

The Perpetuation of Stratification in Market Environments – Markets and Corporate Power, Institutions, and Complex Systems Dynamics

Henning Schwardt

University of Denver, Denver, CO, USA

Henning.Schwardt@du.edu

Received: 24 December 2021; Accepted: 10 September 2024.

Abstract: We consider how market environments can perpetuate the stratification of societies and economies. Markets are sets of institutions. These institutions are emergent outcomes of interactions in ongoing socio-economic processes. They entail societies' rules, norms and values; and market environments and agents' behavior therein will reflect them. Markets are also complex systems. Complex systems dynamics allow us to identify additional endogenous mechanisms contributing to the perpetuation of stratified structures in market economies. In capitalism's drive towards concentration and centralization, and the concomitant consolidation of corporate power, further factors leading to stratified socio-economic outcomes emerge. We formulate policy considerations based on the analytical results presented. One focus is what measures may help reduce stratification and change the dynamics that reconstitute it. The other focus draws on the fact that policies are an output of the system, which means that changes to the structure itself may have to be required to advance changes that can have an equitable impact.

JEL: B51, B52, Z13

Key words: Stratification, Complexity, Power, Institutions

1 Introduction

Stratification economics (SE) focuses on the impact that societal structures have on economic outcomes; in particular, on the stratification along social identity dimensions that has been observable for generations (Davis 2015). In market-focused economies, the role that markets and market dynamics can play for these patterns has to be addressed. So far policy suggestions have

tended to focus more on reducing disadvantages when entering markets. The role of markets themselves has been underexplored.

From evolutionary institutional and complexity economics perspectives, we will consider which mechanisms in socio-economic structures, and in particular in markets, that may lead to the perpetuation of stratified socio-economic outcomes can be identified; and in turn which focus for policies may be promising to try and overcome these outcomes. Policy considerations have to be qualified because they are a system output, like stratification is, and so measures that can support equitable outcome will likely face resistance in the policy-making process. If we take markets as amplifying differences more than reducing them, then policies that only consider the reduction of initial differences cannot hope to lead to significant changes in system output patterns.

Institutions are an emergent output of the complex adaptive system (CAS) society. They stabilize socio-economic environments and enable purposive interactions of individuals. Markets do not exist separately from the rest of a society's socio-political structure. They are embedded in and emerge from the social rules and norms, and values, of a society. CAS phenomena such as positive feedback effects or path dependency are present in market environments, as well, so that there is no *ex ante* reason to suspect that market-based interactions would reduce differential position, power, or inequality and inequity in societies.

Control over a market environment, and the avoidance of competition, have long been motivating factors for behavior in relation to markets (e.g., Chandler 1984, Beinhocker 2006, Schwardt 2017). Corporate control, such as under monopoly capitalism, can influence market environment and policy makers to consolidate control further. From this, we can gain some additional insights into causes of stratified socio-economic structures, in particular when combined with the institutional aspects and CAS dynamics outlined before. A shift to increasingly financialized economic structures may further strengthen related dynamics and trends.

In the following section, we will review inequality and stratification we can currently observe in socio-economic systems. After this outline of the situation at hand, we discuss some of the characteristics of complex systems and their possible dynamics in section 3. Institutions as the emergent social rules and norms that shape the complex market system will be given more detailed consideration in section 4. Market environments and their potential impact on the matter at hand will then be considered in section 5. Drawing on these strands of the critical economics literature,

under a complexity umbrella, policy considerations will be formulated in section 6. Section 7 concludes the text.

2 Stratification in Resource Access and Distribution

Inequality – in quantitative terms – has been documented to have increased over the last decades. This holds between countries, between classes, and between races and gender, amongst others (e.g., Chancel et al. 2022). We will focus on domestic outcomes, and there on those where inequality consistently shows in social identity dimensions over generations, as the socio-economic stratification of populations. The recognition of these persistent outcomes has opened the door to questions that a perspective resting on a foundation of methodological individualism in analyses could not ask, nor answer; namely, what are systemic issues that play a role in perpetuating these patterns. Or, the other way around, that inequality and exclusion can be fairly consistently identified along lines of social identity points to answers that will have to integrate systemic aspects, in order to be able to explain and allow to address underlying causes and dynamics and remedy the situation people have been facing.

Following Darity (2005), specifically four postulates are made at the outset in SE, namely that material benefits can be and are passed down through generations; that societies divide into groups and that these show a hierarchy, where benefits accrue to members in dominant groups who are motivated to put effort into maintaining their positions; that market environments are unlikely to end this; and that on the individual level, effort to overcome barriers may mean more discrimination (also, Price 2017; for the ‘wealth privilege model’, see Williams 2017). Williams (2017) and Darity et al. (2015) point out that ‘structures of privilege’ do not have to be specifically and persistently racially targeted, to result in racial stratification as this can flow from the initial conditions of members of different groups in societies and persist over generations because of internal socio-economic dynamics. Drawing on institutionalist and complexity concepts, we can address these dynamics in more detail than has been done, and more pointedly answer questions relating to possible dynamics underlying outcome patterns. This will allow us to consider policies more specifically related to systemic dynamics.

Over the last roughly five decades, national statistics on income (from the Bureau of Labor Statistics in the US, for instance) document generally increasing income inequality (e.g., Kochhar

and Fry 2014, Asante-Muhammed et al. 2016). Tridico (2018) documents the overlap of this inequality dynamic with a policy reorientation focusing on financialization, so-called flexible labor contracts, weakened unions and the retrenchment of the welfare state (also compare, Fiorentini 2015). More generally, this neoliberal policy framework that has been implemented since the late 1970s, with its reduction of the role of the state in favor of ceding space to private agents, parallels a reversal of trends in socio-economic indicators that try to capture inclusiveness, equity, or equality, amongst others (e.g., Kotz 2002, Evans and Sewel 2013). In a different policy environment immediately following World War II, such an inequality increase was not apparent in the data (Kotz 2002, Evans and Sewell 2013), strengthening the case that relying on transactions and private interactions to bring about more inclusive socio-economic outcomes may not only be not sufficient, but prove counter-productive.

Different groups have been differentially affected by these inequality dynamics. Akee et al. (2019) show that US citizens face significant racial stratification in average incomes, with higher in-group inequality and lower in-group mobility for the richest (White and Asian) and lower in-group inequality and higher in-group mobility for poorer groups, who also show high overall immobility however. In sum, their results are showing a rigid US income structure overall, with Whites and Asians on top, driven by subsets of these populations, and blacks, native Americans and Hispanics at the bottom (also compare Zweigenhaft and Domhoff 2014).

Persistent, and lately stagnant gender inequality has been documented as well (e.g., Goldin et al. 2017, Elson 2017) with also at least a momentary worsening due to the pronounced gender-related inequality in the impact of the Covid-19 pandemic (e.g., Alon et al. 2020). We note adverse impacts of previous crises, such as during the Great Recession, as well (e.g., Seguino 2019). Effects appear to be synergistic, here, at least between race and gender. Adverse education outcomes (e.g., Schneider et al. 2018, Gamoran and Bruch 2017) and health outcomes (e.g., Bor et al. 2017, Dewan et al. 2019, Hill and Jorgenson 2018, Dickstein et al. 2019) are subject to effects related to inequality in incomes. Both of these are areas where we can expect, and in fact have started to see, a differential impact from the pandemic as well (e.g., Green et al. 2021, Gibson et al. 2020). Still, and the importance of education for overcoming development constraints notwithstanding, we can also note a limited impact of formal education outcomes on stratification dynamics in the US – only at the bachelor's level is mobility somewhat enhanced, above and below it appears not to be (Torche 2011). The gatekeeper role of education institutions that we can derive

from Veblen's (1919) analysis of 'Higher Education in America' appears alive and well. Other factors must be considered, in parallel and prior to education structures. We may assume that complementary and reinforcing factors compound the gatekeeping function, such as the fact that individual level efforts may lead to more discrimination for these individuals (Darity 2005) but also the reaction of dominant group members in the face of actions by non-dominant group members that do not align with institutionally prescribed and expected behavior patterns (see below, section 4).

If anything, wealth inequality has been and continues to be more pronounced and growing more quickly than income inequality (e.g., Kochhar and Fry 2014, Tippett et al. 2014). Inheritance has been identified as a main reason (Conley 1999, Darity 2009), with additional influence factors – even if from the same source of family wealth – including reduced debt-burden in younger years, reduced care responsibility for older family members, abilities to build a financial investment portfolio, and others (for an overview, see Williams 2017).

