



A Fair Governance: On Inequality, Power and Democracy

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Abstract

Can governments keep the pace of global markets? It is a defining characteristic of the present times, tested and measured within multiple studies, that we are living in an increasingly interconnected economy in which giant companies emerge and compete presenting new goods and products at a global scale. The competing environment of international markets produces quickly growing creatures that old nation-states struggle to understand, monitor and, consequently, regulate. In this regard, the selection process taking place in the market seems to be far more effective and greedy than the selection process we apply to our governments. In this paper I discuss the basic theoretical mechanisms for the persistence of wealth concentration, introducing a general game-theoretical framework to connect governance, market economy, and wealth distribution, and to rethink democracy and fairness in policy-making, especially with the aim of global sustainability governance.

Keywords Fairness · Inequality · Democracy · Markets · Game theory

When a corporation wields sufficient economic power, we should view it as a political institution outright Teachout and Khan (2014).

1 Introduction

The current challenge posed to politics is unprecedented as giant companies operate globally (Schweitzer et al. 2009) whilst nation-states need to coordinate both internally, via democratic or authoritarian institutions, and externally, via international institutions conciliating the interests and the policies of different national governments. Pulling the plug on international trade and finance seems to be an attractive option for national politics, but the fast pace of technological progress and the unavoidable dependence of national economies on importing and exporting international goods make these autocratic policies, if not impossible, destabilising for a country's economy and refinancing needs. In a recent speech (Draghi 2019), the European Central Bank president outlined how the disproportion between individual countries and global financial integration affects the ability of isolated governments to exercise political and economic

power, and effective sovereignty over policies and the economic condition of a country is only restored by the bargaining power that supranational entities, such as the European Union, coordinating the interests of larger economic areas, can rely upon.

Regulating large companies holding a vast portion of world's wealth and power is crucial for keeping a working democracy, as powerful elites (Acemoglu and Robinson 2008) are able to actively invest in politics to lobby for their own interests. Information asymmetry, private funding in political campaigns, and lobbying tend to give a competitive advantage to large companies and it is not at all guaranteed that the defense mechanisms in place in current democracies are sufficient to avoid a persistent control of major political decisions by individuals and companies that have managed to dominate a large portion of global markets.

In this scenario of persistent control by market winners, one may either embrace the ruling of a benevolent market-driven dictator, or a small group thereof, over irrelevant democratic institutions, or rethink the state of current democratic mechanisms and possibly redesign them for ensuring they guarantee the fundamental rights for which they are built. In fact, a philosophical and financial investigation (Ippoliti and Chen 2017, Ippoliti 2017a, b, c) can outline the special role that global governance plays in the interplay between finance, market economy and society, as it can act as a balancing factor that can either reinforce market

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outcomes or provide means and opportunities to ensure fair competition in the modern complex society.

The complexity of the world economy is a challenge for ethics for one main reason: the complex consequences of an isolated action hinder the possibility of a decision taken only within the framework of a naive ethics of conviction (Weber 1919) and the inability of predicting the impact of an action undermines the effectiveness of an ethics of responsibility. Withdrawing the understanding of the complex phenomena in modern society and economics it means renouncing the very possibility of an ethical action. In the context of financial management, in de Bruin (2014, 2015) it is argued that we need to focus on the acquisition and exercise of epistemic virtues, rather than to focus on a more ethical culture for banking per se. Within this theory, we argue that acknowledging complexity and facing the challenge of its predictability can be regarded as an epistemic approach (De Bruin 2013) that may lead to better financial and economic regulation, to the formation of a fairer global economy and potentially to global financial stability and sustainability.

In this paper I aim to understand basic theoretical mechanisms for the persistence of wealth inequality and power concentration, considering accelerating scenarios and possible consequences to democracy, understanding its ethical implications in the current scenario of global decision making, that is found necessary for geopolitical matters and in climate change policy-making. In Sect. 2 I discuss the facets of wealth inequality. In Sect. 3 I briefly illustrate the necessity of inequality in a broader political and economic context. In Sect. 4 the concept of institutional inequality emerging from the market is discussed. In Sect. 5 a general framework to consider governance, markets, and inequality is introduced. Finally we discuss perspectives for designing fair democracies.

