1-15.
- Puaschunder, Julia Margarete, Martin Gelter & Siegfried Sharma. 2020. “Alleviating an unequal COVID-19 world: Globally digital and productively healthy.” *Proceedings of the 1<sup>st</sup> Unequal World Conference: On Human Development*, United Nations, New York, New York, September 28-29.
- Stiglitz, Joseph. 2006. *Making globalization work*. New York: Norton.
- Stiglitz, Joseph. 2011. *Globalization and its discontents*. New York: Norton.
- Stiglitz, Joseph. 2012. *The price of inequality: How today's divided society endangers our future*. New York: Norton.
- Stiglitz, Joseph. 2015. *The great divide: Unequal societies and what we can do about them*. New York: Norton.