The US may for a while have been preventing social mobility to a lesser degree than other societies, but that has long since ceased; at least compared to other high-income countries (e.g., Bratberg et al. 2017, Blanden 2011). The most socio-economically mobile region in the US, its West, appears to be at best permitting about as much intergenerational mobility as the least mobile European Union countries in the Mediterranean, and the least mobile ones, such as the Deep South, show a persistently segregated socio-economic structure (Bratberg et al., 2017, Chetty et al. 2014). Incidentally, in particular these regions of lesser socio-economic mobility show taxation structures that are particularly burdensome on the poor (Chetty et al. 2015).

3 Inequality and Discrimination in Complex Economies

Mostly discarded attempts at explanations of systemic inequality have in the past pointed to inferior foundations for achieving wealth, in particular biologically-based ones. These have been supplanted by culturally-based outlines (Darity 2005), assuming that if group outcomes are discernibly different from the wider averages, then behaviors and values that individuals have learned by way of their group membership, in their socialization into the group, were behind the patterns. These rhetorics have proven difficult to overcome, the first in its time, the second one still today. Given their close adherence to ideologically useful explanatory patterns of inequality

focusing on individual effort reflected in individual success, or, of holding individuals solely responsible for their situations, this may hardly be surprising.

In related prominent theoretical explanations, two lines of thinking are stressed. One is based on Becker's (1957) 'taste for discrimination' and the other on the Phelps' (1972) and Arrow's (1973) application of presumed group averages to make inferences and decisions about an individual when that individual is not well known.

However, the individual preference-based 'taste for discrimination' and the asymmetric information-based 'statistical' reasoning respond to the output of the system as much as they shape what goes back. Both neglect that individuals are influenced and shaped by their social environment, and the habits of thought into which they are socialized, to then consider whether someone's decision and behavior can be conceptualized applying a specific toolset. Causes, dynamics, or processes that shape perceptions, prejudices, and habits of thought, have to be excluded by nature of the methods employed. We therefore find descriptions of behavior that are interpreted under the assumption that individuals are neoclassically rational. This is further underlined when we consider that individual motivations are marshalled into explaining persistent emergent patterns. If individual preferences were independently formed, and lying behind the patterns we can identify, then in that independent formation some stable pattern that would underlie the observed patterns would have to be expected as well. How that should come about if they were indeed formed independently would have to remain a mystery, though. Similarly, if statistics-based discrimination were to hold as an explanation for long-term persistent patterns, how a changing society can reproduce such patterns over time without drawing on societal components and systemic characteristics for an explanation, remains elusive. If it serves as a reaffirmation of patterns brought about by discriminatory or other practices, on the other hand, it is not an explanation. Empirical studies indeed fail to find support for group culture, such as reflected in different savings rates, as the cause behind wealth disparities in particular (Williams 2017). Conceiving of an economy as a complex system and its ongoing processes, embedded in the complex system that is society, introduces the possibility for systemic influences in ongoing processes, on the other hand.

Considering complexity economics as it has taken shape until now, we can trace, in broad terms, two strands in which complexity ideas have been voiced in economic thought: a Smith-Marx-Veblen-Marshall-Schumpeter through Hayek line that stresses aspects of emergence and

self-organization, and a Smith-Marx-Veblen-Marshall-Schumpeter through structuralism and development schools line (as embodied by Myrdal and Hirschman, for instance, by way of Allyn Young) that integrates non-linearity and path dependence, cumulative causation and divergence, and structural change (compare, Robert and Yoguel 2016). Both lines of analyses offer, as we will discuss momentarily, insights into systemic dynamics that can by themselves perpetuate patterns from initial conditions in socio-economic structures and outcomes. How the system is set up when it begins to unfold matters for how a situation looks like as we continue in the process of unfolding. The non-linearities we can observe in complex systems dynamics can result in initial differences being amplified over time (Johnson 2007).

Where self-organization and emergence are concerned, we may for instance think in terms of a social structure that has established itself, and from there on shapes people's outlook and expectations, concerning their own roles and those of others in society. Those are taught and learned and carried forward, and continue to provide stability. At the same time, that (possibly temporary) stability can entail discrimination and suppression, as we have frequently observed throughout history. As the stabilizing factors, here, can be captured as institutions, we will return to dynamics involved in more detail in the following section 4, on institutions.

For the second strand identified, it may be useful to think of patterns of dynamics that result in a perpetuation, and possibly amplification of differences in starting positions. Differential access to health care, education, or ownership, to name but a few, can produce initial conditions that lay the foundation for further, possibly compounded, advantages for those with that access. Questions of interest include, what is needed to participate, how is access available and granted, how does someone's starting position influence opportunities later on, etc.

Under path dependency of processes, the state of a system may allow a number of positions to be reached in its next move, but not all possible states of the system are always in reach, and the possibilities at some point in time are contingent on the state at that time (Arthur 1994, Johnson 2007). When carriages became cars, a number of different engine types competed until the internal combustion engine became the standard in the industry. Over time, its efficiency continued to increase, and a replacement by competing potential standards became less and less attractive, or viable; in particular for individual private agents. The infrastructure that developed around internal combustion – and with it the interests that may prefer to maintain its position – further strengthened its position, and limited the potential paths for private transportation solutions to follow. When

there is a stabilization of outputs, the location of a system in a specific basin of attraction, the system itself remains there. It is locked into its current pattern for the time being.

This notwithstanding, micro-behaviors can add up to lead to a (sudden) shift to a different attractor and to changes in the system's macrobehavior. Where technology standards are concerned, there are very limited incentives for private agents to change their behavior. But, research and incentives to adopt new standards can be brought forth by public policy measures. In socio-economic, human-made, systems, there are more degrees of freedom, also because once groups get larger, they are not generally homogenous. We can take measures, such as policies, to influence agent behavior, and thereby system structure, and output patterns, and try to steer the system onto a path that reflects values and objectives we have decided to pursue more closely than may currently be the case. We can also attempt to tackle the system itself more directly, of course.

Path dependency ties into another aspect, in terms of the dynamics within the system, namely, positive feedback in output dynamics over time. Positive feedback would drive the system away from a previous resting position. We can find such dynamics in the institutional and development literature for instance, as circular and cumulative causation, embodied in backwash or spread effect, in Myrdal's terms (Myrdal 1968). A difference in some relevant variable leads to different paths pursued, in an upward spiral, possibly, in one case and a downward spiral in another. Myrdal (1944) applied the same thinking to studying societal problems, in 'American Dilemma', outlining how different components of the US political, social, and economic system shape the differences in quality of life for different groups. In particular, he could underscore the fact that White Americans were collectively responsible for the circumstances under which Black Americans lived. Systemic discrimination against Black Americans has shaped outcome patterns. Societal narratives then claimed outcomes were a reflection of performance by Black Americans in order to justify prejudices, and by extension the systems in place that mirrored these prejudices.

We note that structural features and dynamics can easily carry inequality forth and even deepen it. In section 5, below, we will focus in particular on the role that market interactions may play in the furtherance of these dynamics and the outcome patterns observed.

4 Institutions and Complex System Dynamics

Institutions are social rules and norms. They prescribe and proscribe behavior in social situations. Institutions are reaffirmed but can also change in the ongoing process of micro-interactions in a dynamic that Hodgson (2006) calls reconstitutive downward causation and Lawson (2009) describes as the ‘transformational model of social activity (... where ...) conditions of actions become the result of actions in a complex and recursive process’, and as such provide an instance of emergence in socio-economic CAS.

4.1 Stability and Continuity

In institutions we see complex system characteristics; namely, a self-organizing structure. The interactions of the individual components create a stable systemic structure, without specific ex ante restrictions (say, a specified type of equilibrium) that would force any specific outcome. Stability results from the mutually compatible expectations of social agents in their interactions, as these reaffirm behavioral choices and reinforce expectations and habits of thought (e.g., Elsner 2012). Out of interaction dynamics in which a certain set of rules or restrictions form, emerge stable outcome patterns that cannot be deduced from analyses of the individual units. Habits of thought, behaviors, motivations – for instance concerning the role of markets, objectives to be pursued in markets, acceptable behavior in markets, regulations of access to markets, and others – can then be reflected in stable patterns such as an ongoing stratification of outcomes of socio-economic activities.