2 The Two Facets of Inequality

Wealth inequality has two facets, on one side it can limit the capabilities of individuals and companies in the lowest band of wealth, possibly sitting under the poverty line and suffering from a deprivation of resources, and on the other side, individuals and companies in the highest band of wealth are able to access good externalities of wealth, allowing for an unequal representation of interests that, in turn, can influence the persistence of wealth distribution and related benefits (Acemoglu and Robinson 2008; Roine and Waldenström 2015). The ability of being efficiently represented by government policies is likely to be affected by many factors: private investments, lobbying, alignment and conflicts of interests, and presence of strong group identities (Varshney 2005). Let us consider the democratization process as the process according to which a government's utility function

includes the utility functions of more and more individuals, in particular, allowing for lower wealth individuals to be represented in the government's interests. In the presence of democratization we might be left with the problem of prioritizing different candidates and policies, selecting a voting system that, though imperfect (Arrow 1950), will manage to aggregate the rational or irrational choices of individual voters. Democratization could be obstructed, or captured by wealth inequality (Acemoglu et al. 2005, 2019), when lobbies actively try to interfere with different steps in the process and modify the overall utility function of a nation, leading to policies that are effectively advantageous for a particular portion of the population.

3 Inequality, Growth, and Poverty

Inequality cannot be evaluated in isolation (Perotti 1996; Muller 1988; Gabaix et al. 2016; Bouchaud and Mézard 2000; Bouchaud 2015; Biondi and Righi 2019), as Rawls (2009) argues with the difference principle, inequality is only troubling if it worsens the situation of the worst-off individual of a society. It is therefore usually considered as part of the so-called poverty-growth-inequality triangle (Ravallion 2001; Bourguignon 2004), sufficient growth may make a given value of inequality acceptable if it does not correspond to increasing poverty. The increasing level of global inequality and national inequalities driven by market competition, the unprecedented level of winner-takes-all effects in the scaling global economy, and the lack of poverty alleviating policies and sustainability goals support the idea that governments and international institutions need to do more to coordinate, control and regulate the global economy, and guide it towards a more equal and sustainable pathway. We are living the longest persistent period of diffused democracy and the fastest growth of technological development (Nagy et al. 2011) in the history of humankind. At the same time, global inequality and national inequalities show a clear increase in the last 30 years (Milanovic 2016; Stiglitz 2012; Piketty and Saez 2006). In fact, thorough statistical investigation confirms that democracy is not correlated with any decrease in inequality (Scheve and Stasavage 2017; Acemoglu et al. 2015; Bollen and Jackman 1985). Such empirical data are consistent with a theory of captured democracy, in which groups of individuals in society are able to be better represented by elected governments (Acemoglu et al. 2019), thanks to a multiplicity of instruments for wealthy and powerful groups to lobby and influence democratic policies. Economic growth seems to partially correlate with democracy, but, interestingly, poverty rates seem marginally related to democracy, as also authoritarian, non voting governments may actively engage in poverty alleviating policies (Varshney 2005). Again, this gives

a consistent picture where democracies allow for economic growth driven by free and participated markets but with only partial redistribution. On a global scale, detailed studies on inequality show a so-called elephant curve (Alvaredo et al. 2018; Milanovic 2016), with low-middle income growth for the lowest income percentiles, low income growth for the middle-upper percentiles, and top income growth levels reserved to a small minority of top incomes. This data suggests two perspectives on the relation between market economy and democracies, democratic policies seem to be inefficient in correcting wealth concentration, but also high levels of wealth and power concentration seem to be able to change the policy priorities of democracies. For instance, being unable to efficiently tackle climate change, alleviate poverty, and support welfare-enhancing measures, thus affecting capabilities of individuals in the democracy. The measure of inefficiency is not directly inequality, as Rawls (2009) pointed out, rather poverty, mobility, and representation, or, in short, the overall fairness of democratic society. Capabilities of individuals (Sen 1987; Sen et al. 1999), at least for what concerns participation and representation, seem to be limited by market economy, and in democracies market opportunities seem to be more favored than equality itself (Acemoglu et al. 2019). Rawlsian analysis urges us to focus on the possible implications of inequality on poverty, hence on the lower end of the wealth distribution, but the emergence of inequality is actually twofold, as it implies the existence of individuals in the highest band of wealth, or companies that are able to influence unequally both private and public decision making in the global society. Regarding poverty as the lack of freedom to act (Sen 1987; Sen et al. 1999), the inability to take part in major decision processes in a society, from the community to the global governance level (Ostrom et al. 2002; Dietz et al. 2003), can be seen as a further state of deprivation, potentially impacting larger and larger portions of society.

