

Inequality in Economics: The Concept, Perception, Types, and Driving Forces

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Abstract

Purpose: The aim of the paper is to overview the research on inequalities in economics. The paper is based on mainstream and heterodox economic theories and approaches addressing inequality and its economic interdependence.

Methodology: Due to its positive and normative nature, inequality is a complex concept that eludes precise definition. The available application of mainstream and heterodox approach to study inequality and its economic interdependence allows for the identification of various components of inequality. Classifications that fall within the mainstream economics especially reveal less numerous and often even different types of inequalities compared to heterodox approaches. Moreover, what determines within-country inequality is the number of driving forces related to the factual and regulatory sphere of an economy.

Findings: This study does not exhaust the general debate over inequality in economics. The question remains about the state of research dedicated to the outcomes of inequality, for instance, perceived in its dynamic and historical perspective. Moreover, there emerges a need to overview the theoretical and empirical research dedicated to inequality in terms of not only its driving forces but also economic outcomes.

Keywords: inequality, classification, mainstream economics, heterodox economics

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Introduction

Inequality occupies a prominent place in the literature on economics. In the middle of the twentieth century, Kuznets (1955) not only highlighted inequalities within countries but also their relationship with economic growth and development. However, the discussions about these relations found no satisfactory conclusion. What was particularly doubtful was the empirical argument for the relationships between inequalities and growth in the inverted U-shape (Kuznets hypothesis). Thus, since the 1970s economists paid more attention to the diagnosis of the nature and forces of economic growth while removing the problem of distribution and inequality within countries from the main area of economic research.

Economists' renewed interest in inequalities emerged at the turn of the twenty-first century. At the end of the twentieth century, Atkinson (1997) emphasized the need for a fair discussion about inequalities, which have been systematically deepening since the 1980s in countries at various levels of development. Moreover, at the beginning of the twenty-first century, there emerged arguments that illustrate the harmful social and economic implications of growing inequalities within countries (Moss et al., 2013; Voitchovsky, 2005).

Started by Kuznets (1955) and subsequently developed by the representatives of various schools of economics, the methodological and empirical analysis of inequalities led to a considerable differentiation of this field of study by:

- the essence and object of inequality: outcome, opportunity, process;
- the spatial dimension of inequality: within-country inequality and inequalities between countries, inequalities between the average level of well-being in different countries, inequalities between people in the world;
- and, the theoretical basis for the study of inequality: mainstream economics versus heterodox economics.

Therefore, the aim of the paper is to present the directions of development of the research on inequalities in economics. This article especially highlights the dilemmas associated with the definition of inequality, the epistemological framework for the interpretation of inequality, and the emergence of different ways of classifying the components of this economic category, not to mention the development of empirical research into causal forces of inequality.

The Concept of Inequality

The literature on inequality has difficulty indicating its interpretation that could serve as a definition of this concept without raising methodological objections. The most popular definitions are fragmentary, as isolated types of inequalities refer to certain aspects of the economic functioning of persons in a particular spatial arrangement like a region, country, or group of countries. Thus, scholars distinguish such inequalities as material, income, wages, wealth, land, education, intellectual, and freedom along with digital, property, and civil rights (e.g. Champernowne and Cowell, 1998, p. 2; Sennett, 2003).

The fundamental limitation in the definition of inequality stems from the fact that it is difficult, if at all possible, to indicate an expression of meaning opposite to inequality. We cannot treat inequalities as an antonym of general equality between studied objects. In such case, equality could be understood as sameness and even the same identity (Blackburn, 2008, p. 251). For this reason, any definition or attempt to define inequalities can give rise to justified methodological doubts that arise from the background of formal logic. Thus, we may assume that inequalities are a general concept that distinguishes several features, which place the constraints on its unambiguous interpretation.

The inequalities that occur between people are relative because they depend on the location in the social context (e.g. Matthews and Gallo, 2010). As explained by Kot (2004a, p. 46), we may understand them as a deviation from equality between the studied objects (people) in terms of selected characteristics. Thus, the interpretation of inequalities often appears accompanied by the word “economic” or an emphasis on a specific characteristic like income, wealth, or remuneration.