The coordinating function that institutions fulfill leads to increasing returns. The more people follow specific behavior prescriptions, the more useful they will be informing expectations about others’ behaviors. If a critical mass is reached (e.g., Elsner 2012), the system is locked in on a set of institutions (for lock-ins, Arthur 1989). As long as stability is maintained, path dependence in dynamics of change, follows, as change occurs within a given system, and new behaviors and the institutions reflected in them, have to be compatible with existing structures.

Further, Ayres (1978) describes interwoven factors that support dynamics of emerging institutions and their stabilization. Providing a narrative, an ideology, to explain and justify the world around us, and supporting emergent or existing social stratification and hierarchies, these

factors offer a sense of understanding and belonging by assigning a place to people. An emotional conditioning from childhood years onward strengthens the connection and allegiance of individuals to the institutional framework in which they were socialized. Connections are further strengthened in ritualized behavior and ceremonies in accordance with the ideological narrative provided. Standards of thinking, habits of thought, are taught, reinforced, and passed on within micro- and meso-structures, which are in turn embedded in wider social structures and networks, and where members are taught part of their identity by virtue of those network memberships and narrower (e.g., extended family) and wider (e.g., working class) group memberships.

In this context, note the findings of Azevedo et al. (2019) concerning the coherence of political beliefs in the neoliberal environments of the US and the UK around opposition to economic and social inequality versus support for economic and social inequality (and authoritarianism). Likewise, Sidanius and Pratto (1993) find a significant positive correlation between support for market capitalism and racist attitude. This is one of their initial papers in the formulation of social dominance theory (Sidanius et al. 1992) which posits that resting on a legitimizing myth, stable ‘caste-like’ intergroup relations rely on institutional discrimination as well as aggregated individual discrimination, and behavioral asymmetries between the agents involved. Ramazzotti (2020), with a view on neoliberal policy frameworks, emphasizes how a policy framework can shape the worldview of people, where messaging as well as behavior brought about through policy decisions may both be expected.

Modes and styles of communication matter here, as well, for instance where they allow some however defined in-group to distinguish and recognize itself from others (e.g., Suzuki 1998). Beyond modes of communication, at the same time reflecting these and shaping them, institutional framework and socialization effects impact people and their interactions in numerous ways, and impact who has access to which resources and how. Subsystems can shape how someone can enter and participate elsewhere, say, through the relation of education structures, social signaling, and economic structures.

4.2 Discontinuity and Change

While institutions bring stability to a societal framework, amongst others by providing coincidence of interpretation of the goings-on around individuals, and by fostering a shared world-view, a

society's institutional framework does not have to be embraced by everyone. Groups are heterogeneous. Interests over aspects of distribution and access, for instance, differ. Interests and perceptions can change. Depending on the ability of (groups of) agents to assert their interests in the formal structures of societies, they can have an impact, or find themselves shut out. How willing disadvantaged groups may be to accept their situation (because of a religious narrative, for instance), and which tools they have at their disposal if they should try and assert interests versus existing structures, depends, over time and between different places.

Institutions can change because of different reasons. Technological change is one of them. To use technology requires suitable behaviors. Such behaviors can then impact behavior outside the immediate application in technology utilization. Habits that are developed in some areas of life can become habits elsewhere (for an example with more positive connotations, we can refer to how general trust may emerge and spread; e.g., Elsner and Schwardt 2014, Elsner and Schwardt 2015). Learning, for instance, from a change in understanding that new technologies can bring, may also lead to changes in institutional relations. For the limit case, Cordes et al. (2021) give an overview over different strands of literature that allow to conceptualize the collapse of institutions.

Original institutional economics defines instrumental and ceremonial aspects of institutions. Instrumental aspects refer to pro-social, group-oriented behaviors and values. Ceremonial aspects refer to behaviors and values that aim at individual advancement and status. The assumption is that over time, in stable social environments, behaviors and motives will shift away from those supporting the well-being of the group towards those that reflect individualistic goals within the structure (e.g., Ayres 1978). The stabilizing narratives referred to above, in section 4.1, entail components that justify differential status, for instance, for members of different groups. Regarding stratification, lower status group members can see their position reinforced through these narratives, by consigning them to their places in the social hierarchies, and providing a narrative to justify why that is as it should be (the market wills it, god wills it, ...).

4.3 Institutions and Markets

Markets are sets of institutions. The instability we observe in markets, as fluctuations in the economic patterns they produce, does not necessarily indicate instability of institutional structures. If we think of market interactions as part of an evolutionary process, then institutional market

environment and agents in markets determine what is selected for, what is successful and which features mark a successful variation. As such, institutions shape markets and decisions in markets; which will include what to bring into markets, who has which access, from whom to buy, or what to buy where, amongst other things, behaviors that can enhance discriminatory outcomes, and reinforce discriminatory dynamics and views, and maybe especially in local and regional environments. For instance, if prejudiced potential customers avoid buying from you, a market dynamic may reinforce segregation (for analyses of some potential dynamics applicable here, see Schelling 1978).

While the organization of economic activity impacts socio-economic structures, socio-economic structures are reflected in market organization and behavior, as well. The concepts of ceremonial encapsulation and ceremonial dominance (Dugger 1980, Bush 1983, Waller 1987), for instance, capture the utilization of technological problem-solving potential with a view on protecting positions of power, over other possible objectives such as enhanced provision options, production efficiency, or profit increases.

Crucially, for our topic, the agents themselves are able to influence the selection environment they face. So, besides actions taken to strengthen their position in a given selection environment, they can try to change the environment itself in an effort to improve their position. Such action may, for instance, entail the limitation of options for potential competitors. Establishing payment streams through a commodification of social structures, can be interpreted to serve purposes beyond the unearned income that they immediately signify, for instance, as they concurrently lead to a restricted mobility for agents who do not have the funds to avoid such ongoing payments.

5 Market Structures and the Perpetuation of Stratification

Markets are sets of institutions. What matters for the actions within markets and the patterns emerging from these actions, is how markets are structured; what is exchanged; where the exchange takes place; what the positions, obligations, and objectives of the agents involved are; to name but a few. Access to positions as well as the dynamics in market environments matter for the outcomes we observe. For the socio-economic system as a whole, which areas of environment and life are commodified, and which are treated differently – as public services, for instance – can

notably impact the reality and quality of life of people, equitable resource access, risk control, and longer term dynamics in the system, and for the people affected by them. This last aspect, we will consider in more detail in section 6, focusing on policy emphases.

5.1 Access to Markets and Access to Positions in Markets for Individuals

There is no reason to suspect that the structures of relations that shape non-market interactions would become irrelevant once interactions occur in market environments. For instance, there is no indication that a pursuit of profits would override prejudice and discrimination if these prevail in different interaction arenas; or even, that it would have to in order to guarantee a comfortable profit position. On the contrary, given that markets entail power structures, and that market environments are shaped in societal power structures, they can be effective vehicles for furthering societal stratification; amongst others, because integrating into the division of labor of economic activity is a necessity for people, and the conditions under which they do so depend on non-market rules and norms.

Human decision-making works with rules of thumb that guide decisions and a subjective evaluation of outcomes achieved (e.g., Simon 1956, Kahnemann and Tversky 1979; for an overview, e.g., Beinhocker 2006). The institutional framework that shapes people's worldviews and expectations likewise shapes what is acceptable and accepted. The perception of the world, people's subjective reality that emerges from these influence factors, translate into market-internal dynamics that support and perpetuate, and even shape, societal norms and structures. By ascribing social status to specific economic outcomes and positions, a circular dynamic of status reinforcement can result.

There is no knowable first-best outcome that could serve as a reference point for evaluation in a world where outputs are multi-dimensional and their achievement includes trade-offs. There are ongoing results and situations during a process that agents find acceptable and those they may want to change. Such changes may have to be achieved by altering the balance of power inside and outside markets, which will likely face resistance.

Access to markets and positions is guarded by societal rules and norms, and by the policy environment in which people's capability development can occur. Even purportedly meritorious structures are not measuring against some objective reality and truth, but are functions of the

specific circumstances and environment in question, and reflect rules and norms, and values in the determination of what is meritorious, and of who is perceived to have merit. Further, if entry conditions are unequal, then a subsequent evaluation against given standards reflects not merit, but unequal access to preparatory structures.