4 Institutional Inequality

The role of large corporations in shaping inequality is multifold, their internal manager-to-worker inequality, related to their business model, markups, and labour share, may directly affect national inequality (Song et al. 2018), and they may be able to influence governments on inequality-related policies. Moreover, in a world where nation-states, democratic and not, struggle to accept and find coordination via diplomacy, large corporations are able to take decisions at a faster rate, exploit innovations globally, and outrace governments and regulatory institutions. Large companies

are able to benefit from their market position in isolation¹, but also engage in corporate relationships with each other, by co-ownership of multiple companies and stakeholders participating in multiple corporate boards (Vitali et al. 2011; Santos and Rumble 2006). Moreover, as argued in (Teachout and Khan 2014): “The largest limited liability companies are too complex to manage, too difficult to regulate, and are often effectively immune from criminal prosecutions. Their size allows them to operate outside of normal democratic constraints and their use of their economic power undermines our democracy. In many ways, the excesses of corporate power constitute a defining challenge of our present moment, yet we have lost the conceptual tools to fully identify and understand it. Our intent is to recover both the vision and language to interrogate this power, so that we as citizens can then decide how to structure and harness it.” These mechanisms are part of the scenario that we are living, in which the concentration of money creates not only economic inequality but also power inequality. In the context of global decision making, wealth concentration ceases to be merely a problem of economy for the efficient allocation of incentives for a country’s growth, but becomes a problem of power inequality, where individual entities can play a major role in political decisions and others can be completely excluded. This is where politics is crucial, democracies so far have consistently managed to enhance growth and partial redistribution but failed to balance wealth inequality and power inequality. Institutional inequality thus creates an inconsistency in the democratic values that sustain fair rules for the access to a free market, and the consequences of these rules of the game allow for power concentration that affects the democracy that created the condition for such power to emerge in the first place.

5 Governance, Markets, and Wealth

I here discuss a general theoretical framework to capture the basic elements that characterize the interplay between market economy and government action (Downs 1957). We represent a society (S) with a market economy as an evolving set of games in extensive and strategic form between citizens (Morrow 1994; Waldman 1984), citizens are free to create games within the constraints defined by the government (G). Governments can act on the set of games by changing the rules and constraints for

¹ As quoted in Davis and Cobb (2010): “If we will not endure a king as a political power, we should not endure a king over the production, transportation, and sale of any of the necessities of life. If we would not submit to an emperor, we should not submit to an autocrat of trade, with power to prevent competition and to fix the price of any commodity” (Sen. Sherman).

game creation, and by adding, removing, and redefining games introduced by citizens. Namely, government may be regarded as a function that takes as an input a set of games and outputs another one. Governments themselves can evolve via voting mechanisms based on voter's preferences (Holcombe 1989), subject to capturing mechanisms (Acemoglu et al. 2015, 2019) influenced by the wealth (W) accumulated by individual citizens, their gaming dynamics or possible network of interactions. This general framework for a democracy $D = \langle S, G, W \rangle$ is here introduced (Fig. 1) to give a qualitative idea on how theory could be able to systematically describe how a modern free society, based on a market economy and democratic institutions, could evolve in time and how self-reinforcing mechanisms could be modelled at a high level of generality, through the different relationships between society, government, wealth, and possibly other parameters and structures, e.g. financial markets influencing citizens' decisions.

Moreover, in this framework we can recover known general results on behavioral economics, as specific games created and played in society (Kahneman et al. 1986; Nowak et al. 2000; Pangallo et al. 2019). For an informal introduction to game theory in diverse branches of philosophy we refer to De Bruin (2005). The effort of governments in this framework is to actively monitor the conditions of citizens based on the offer of games they are presented within the society, possibly integrating missing opportunities, and restoring the ability of bargaining power when inequality among players emerging from market economy could affect the fairness of individual games (McCarty and Meirowitz 2007; Kahneman et al. 1986). This also allows us to introduce a more radical notion of fairness of society, capturing a different aspect of human behaviour, that is the freedom of accepting participation in a game. In fact, the absence of a competitive and fair offer of games within society could force players to accept the participation in unfair games, possibly with incomplete and asymmetric information. This represents a societal definition of fairness: when citizens in a society are forced to participate due to lack of fair alternatives or are misled into playing through asymmetric information, then the society as a whole can be deemed unfair. If we connect this notion of fairness in society with the possibility of wealth concentration and inequality to influence democracy in adjusting the set of available games in a society, then this framework allows for the emergence of a self-reinforcing and accelerating mechanisms for wealth and power accumulation through the presence of an unfair offer of games within society. Inequality can become a trigger for unfairness in society manifested through persistence of wealth concentration, hence absence of social mobility, lack of poverty alleviation policies, and for public investments, represented in this framework by publicly-funded fair games.

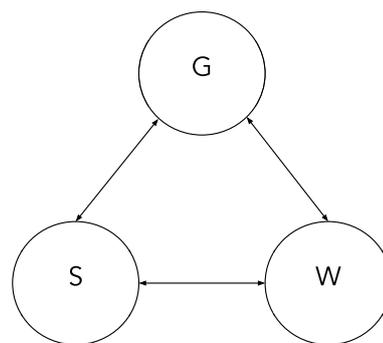


Fig. 1 A general representation for a democracy, $D = \langle S, G, W \rangle$, in which interactions between government, society, and wealth—or other individual features—take place, possibly creating self-reinforcing mechanisms for wealth concentration

6 When Inequality Becomes Unfair

In this paper I investigated a definition of fair society and introduced a framework to understand the role that democracy has, or fails to have, in creating one. In his seminal paper, Rabin (1993) points out how “no matter how minor the material implications, people’s well-being is affected by the friendly [fair] or un-friendly behavior of others.” Fairness is a fundamental factor in human happiness, and equal levels of personal wealth may correspond to a far different happiness level, or utility value in economic terms, for individuals and for a society as a whole. This dictates to look with a new eye at the problem of wealth concentration, that is the eye of ethics. Monitoring inequality is not only about fiscal correctness or tax evasion prevention but also a matter of preserving the space for free and fair decision making for the majority of individuals of a democracy, through politically backed institutions able to confront large institutions emerging from global markets. This approach is needed at both a national and especially at an international level, as globally operating companies are able to significantly influence decisions of democratically elected governments. We aim for a fair international system that maximizes global welfare and sustainability, providing individuals with equal opportunities. How does this theoretical analysis translate in practice? This is a crucial question to ask, as discussed in Gal (2015): “In designing socially optimal legal rules, not only conceptual obstacles but also practical limitations in the decision-making process should be taken into account. Accordingly, an optimal legal rule is not necessarily one that would lead to a hypothetically efficient outcome, but rather one which maximizes social welfare under realistic assumptions”. Ultimately, restoring fairness is about giving individuals concrete fair choices in their daily economic and social activities. Inequality is one consequence of market economy, and is one cause of the unfair conditions in which the majority of world’s population lives in, as most choices

become a privilege of a limited number of people or institutions. Looking at it in an isolated fashion gives a partial picture and fails to capture the real reason for its relevance in democracies. The problem of inequality is often regarded as a problem of moral conviction, i.e. that inequality is either just or unjust per se, but the question maybe rephrased in the context of an ethics of responsibility, focusing on understanding the consequences of an unfairly unequal democracy. I argued how this might apply only in cases where inequality becomes a self-reinforcing mechanism for wealth concentration that forces individuals to accept unfair deals as a natural consequence of inequality itself. Investigating the fairness of the different alternatives that citizens around the world are presented with is crucial to ensure that our democracies serve their purposes. Providing democracies with the ability to study and act upon the unfair economic conditions of the world's population is an absolute necessity for global governance to be considered sustainable.