Within markets themselves, what people bring into markets, what people want out of them, and how socio-economic structures impact their behavior and interactions in markets, are areas to consider if outcome patterns are found as lacking, then. Even how demand is shaped in a given social setting, including what to buy, from whom to buy, as well as, how to engage in transactions, as in red-lining cases, for instance, matters for outcome patterns that emerge from transactions. Insofar as demand patterns are shaped by a socio-economic structure, from institutional framework to the distribution of purchasing power, market outcomes reflect social structures, and can reinforce those, for instance, in a circular notion through status attachments to said outcomes. The more numerous the areas of human life that are being pulled into transaction structures, the more likely the potential for such circular and cumulative causation dynamics to unfold, solidifying and furthering differences in initial socio-economic positions as the commodification of structures amplifies the impact of initial spending ability.

5.2 Dynamics in and Utilization of Markets

In capitalist economies, markets themselves entail power relations (e.g., Palermo 2007, Harris-White 2014, Ozanne 2016). The notion of power in, as well as exercised through markets can be linked to an institutional framework, as the rules governing market transactions result from the institutional framework that reflects but also justifies hierarchical status and influence. There is no reason to suspect that some areas of socioeconomic relations would be uninfluenced by the social hierarchies of the system in which they are embedded, or that they might not serve to further the influence and power groups already hold. Narrowly, focusing on monetary and distributional aspects, Schutz (1995), touching on points raised by Bowles and Gintis (1992) from a different angle, outlines how market concentration and short-side power in markets are allowing redistribution towards powerful agents. These distributional aspects then provide the means to reinforce status hierarchies and limit the access to resources that could serve to overcome stratification patterns more broadly under different circumstances.

Kalecki (1938) stresses, ‘Monopoly appears to be deeply rooted in the nature of the capitalist system: free competition, as an assumption, may be useful in the first stage of certain investigations, but as a description of the normal stage of capitalist economy it is merely a myth’. Chandler (1977) analyses the changes in business structure and operations and technological changes that have fueled the trend towards a monopolization of market structures following the Industrial Revolution. Sweezy (1990) outlines Marx’s recognition of the inherent instability and lack of permanence of competitive (in the actual sense of the word) market structures. He further stresses the role of financial markets as accelerants of these processes. A monopolization of production structures, and a commodification of increasing areas of human life, can exacerbate outcomes that result from unequal resource access for different groups. Besides the increased concentration of control and derived limitation of access, particularly noteworthy for our purpose is the expected unequal distribution of hardship in crises, as seen above, as well as crises’ impact on people’s starting positions and their possible paths that may unfold. Inequality and wealth inequality, for instance, increased after the Great Recession (e.g., Thompson and Smeeding 2013, Pfeffer et al 2013).

Marx notwithstanding, a name often mentioned as the first to consider monopoly capitalism with more focus is Torstein Veblen, in his ‘Theory of the Business Enterprise’ (1904) and in particular in ‘Absentee Ownership’ (1923). Both build on his general approach to try and understand economic activity as evolutionary process, and to capture the dynamics that drive this process endogenously. A factor to highlight for our purposes is Veblen’s recognition that societal interest and business interest need by no means overlap, as reflected for instance in the ‘right to sabotage’, to leave resources unemployed, that ownership confers, or in the desire for social status driving individual action (also, Veblen 1899). Again, resulting dynamics lend themselves to circular causation between economic returns and social status, and resulting political power.

Sweezy (1942) adopted some Veblenian concepts into his approach to economic analyses, as illustrated by endogenously changing economies, that converge towards monopoly capitalist structures (O’Hara and Sherman 2004). Both Veblen (1923), and Baran and Sweezy (1966) point out the necessity of waste of resources – from a societal point of view – to sustain monopoly structures’ profits; through their unemployment, for instance. The divergence of available resources to the support of individual hierarchical ambitions further deprives communities of potential. The authors also emphasize the temptation for business to stoke nationalist rhetoric and

sentiment in order to generate pressure for military and related spending. Those approaches are generally embedded in an ideological structure that is likewise instrumental to maintaining domestic hierarchical status relations.

Besides agents' guarding of access to resources and opportunity, capitalism's endogenous crises impact possibilities and opportunities as well. Crises may be further exacerbated, as monopoly profits seeking an outlet to generate further returns are more likely to end up fueling speculative bubbles, in particular as we have moved towards the eventually recognized financialization of economic and business structures (e.g., Sweezy 1990, Foster 2016).

With the dynamics towards centralization and concentration that we observe in real-world markets, Reich et al. (1973) point out, labor market segmentation, or discrimination against members of certain groups, began to be notable. The consolidation of power of businesses paralleled the homogenization and proletarianization of the workforce. The resulting unifying workforce presented a problem to capitalists that was met with various strategies. Successful ones were copied and as an end result we see conscious efforts were undertaken to segregate workers, making use of race, immigration background, and gender prejudices in attempts to be stirring animosity; for instance, by hiring specific groups of workers as strikebreakers. Division has been fostered to weaken workers' bargaining power (Reich 1981), always against the background of a lopsided power balance in a system characterized by private ownership of capital and the division of labor that necessitates wage labor for most to begin with (Palermo 2007). Labor relations reflect institutional framework and the concomitant utilization of institutionalized power structure and a segregated social environment that allows a self-identified in-group to control access, allocation, and distribution.

Eventually other control mechanisms have been introduced as well, such as education credentials to monitor entrance into labor market segments. Education has long been closely aligned with businesses in the US (e.g., Veblen 1919), and so could serve a channeling function for business interests, or, rather, business people's interests, and serve as a tool to maintain hierarchical advantage. Particularly in the US, school district financing further reinforces in-group holds on education structures. The inflation of degree requirements for labor market entry has also caused an enhancement of the potential for initial socio-economic conditions to be amplified (e.g., Collins 2011, Sim and Seki 2022).

Industrialization and eventually monopolization initially led to a segmentation into a domestic industrialized, capital-intensive, core, and a domestic periphery of labor-intensive suppliers and outsourced activities. For the post-industrial society taking shape, high paid finance-related service areas may increasingly claim core positions, though the resulting structure and dynamic appears comparable to a more classical in-group and out-group labor market segmentation. In the classical core-periphery labor markets, Vietorisz and Harrison (1973) maintain, positive feedback will drive wages and working conditions between the segments further apart, as the capital-intensive core seeks labor-saving and productivity-improving changes that the labor-intensive periphery does not adopt. Power structures and access regulations may be expected to perpetuate these patterns, even when underlying conditions may be somewhat decoupled from high capital intensity production. In other words, we can note that labor in an identifiable periphery is not tied to the existence of an industrial core in the classical sense. In particular, the existence of low paying service sector work, for instance, is a function of labor regulations, much more than a function of activity in other areas of an economy. To be thinking of reimbursements for work in terms of labor productivity of individuals would be misleading, here. Relatedly, as Pullen (2009) shows, the whole concept of marginal productivity calculation is unsound.

In a financialized economy, additional mechanisms reinforcing unequal starting positions can be introduced, that, for instance, tie people to financial obligations over long periods of time and thus reduce their ability to move to positions which enable a broader capability development. Endogenously emerging barriers between different labor market segments are expected, that flow from the differentiated wage structures and types of activities and work environments in the different segments, and that sustain the separation of segments based on differences in education, work norms, and job training, and thus are often a function of conditions experienced earlier in life. We find Braverman's (1998) broader analyses on labor relations and conditions under monopoly capitalism mirrored, as one aspect Braverman underscores is the impact the Taylorization of work structures has, as a de-skilling of the individual in an environment where continuously increasing overall sophistication of processes is embodied in capitals. Against a background of power imbalances, related dynamics may be expected to further divisions in positions of groups involved. Selected service activities that support an industrial core, and activities that are decoupled from production and focus on financial operations, are somewhat insulated from the replacement by capitals, and thus may be able to enjoy a – for wage recipients

– favorable position in distribution for the time being. At the same time, the concentration and centralization of capitals continues, and enhances the position of agents who hold power over institutional structures (Dugger 1980). As an example, this trend permits select groups to influence conditions for how labor power can be sold, and retained (see the ‘right to work’ legislation in the US, for instance).