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Compliance with Ethical Standards

Conflict of interest Paolo Barucca declares that he has no conflict of interest.

Ethical Approval This article does not contain any studies with human participants performed by any of the authors.

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References

- Acemoglu D, Robinson JA (2008) Persistence of power, elites, and institutions persistence of power, elites, and institutions. *Am Econ Rev* 98(1):267–93
- Acemoglu D, Johnson S, Robinson JA (2005) Institutions as a fundamental cause of long-run growth. *Handb Econ Growth* 1:385–472
- Acemoglu D, Naidu S, Restrepo P, Robinson JA (2015) Democracy, redistribution, and inequality In *Handbook of income distribution*. Elsevier, Amsterdam, pp 1885–1966
- Acemoglu D, Naidu S, Restrepo P, Robinson JA (2019) Democracy does cause growth. *J Polit Econ* 127(1):47–100
- Alvaredo F, Chancel L, Piketty T, Saez E, Zucman G (2018) The elephant curve of global inequality and growth. *AEA Pap proc* 108:103–108
- Arrow KJ (1950) A difficulty in the concept of social welfare. *J Polit Econ* 58(4):328–346
- Biondi Y, Righi S (2019) Inequality, mobility and the financial accumulation process: a computational economic analysis. *J Econ Interact Coord* 14(1):93–119
- Bollen KA, Jackman RW (1985) Political democracy and the size distribution of income. *Am Sociol Rev* 50:438–457
- Bouchaud J-P (2015) On growth-optimal tax rates and the issue of wealth inequalities. *J Stat Mech* 11:P11011
- Bouchaud J-P, Mézard M (2000) Wealth condensation in a simple model of economy. *Physica A* 282(3–4):536–545
- Bourguignon F (2004) The poverty-growth-inequality triangle. *Tech. Rep. Working paper*
- Davis GF, Cobb JA (2010) Corporations and economic inequality around the world: the paradox of hierarchy. *Res Organ Behav* 30:35–53
- De Bruin B (2005) Game theory in philosophy. *Topoi* 24(2):197–208
- De Bruin B (2013) Epistemic virtues in business. *J Bus Ethics* 113(4):583–595
- de Bruin B (2014) Ethics management in banking and finance. In: Morris N, Vines D (eds) *Capital failure, rebuilding trust in financial services*. Oxford University Press, Oxford, pp 255–276
- De Bruin B (2015) *Ethics and the global financial crisis*. Cambridge University Press, Cambridge
- Dietz T, Ostrom E, Stern PC (2003) The struggle to govern the commons. *Science* 302(5652):1907–1912
- Downs A (1957) An economic theory of political action in a democracy. An economic theory of political action in a democracy. *J Polit Econ* 65(2):135–150
- Draghi M (2019) Sovereignty in a globalised world. Speech on the award of Laurea honoris causa in law. University of Bologna, Bologna
- Gabaix X, Lasry JM, Lions PL, Moll B (2016) The dynamics of inequality. *Econometrica* 84(6):2071–2111
- Gal M (2015) Abuse of dominance—exploitative abuses. In: Lianos I, Geradin D (eds) *Handbook on European competition law*. Edward Elgar Publishing, Cheltenham, pp 385–422
- Holcombe RG (1989) The median voter model in public choice theory. *Pub Choice* 61(2):115–125
- Ippoliti E (2017a) Dark data: some methodological issues in finance. In: Chen P, Ippoliti E (eds) *Methods and finance. A unifying view on finance, mathematics and philosophy*. Springer, Berlin, pp 179–194
- Ippoliti E (2017b) Method and finance. A view from outside. In: Chen P, Ippoliti E (eds) *Methods and finance. A unifying view on finance, mathematics and philosophy*. Springer, Berlin, pp 3–15
- Ippoliti E (2017c) Method and finance. A view from inside. In: Chen P, Ippoliti E (eds) *Methods and finance. A unifying view on finance, mathematics and philosophy*. Springer, Berlin, pp 121–128
- Ippoliti E, Chen P (2017) *Methods and finance: a unifying view on finance, mathematics and philosophy*. Springer, Berlin
- Kahneman D, Knetsch JL, Thaler R (1986) Fairness as a constraint on profit seeking: entitlements in the market. *Am Econ Rev* 76:728–741
- McCarty N, Meirowitz A (2007) *Political game theory: an introduction*. Cambridge University Press, Cambridge
- Milanovic B (2016) *Global inequality: a new approach for the age of globalization*. Harvard University Press, Cambridge
- Morrow JD (1994) Game theory for political scientists (No. 30: 519.83). Princeton University Press, Princeton

- Muller EN (1988) Democracy, economic development, and income inequality. *Am Sociol Rev* 53:50–68
- Nagy B, Farmer JD, Trancik JE, Gonzales JP (2011) Superexponential long-term trends in information technology. *Technol Forecast Soc Chang* 78(8):1356–1364
- Nowak MA, Page KM, Sigmund K (2000) Fairness versus reason in the ultimatum game. *Science* 289(5485):1773–1775
- Ostrom EE, Dietz TE, Dolšák NE, Stern PC, Stonich SE, Weber EU (2002) *The drama of the commons*. National Academy Press, Washington
- Pangallo M, Heinrich T, Farmer JD (2019) Best reply structure and equilibrium convergence in generic games. *Sci Adv* 5(2):eaat1328
- Perotti R (1996) Growth, income distribution, and democracy: what the data say. *J Econ Growth* 1(2):149–187
- Piketty T, Saez E (2006) The evolution of top incomes: a historical and international perspective. *Am Econ Rev* 96(2):200–205
- Rabin M (1993) Incorporating fairness into game theory and economics. *Am Econ Rev* 83:1281–1302
- Ravallion M (2001) Growth, inequality and poverty: looking beyond averages. *World Dev* 29(11):1803–1815
- Rawls J (2009) *A theory of justice*. Harvard University Press, Cambridge
- Roine J, Waldenström D (2015) Long-run trends in the distribution of income and wealth. *Handbook of income distribution*. Elsevier, Amsterdam, pp 469–592
- Santos JA, Rumble AS (2006) The american keiretsu and universal banks: investing, voting and sitting on nonfinancials' corporate boards. *J Financ Econ* 80(2):419–454
- Scheve K, Stasavage D (2017) Wealth inequality and democracy. *Annu Rev Polit Sci* 20:451–468
- Schweitzer F, Fagiolo G, Sornette D, Vega-Redondo F, Vespignani A, White DR (2009) Economic networks: the new challenges. *Science* 325(5939):422–425
- Sen A (1987) Food and freedom. *World Dev* 17:769–781
- Sen A et al (1999) *Commodities and capabilities*. OUP Catalogue. Oxford University Press, Oxford
- Song J, Price DJ, Guvenen F, Bloom N Von, Wachter T (2018) Firming up inequality. *Q J Econ* 134(1):1–50
- Stiglitz JE (2012) *The price of inequality: how today's divided society endangers our future*. WW Norton & Company, New York
- Teachout Z, Khan LM (2014) Market structure and political law: a taxonomy of power. *Duke J Const Law Publ Pol* 9:37
- Varshney A (2005) Democracy and poverty. In: Deepa N (ed) *Measuring empowerment, cross-disciplinary perspectives*. World Bank, Washington, pp 383–401
- Vitali S, Glattfelder JB, Battiston S (2011) The network of global corporate control. *PLoS ONE* 6(10):e25995
- Waldman M (1984) Job assignments, signalling, and efficiency. *Rand J Econ* 15(2):255–267
- Weber M (1919) *Politik als beruf [politics as a vocation]*. Gesammelte Politische Schriften

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