Additionally, furthering such dynamic, we also know that many positions are filled through referrals so that social segregation may be mirrored in labor market segregation (Arrow, 1998). Gate-keeping in an environment of commoditized education plays into such patterns as well, as access to education structures is concurrently also an entry into professional networks. Furthermore, in the responses to disadvantageous or outright discriminatory structures, there lies reinforcement potential for the narrative behind those structures, such as reasserting existing stereotypes through the outcomes of discrimination; reinforcing social conditions, such as discrimination; and others (compare already Myrdal 1944). The power that comes from influencing public opinion and lawmakers also allows to shift the boundaries and responsibilities flowing from economic and business activity, and the allocation of burden and cost to different groups in society. This may conceivably be embedded in the dynamics of a Polanyian double-movement in a push towards further commodification (Polanyi 1944) or the shifting of the burdens of capitalist production onto the shoulders of the collective, as outlined by Kapp (2016). The double-movement captures the dynamic between attempts to pull more areas of life into markets, and societies’ attempts to protect themselves and their environment from the harm that commodification does to them. The furthering of commodification of social structures is likely to reinforce the imbalances between societal groups by reinforcing differences in ‘endowments’ and resource access.

6 Policy Considerations

The maintenance and reproduction of inequality by class, race, and gender, is the focus of analyses for SE (Seguino, 2021), and we have stressed the role of markets in particular in this process. Where mainstream economics’ ideological role has been characterized as obfuscating race or gender interests (Obeng-Odoom, 2020), critical perspectives provide a ready toolset for analyses and overcoming of the long running stratification of societies.

The monopolization of structures is a key tendency in capitalist economies. This monopolization is paralleled by enhanced corporate power more broadly (Chandler 1977, Semmler 1982). Besides the processes that are part of capitalist economies, and that rest on a foundation of capital ownership and wage labor that help define such economies, further social and institutional processes have been utilized to enhance power imbalances, reinforce economic differences, and increase the likelihood of a stratification of groups of economic agents. Allowing unearned income to play a main role in societies, and the expansion of the market sphere into further areas of life, solidify paths that produce ongoing stratification of socio-economic structures. Regarding policies, there are two broad concerns. For one, what policies can help achieve a desired outcome. For the other, as an output of the same system that produces stratification, and which policies may influential interests be willing to permit. All the considerations we have formulated can be further refined and assessed against the background of zero growth or de-growth requirements that emerge from the ecological crises we will no longer be able to ignore as the same policy background has driven related dynamics, as well.

6.1 Policies to Counter Stratification

As far as policy considerations on the foundation of the above are concerned, we can focus on changing the initial positions of agents, the reach of the market sphere into society, as well as on an interruption of systemic causation and market functioning where those contribute to a stratification dynamic. Beyond simple policy, of course an overhaul of the system will also be an option, albeit, not a realistic one for now.

As a general note, approaches can benefit from, and may require, changes in political rhetoric to carry them. A policy foundation of effectively blaming victims for their situation has started to overcome earlier perspectives and evaluations of collective, social and welfare policy measures; pushing these perspectives away from understanding policies as reflecting a society supporting its members, and towards seeing them as taking away things to give to people too lazy to support themselves. Some ideological realignment will be needed for policy considerations to meet a more receptive political and social reality.

The ongoing push towards a commodification of social structures, increases the risks that individuals face, as their ability to protect themselves will depend on their financial means.

Collectively, such risks can be covered more comprehensively. The financialization of economies may be expected to reinforce inequality and stratification. Trying to steer the endogenous processes that solidify and enhance stratification into a more inclusive direction will require a turn away from commodification and financialization, then, and towards an understanding of societal services to improve people's conditions, and restrictions on individual attempts at redistribution towards themselves.

Where wealth inequality is concerned, two main immediate areas stand out, namely, inheritance and financial market activity. Inheritance should be taxed heavily to avoid the simple perpetuation of positions of wealth. The consideration to offer baby bonds (Hamilton and Darity, 2010), or some measure to that effect, may be fruitfully pursued as well. Where inheritance taxation limits the perpetuation of wealth, support for children of poorer families may reduce their disadvantages. An additional point in its favor may be that this way when discrimination dons a different cap, people do not slip through gaps left open if policy measures were exclusively focused along currently discernible dimensions of discrimination. This may also possibly help the general acceptance of related policies, as mobility, in the US at least, has been horizontal to a good degree, so that, for instance, Caucasians from poorer backgrounds have not seen pronounced upward mobility over time, either (Darity 2009). Still, this is a shorter term measure to support immediate access. In a structure set up to redistribute wealth upward through commodified and financialized structures, funds to enable momentary access may well prove insufficient by themselves unless accompanied by a broader focus on public structures as services, not businesses, and a limitation to rent creation and perpetuation through financial markets and inheritance, and asset ownership in general. A foundation to build a participatory structure and resource access will require a focus on housing, as well.

To reduce the chances for a transmission of crises from financial activities onto real economic activities (compare, e.g., Minsky 1986), enhanced regulations for agents in financial markets, as well as of financial markets' relations to the rest of the economy, are generally advisable. This may help prevent the setbacks that the unequal impact of economic crises has been shown to have on different groups in societies (see above). More substantial taxes on the so-called capital gains may be another measure to consider with a view on preventing stratification to deepen, as well. Treating all unearned income in this manner will be even more preferable. A reorientation of policies back towards defined-benefits and away from the increasing reliance on

defined-contributions focus in pension schemes currently in place that shift future risk firmly to the individual worker's shoulder, and punish those without the means to build financial portfolios early in life, may be advisable as well, if the impact of initial differential positions is to be reduced.

Reducing the constraint on their health that people currently face, would be an important objective of policies pursued as well. A closer look at the Scandinavian welfare state may merit consideration, as we see in Esping-Andersen's (2015) work that welfare state – as social policy – structures can enhance socio-economic intra- and intergenerational mobility. Education and broad support for skill-development likewise weigh heavily, here. Broader based social policy may support overcoming a differential vulnerability during and after crises. This will entail a move away from markets as a default solution to societal issues.

Antidiscrimination legislation is important, and an important signal. Insofar as it may allow people to be less susceptible to stereotypes and prejudice by broadening their base of experiences, it may help insulate a population against divisive rhetoric and actions. Quotas may serve the same purpose. But if the structural components resulting in stratified societies and economies are not addressed, the system can still perpetuate itself through the endogenous dynamics in place. Measures cannot be focused only on situations people face later in their lives. Say, reducing barriers to labor market participation and access to more diverse roles in labor markets are good, but if gatekeeping institutions that take effect before labor market access can even be considered remain in place, effects on discriminatory outcomes and systemic stratification dynamics will be limited.

With a view on specific economic factors, the monopolization of markets and the power imbalances this sustains and even deepens are a focus for control and oversight considerations. More widespread ownership structures, such as through cooperatives, may be considered as a way forward, as well. A more unified working population would be another factor, or more generally, an improved negotiating position regarding working conditions in general, for which greater numbers pulling in the same direction will be helpful. Efforts to support broader unionization to strengthen collective bargaining power in order to undercut attempts at isolating groups of workers to weaken them should then be fostered and supported. Measures can range from active support to the use of government contracts to reward unionized production, for instance. However, it also bears mentioning that a union structure in and of itself does not guarantee less stratified outcomes. In a core-periphery-like domestic structure, narrower organization may well further divisions

rather than overcoming them. Unionized workers are still embedded in the general institutional framework, and a socio-economic climate might lead people to try and use unions for their advantage over perceived worker competition, instead of as a tool for unifying workers and improving their negotiating position vis-à-vis employers. The more encompassing measures can be, the better their chance of success with regards to a de-stratification of socio-economic structures probably is.

Labor laws can play an important role in shifting an economy's path towards more integrated and equitable outcomes. They can directly impact the distribution of returns, impact power balances in workplace negotiations, and mitigate income inequality. Malloy (2020) shows that minimum wages are improving workers' bargaining position, so that a decent living wage as the minimum coupled with automatic increases to match standard-of-living expense changes can be a promising objective to pursue. There is no reason to enhance capital's share of revenue at the cost of people's ability to live their lives. Such measures may at least limit segregated employment and earnings structures in an economy, and the more broadly applicable work place regulations to protect and support workers can be, the less pronounced the differences in structure may be. A minimum wage may also be coupled with a jobs guarantee. A jobs guarantee (e.g., Ramsay 2002) can be more forcefully pursued, and achieve a number of economic objectives (e.g. Wray et al. 2019). Alternatively, or complementarily, workday regulations could be used to create positions in private companies in order to reduce the pool of surplus labor. Overall, an improved access to the means for meeting human needs and human development potential will be good guidelines for policy directions.

6.2 What Can Be Implemented

Policies are an output of the institutional system. That the above policies, which would entail a shift in the balance of power between different groups, would be implemented without resistance, is then not necessarily realistic, in particular for the concerted policies that will be required to really make a difference in people's lives, as any given single measure may at best hope to temporarily alleviate some adverse impacts. Beyond influencing the political arena directly, dominant interest groups can also set the public discourse and shape opinions through mass media and communication. Amongst others, this allows to employ informal sanctioning mechanisms, to

define conventional wisdom and mainstream ideology, and to enforce social rules and norms underlining them.

In fact, in reality, we see, in the USA, and increasingly in other countries, as well, dynamics pushing the system into an opposite direction from the policies outlined above. Commodification has reached into social arenas like education and health, and focal areas like the public debt discourse are used to reduce the role the state plays in people's lives. Where the state spends with less restraint, such as where military matters are concerned, we can note that the primary impact is not the support of the social environment (for reasons for such emphases in government activity, e.g., Baran and Sweezy 1966).

Countering such emphases in policy decisions, and the underlying power imbalance, will require concerted action by members of less advantaged groups, to counter conventional wisdom, enhance collective action capability, and build a power block that can assert itself in and countervail existing structures. A main interruption in the trend of increasing commodification and financialization, happened after World War II, with the Great Depression and the Cold War as notable influence factors. Since the 1970s, the initial dynamic has been gaining again, with the Reagan and Thatcher administrations as a focal point.

That means that policy proposals that have been advanced in the stratification literature are often sound in that they reflect a systemic understanding of problem structures, still fall short because they neglect the importance of systemic dynamics and hierarchies. The institutional framework does not change because some agents have – temporarily – a bit more money, for instance. With the market dynamics and institutional dynamics we have identified with the help of the complex system framework, structural factors are in place that reassert themselves and re-establish a hierarchy with concomitant distribution structures.

Bottom-up, endogenous institutional change (e.g., DellaPosta et al. 2017) will have to be the focus for action of agents seeking structural changes, then (e.g., Vasconcelos et al. 2013). We can draw a parallel, here, for instance to sustainable development goals and policies emphasized to reach them, because there, as well, the focus is on markets and top-down policies, and neglects that the policies shaping markets, and that have shaped the outcomes we have begun to see, are set by powerful agents with specific interests who do not appear to have an interest in the radical reorientation of economic structures that is required to prevent a worsening of global suffering.

7 Conclusion

Narratives focusing on individualistic market participation, and policies mirroring them, exclude systemic characteristics from considerations, at the same time that they serve to justify systemic output patterns. An individualistic lens weaves a narrative which invalidates systemic concerns, and thus tends to lend itself to supporting policy positions which pose barriers to overcoming outcome patterns shaped by systemic dynamics, such as socio-economic stratification.

Integrating systemic components into the analyses can offer a perspective that captures factors that narrower frameworks cannot capture. The institutional framework of societies and the market sphere specifically allow this integration. The institutional framework is a key factor in stratified social structures, shaping what is taught, what is valued, and which objectives people pursue, and how, but also how power is justified and can be exercised (in a sanctioned manner). In the economic sphere, they structure which roles markets and behavior in markets assume. Markets themselves show dynamics that reproduce and can enhance differential initial positions of individuals. They do not level those, because agents in markets are not acting independently of their background, what they bring into markets depends on the structures in which they grew up, and so differential initial positions can carry through over long periods of time.

While embedded in the current framework, any given measure solely offering financial support to individuals, is unlikely to succeed. Redistribution structures that funnel money away from lower income and towards high income groups, will likely mean that any focus on financial disadvantage only, will simply result in additional money flows towards high income groups over time. Any single measure may alleviate some negative impacts, but will not be sufficient to overcome general disadvantages and the output patterns that follow from these. Concerted policies, and a removal of key components of human life and development from market environments, will be required. Deeper bottom-up organization for concerted action to push for such changes, will likely be a necessary prerequisite. As societies have mostly been predatory, that they continue to show such patterns, is not a big surprise. The awareness of social factors that shape these patterns, may still offer an important first step for hopefully eventually countering such structures effectively.

References

- Akee, R, MR Jones, SR Porter (2019), Race Matters: Income Shares, Income Inequality, and Income Mobility for all U.S. Races, in: *Demography* 56, 999-1021. DOI: [10.1007/s13524-019-00773-7](https://doi.org/10.1007/s13524-019-00773-7)
- Alon, T, M Doepke, J Olmstead-Rumsey, M Tertilt (2020), The Impact of COVID-19 on Gender Equality, *NBER working paper* 26749, April 2020 , <https://www.nber.org/papers/w26947> .
- Arrow, K (1973), The Theory of Discrimination, in: O Ashenfelter and A Rees (eds), *Discrimination in Labor Markets*, Princeton University Press, 3-33.
- Arrow, K (1998), What Has Economics to Say About Racial Discrimination?, in: *Journal of Economic Perspectives* 12(2), 91-100. DOI: 10.1257/jep.12.2.91
- Arthur, W B (1994), *Increasing Returns and Path Dependence in the Economy*, University of Michigan Press.
- Asante-Muhammad, D, C Collins, J Hoxie, and E Nieves (2016), *The Ever-Growing Gap: Without Change, African American and Latino Families Won't Match White Wealth for Centuries*, CFED and Institute for Policy Studies, https://ips-dc.org/wp-content/uploads/2016/08/The-Ever-Growing-Gap-CFED_IPS-Final-2.pdf
- Ayres, CE (1978), *The Theory of Economic Progress: A Study of the Fundamentals of Economic Development and Cultural Change* (3e), New Issues Press
- Azevedo, F, JT Jost, T Rothmund, J Sterling (2019), Neoliberal Ideology and the Justification of Inequality in Capitalist Societies: Why Social and Economic Dimensions of Ideology are Intertwined, in: *Journal of Social Issues*, 75(1), 49-88. doi.org/10.1111/josi.12310
- Baran, PA, P Sweezy (1966), *Monopoly Capital: An Essay on the American Economic and Social Order*, Monthly Review Press.
- Becker, G (1957) *The Economics of Discrimination*, Chicago: University of Chicago Press.
- Beinhocker, E (2006), *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*, Harvard Business School Press.
- Blanden, J (2011), Cross-Country Rankings in Intergenerational Mobility: A Comparison of Approaches from Economics and Sociology, in: *Journal of Economic Surveys* 27(1), 38-73. doi.org/10.1111/j.1467-6419.2011.00690.x

Bor, J, GHC McPhil, S Galea (2017), Population Health in an Era of Rising Income Inequality: USA, 1980-2015, in: *The Lancet* (389), issue 10077, 1475-90. DOI: [10.1016/S0140-6736\(17\)30571-8](https://doi.org/10.1016/S0140-6736(17)30571-8)

Bowles, S, H Gintis (1992), Power and Wealth in a Competitive Capitalist Economy, in: *Philosophy and Public Affairs* 21(4), 324-53.

Bratberg, E, J Davis, B Mazumder, M Nybom, DD Schnitzlein, K Vaage (2017), A Comparison of Intergenerational Mobility Curves in Germany, Norway, Sweden, and the US, in: *The Scandinavian Journal of Economics* 119 (1), 72-101. doi.org/10.1111/sjoe.12197

Braverman, H (1998), *Labor and Monopoly Capital – The Degradation of Work in the Twentieth Century*, Monthly Review Press.

Bush, P. D. (1983), “An Exploration of the Structural Characteristics of a Veblen-Ayres-Foster Defined Institutional Domain”, *Journal of Economic Issues*, vol. 17 n. 1, pp. 35-66. doi.org/10.1080/00213624.1983.11504088

Bush, PD (1987), The Theory of Institutional Change, in: *Journal of Economic Issues* 21(3), 1075-1116. doi.org/10.1080/00213624.1987.11504697

Chancel, L, T Piketty, E Saez, G Zucman (2022), *World Inequality Report 2022*, World Inequality Lab.

Chandler, A (1977), *The Visible Hand: The Managerial Revolution in American Business*, Belknap Press.

Chetty, R, N Hendren, P Kline, E Saez (2014), Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States, in: *The Quarterly Journal of Economic* 129(4), 1553-1623. doi.org/10.1093/qje/qju022

Chetty, R, N Hendren, P Kline, E Saez (2015), *The Economic Impact of Tax Expenditures: Evidence from Spatial Variation Across the U.S.*, <https://www.irs.gov/pub/irs-soi/14rpttaxexpenditures.pdf>

Collins, R (2011), Credential Inflation and the Future of Universities, *Italian Journal of the Sociology of Education*, 2, pp. 228-51. DOI: 10.14658/PUPJ-IJSE-2011-2-12

Conley, D (1999), *Being Black, Living in the Red: Race, Wealth, and Social Policy in America*, University of California Press.

Cordes, C, W Elsner, C Gräbner, T Heinrich, J Henkel, H Schwardt, G Schwesinger, T-Y Su (2021), The Collapse of Cooperation: The Endogeneity of Institutional Break-Up and Its Asymmetry With Emergence, in: *Journal of Evolutionary Economics*, vol. 31, pp. 1291-1315. doi.org/10.1007/s00191-021-00739-2

Darity, WA (2005), Stratification Economics: The Role of Intergroup Inequality, in: *Journal of Economics and Finance* 29(2), 144-53. doi.org/10.1007/bf02761550

Darity, WA (2009), Stratification Economics: Context Versus Culture and the Reparations Controversy, in: *Kansas Law Review* 57, 795-811. DOI: [10.17161/1808.20096](https://doi.org/10.17161/1808.20096)

Darity, WA, D Hamilton, JB Stewart (2015), A Tour de Force in Understanding Intergroup Inequality: An Introduction to Stratification Economics, in: *Review of Black Political Economy* 42, 1-6. doi.org/10.1007/s12114-014-9201-2

Davis, JB (2015), Stratification Economics and Identity Economics, in: *Cambridge Journal of Economics* 39, 1215-29. doi.org/10.1093/cje/beu071

DellaPosta, D, V Nee, and S Opper 2017, Endogenous Dynamics of Institutional Change, *Rationality and Society*, vol. 29, no. 1, pp. 5-48. DOI: 10.1177/1043463116633147

Dewan, P, R Rorth, PS Jhund, JP Ferreira, F Zannad, L Shen, L Kober, WT Abraham, AS Desai, K Dickstein, M Packer, JL Rouleau, SD Solomon, K Swedberg, MR Zile, JJV McMurray (2019), Income Inequality and Outcomes in Heart Failure: A Global Between-Country Analysis, in: *Journal of the American College of Cardiology* 7(4), 336-46. DOI: [10.1016/j.jacc.2018.09.081](https://doi.org/10.1016/j.jacc.2018.09.081)

Dugger, W. M. (1980), "Power: An Institutional Framework of Analysis", *Journal of Economic Issues*, vol. 14 n. 4, pp. 897-907. doi.org/10.1080/00213624.1980.11503790

Elsner, W (2012), The Theory of Institutional Change Revisited: The Institutional Dichotomy, Its Dynamic, and Its Policy Implications in a More Formal Analysis, in: *Journal of Economic Issues*, vol. 46, no. 1, pp. 1-44. doi.org/10.2753/JEI0021-3624460101

Elsner, W, and H Schwardt (2014), Trust and Arena Size: Expectations, Institutions, and General trust, and Critical Population and Group Sizes, in: *Journal of Institutional Economics*, vol. 10, no. 1, pp. 107-34. doi.org/10.1017/S1744137413000179

Elsner, W, and H Schwardt (2015), From Emergent Cooperation to Contextual Trust, and to General trust: Overlapping Meso-Sized Interaction Arenas and Cooperation Platforms as a Foundation of Pro-Social Behavior, in: *Forum for Social Economics*, vol. 44, no. 1, pp. 69-86. doi.org/10.1080/07360932.2014.980751

Elson, D (2017), Recognize, Reduce, and Redistribute Unpaid Care Work: How to Close the Gender Gap, in: *New Labor Forum* 26(2), 52-61. doi.org/10.1177/1095796017700

Engels, F (1844), Outline of a Critique of Political Economy, *The Marx/Engels Internet Archive*, www.marxists.org .

Esping-Andersen, G (2015), Welfare Regimes and Social Stratification, in: *Journal of European Social Policy* 25(1), 124-34. doi.org/10.1177/0958928714556976

Evans, PB, and WH Sewell (2013), Neoliberalism – Policy Regimes, International Regimes, and Social Effects, in: Peter A. Hall and Michèle Lamont (eds) *Social Resilience in the Neoliberal Era*, Cambridge University Press.

Fiorentini, R (2015), Neoliberal Policies, Income Distribution Inequality and the Financial Crisis, in: *Forum for Social Economics* 44(2), 115-32. doi.org/10.1080/07360932.2014.951376

Foster, J B (2016), Monopoly Capital at the Half-Century Mark, in: *Monthly Review* 68 (3), 1-25.

Gamoran, A, SK Bruch (2017), Educational Inequality in the United States: Can We Reverse the Tide?, in: *Journal of Education and Work* 30(7), 777-92. doi.org/10.1080/13639080.2017.1383091

Gibson, B, J Schneider, D Talamonti, and M Forshaw (2020), The Impact of Inequality on Mental Health Outcomes During the COVID-19 Pandemic: A Systematic Review, in: *Canadian Psychology / Psychologie canadienne*, vol. 62, no. 1, pp. 101-26. doi.org/10.1037/cap0000272

Goldin, C, S Pekkala Kerr, C Olivetti, and E Barth (2017), The Expanding Gender Earnings Gap: Evidence from the LEHD-2000 Census, in: *American Economic Review*, 107 (5): 110-14. DOI: 10.1257/aer.p20171065

Green, H, R Fernandez, and C MacPhail (2021), The Social Determinants of Health and Health Outcomes Among Adults During the COVID-19 Pandemic: A Systematic Review, in: *Journal of Nursing Management*, vol. 38, no. 6, pp. 942-52. DOI: [10.1111/phn.12959](https://doi.org/10.1111/phn.12959)

Hamilton, D, W Darity (2010), Can ‘Baby Bonds’ Eliminate the Racial Wealth Gap in Putative Post-Racial America?, in: *The Review of Black Political Economy* 37(3-4), 207-16. doi.org/10.1007/s12114-010-9063-1

Harris-White, B (2014), Real Markets as Social and Political Institutions and their Implications for Human Development, in: *Indian Journal of Human Development* 8(1), 29-47. doi.org/10.1177/0973703020140102

Hill, TD, A Jorgenson (2019), Bring out Your Dead!: A Study of Income Inequality and Life Expectancy in the United States, 2000-2010, in: *Health and Place* 49, 1-6. DOI: [10.1016/j.healthplace.2017.11.001](https://doi.org/10.1016/j.healthplace.2017.11.001)

Hodgson, GM (2006), What are Institutions?, in: *Journal of Economic Issues* 40(1), 1-25. doi.org/10.1080/00213624.2006.11506879

Johnson, N (2007), *Simply Complexity – A Clear Guide to Complexity Theory*, Oneworld.

Kahnemann, D, A Tversky (1979), Prospect Theory: An Analysis of Decision under Risk, in: *Econometrica* 47(2), 263-91. doi.org/10.2307/1914185

Kalecki, M (1938), The Determinants of Distribution of the National Income, in: *Econometrica* 6(2), 97-112. doi.org/10.2307/1907142

Kapp, KW (2016), *The Heterodox Theory of Social Cost* (S Berger ed), Routledge.

Kochhar, R, R Fry (2014), *Wealth Inequality has Widened Along Racial, Ethnic Lines Since End of Great Recession*, Pew Research Center, <http://www.tripoetry.com/BEING-BLACK/FACTS/Wealth%20inequality%20has%20widened%20along%20racial,%20ethnic%20ines%20since%20end%20of%20Great%20Recession%20%7C%20Pew%20Research%20Center.pdf>

Kotz, DM (2002), Globalization and Neoliberalism, in: *Rethinking Marxism – A Journal of Economics, Culture, and Society*, vol. 14, no. 2, pp. 64-79. doi.org/10.1080/089356902101242189

Lawson, C (2009), Ayres, Technology and Technical Objects, in: *Journal of Economic Issues* 43(3), 641-59. doi.org/10.2753/JEI0021-3624430304

Malloy, LC (2020), The Minimum Wage, Bargaining Power, and the Top Income Share, in: *Forum for Social Economics* 49(1), 75-98. doi.org/10.1080/07360932.2016.1155468

Myrdal, G (1944), *An American Dilemma: The Negro Problem and Modern Democracy*, Harper Brothers.

Myrdal, G (1968), *Asian Drama: An Inquiry into the Poverty of Nations*, Pantheon.

Obeng-Odoom, F (2020), *Institutions and Social Stratification in Africa*, Cambridge University Press.

O’Hara, PA, HJ Sherman (2004), Veblen and Sweezy on Monopoly Capital, Crises, Conflict, and the State, in: *Journal of Economic Issues* 38(4), 969-87. doi.org/10.1080/00213624.2004.11506752

Ozanne, A (2016), *Power and Neoclassical Economics: A Return to Political Economy in the Teaching of Economics*, Palgrave Macmillan.

Palermo, G (2007), The Ontology of Economic Power in Capitalism: Mainstream Economics and Marx, in: *Cambridge Journal of Economics* 31(4), 539-61. DOI: [10.1093/cje/bel036](https://doi.org/10.1093/cje/bel036)

Pfeffer, FT, S Danziger, and RF Schoeni (2013), Wealth Disparities Before and After the Great Recession, *The Annals of the American Academy of Political and Social Science*, vol. 650, no. 1, pp. 98-123. doi: [10.1177/0002716213497452](https://doi.org/10.1177/0002716213497452)

Phelps, E S (1972) The Statistical Theory of Racism and Sexism, in: *American Economic Review* 62 (4), 659-61.

Pickett, K, RG Wilkinson (2009), *The Spirit Level: Why More Equal Societies Almost Always Do Better*, Allen Lane.

Polanyi, K (1944) *The Great Transformation: Origins of Our Time*, Farrar and Rinehart.

Price, G (2017), The Emerging Field of Stratification Economics – A Unified Social Science Theory of Race and Inequality? In: JL Conyers (ed), *Africana Social Stratification: An Interdisciplinary Study of Economics, Policy, and Labor*, Lexington Books, 13-20.

Pullen, J (2009), *The Marginal Productivity Theory of Distribution: A Critical History*, Routledge.

Ramazzotti, P (2020), Economic Policy, Social Identity and Social Consensus, in: *International Journal of Political Economy* 49(2), 139-52. DOI: [10.1080/08911916.2020.1778864](https://doi.org/10.1080/08911916.2020.1778864)

Ramsay, T (2002), The Jobs Guarantee: A Post-Keynesian Analysis, in: *Cambridge Journal of Economics* 25(2), 273-91. doi.org/10.1080/01603477.2002.11051352

Reich, M (1981), *Racism: A Political Economic Analysis*, Princeton University Press.

Reich, M, DM Gordon, RC Edwards (1973), Dual Labor Markets: A Theory of Labor Market Segmentation, in: *American Economic Review* 63(2), 359-65.

Robert, V, G Yoguel (2016), Complexity Paths in Neo-Schumpeterian Evolutionary Economics, Structural Change, and Development Policies, in: *Structural Change and Economic Dynamics* 38, 3-14. doi.org/10.1016/j.strueco.2015.11.004

Schelling, T (1978), *Micromotives and Macrobehavior*, W. W. Norton and Co.

Schneider, D, OP Hastings, J LaBriola (2018), Income Inequality and Class Divides in Parental Investments, in: *American Sociological Review* 83 (3), 475-507. DOI: 10.1177/0003122418772034

Schutz, E (1995), Markets and Power, in: *Journal of Economic Issues* 29(4), 1147-70. doi.org/10.1080/00213624.1995.11505745

Schwardt, H (2017), *The Path to a Modern Economics – Dealing With the Complexity of Economic Systems*, Palgrave Macmillan.

Seguino, S (2019), Feminist and Stratification Theories' Lessons from the Crisis and Their Relevance for Post -Keynesian Theory, in: *European Journal of Economics and Economic Policies: Intervention* 16(2), 193-207. doi.org/10.4337/ejeep.2019.02.05

Seguino, S (2021), Inequality and Economic Stratification: Reflections on Bromley, Piketty, and Obeng-Odoom, in: *Forum for Social Economics*, vol. 50, no. 2, pp. 243-51. doi.org/10.1080/07360932.2020.1864433

Semmler, W (1982), Theories of Competition and Monopoly, in: *Capital and Class* 6(3), 91-116. doi.org/10.1177/0309816882018001

Sidanius, J, E Devereux, F Pratto (1992), A Comparison of Symbolic Racism Theory and Social Dominance Theory as Explanations for Racial Policy Attitudes, in: *The Journal of Social Psychology* 132(3), 377-95. DOI: [10.1080/00224545.1992.9924713](https://doi.org/10.1080/00224545.1992.9924713)

Sidanius, J, F Pratto (1993), Racism and Support of Free-Market Capitalism: A Cross-Cultural Analysis, in: *Political Psychology* 14(3), 381-401. doi.org/10.2307/3791704

Sim, S-G, and M Seki (2022), Technological Progress and Self-reinforcing Degree-Inflation in the Canadian Labor Market. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2450828 (Last Accessed: April 1, 2024).

Simon, H (1956), Rational Choice and the Structure of the Environment, in: *Psychological Review* 63(2), 129-38. DOI: [10.1037/h0042769](https://doi.org/10.1037/h0042769)

Suzuki, S (1998), In-Group and Out-Group Communication Patterns in International Organizations: Implications for Social Identity Theory, in: *Communication Research* 25(2), 154-82. doi.org/10.1177/009365098025002002

Sweezy, P (1942), *The Theory of Capitalist Development*, Monthly Review Press.

Sweezy, P (1990), Monopoly Capital, in: Eatwell J, Milgate M, Newman P (eds) *Marxian Economics*. Palgrave Macmillan, London. 297-303.

Thompson, JP, and TM Smeeding (2013), Inequality and Poverty in the United States: The Aftermath of the Great Recession, *FEDS Working Paper No. 2013-51*.

Tippett, RM, A Jones-DeWeever, M Rokeymoore (2014), *Why Closing the Racial Wealth Gap is a Priority for National Security*, Center for Global Policy Solutions, https://globalpolicysolutions.org/wp-content/uploads/2014/04/BeyondBroke_Exec_Summary.pdf

Torche, F (2011), Is a College Degree Still the Great Equalizer? Intergenerational Mobility Across Levels of Schooling in the United States, in: *American Journal of Sociology* 117(3), 763-807. doi.org/10.1086/661904

Tridico, P (2018), The Determinants of Income Inequality in OECD Countries, in: *Cambridge Journal of Economics* 42 (4), 1009-42. doi.org/10.1093/cje/bex069

Vasconcelos, VV, FC Santos, and JM Pacheco 2013, A Bottom-Up Institutional Approach to Cooperative Governance of Risky Commons, *Nature Climate Change*, 3, pp. 797-801. doi.org/10.1038/nclimate1927

Veblen, T. B. (1899 / 1994), *The Theory of the Leisure Class*, Dover Publications, Inc.

Veblen, T. B. (1904 / 2005), *The Theory of the Business Enterprise*, New York: Cosimo, Inc.

Veblen, T. B. (1919 / 1992), *The Higher Learning In America – A Memorandum on the Conduct of Universities by Business Men*, Routledge.

Veblen, T. B. (1923 / 1954), *Absentee Ownership and Business Enterprise in Recent Times – The Case of America*, New York: The Viking Press, Inc.

Vietorisz, T, B Harrison (1973), Labor Market Segmentation: Positive Feedback and Divergent Development, in: *American Economic Review* 63(2), 366-76.

Waller, WT (1987), Ceremonial Encapsulation and Corporate Cultural Hegemony, in: *Journal of Economic Issues*, vol. 21 (1), 321-28. doi.org/10.1080/00213624.1987.11504612

Williams, RB (2017), Wealth Privilege and the Racial Wealth Gap: A Case Study in Economic Stratification, in: *The Review of Black Political Economy*, vol. 44, no. 3-4, pp. 303-25. doi.org/10.1007/s12114-017-9259-8

Wray, LR, F Dantas, S Fullwiler, PR Tcherneva, SA Kelton (2019), Guaranteed Jobs Through a Public Service Employment Program for the United States, in: N Karagiannis and JE King (eds), *A Modern Guide to State Intervention: Economic Policies for Growth and Sustainability*, Edward Elgar.

Zweigenhaft, RL and GW Domhoff (2014), *The New CEOs: Women, African American, Latine, and Asian American Leaders of Fortune 500 Companies*, Rowman and Littlefield.