Moreover, the relative nature of this notion is apparent from the literature’s view that we should not inequalities treat as synonymous with differences between people (Blackburn, 2008). Sen (1992, p. 1) explains that “human beings are thoroughly diverse” because of their personal characteristics, gender, disease resistance, physical and mental abilities, as well as external characteristics like inherited wealth and the natural and social environment of human and group life.

However, differences between people due to external and personal characteristics do not reflect the essence of inequality, which should attract the attention of economists. The inequalities within the area of economic interest differ from the dissimilarities between people. The inequality in economic perspective results from production,

consumption, and distribution processes. Therefore, the group of gender, racial, and religious inequalities are not precisely economic. However, as a result of the mechanisms of production, distribution, and consumption, this group comes up against them, often to the point of fixing economic inequalities, unequal wages, income, or, more broadly, inequalities in the standard of living.

An important characteristic of inequality is its dual nature, that is: positive (instrumental) and normative. The positive nature of inequality means it always describes a scale of unequal access to “goods and values” between members of a given population. On the other hand, the normative nature of inequality signifies it often appears along with an ethical norm, such as the principle of justice and freedom. Often, scholars explicitly or implicitly interpret inequalities in terms of good – bad or fair – unfair. The interpretation of inequalities free from ethical inclinations – so only in a positive way – characterizes economists who elaborated a certain axiological system derived from utilitarian theories of wellbeing (Kot, 2004a, pp. 45–46). However, even the authors of studies based on positive economics – thus based on complex tools of descriptive statistics and econometrics – often explicitly or implicitly evaluate existing inequalities (Jenkin, 2011). This involves value judgments of inequalities and, thus, refers to their normative.

Consequently, it is difficult to maintain ethical neutrality in discussing inequalities. Therefore, many controversies involve the definition of a category that does not raise reasonable methodological doubts, so as to attempt to answer what is inequality. It is perhaps for this reason that most economists, starting with Sen, begin their considerations on inequality with an attempt to answer the question: *the (in)equality of what?*

Methodological Basis for the Interpretation of Inequality

Mainstream Economics

The interpretation of inequality typical for mainstream economics develops from two closely related groups of theories – distribution and welfare – that dates back to classical economics (Landreth and Colander, 1994). However, these theories only slightly relate to inequalities understood as the division of economic outcomes between members of a population. What is typical of classical economists is their functional approach to distribution. Thus, classicists’ subject of analysis is employment and payment of production factors, such as land, labor, and capital; assuming that the society consists of three homogeneous groups of individuals, that is landowners, owners of capital, and workers (Cowell, 2007).

However, the functional approach is insufficient to describe the distribution of income between people. Moreover, we should include the distribution structure of production factors ownership (labor, capital, land) that does not overlap with the division of society into workers, capitalists, and landowners. Thus, apart from employing and enumerating production factors, economists began to assume additional considerations to possibly clarify, on the one hand, the level and, on the other hand, the differentiation between the economic outcomes of households and their members. Such developed personal approach explained the distribution of economic outcomes between households and their members on the basis of (Cowell, 2007, p. 8):

- evolution of property rights across generations that, among others, depends on how families are formed (whether the rich marry the rich or the poor; (Fernández et al., 2005; Liu and Lu, 2006) and the motives for bequeathing wealth to the future generations; hence, whether parents compensate disadvantaged children or transferred wealth is the result of intergenerational optimization or a matter of creating opportunities for future generations (Kopczuk and Lupton, 2007).
- dispersion of wages in industrialized countries (Gottschalk and Smeeding, 2000), which many seek in the effects of technological advances (Acemoglu, 2002; Blau and Kahn, 1996; Goldin and Katz, 1996; Krueger, 1993) and developments of international trade (Burtless, 1995; Krugman and Venables, 1995; Richardson, 1995).

Noteworthy, regardless of whether mainstream economics represent the distribution functionally or personally, it always refers to the specific perception of welfare. Thus, the disproportions in its distribution – that is, inequalities – also have a strictly defined semantics resulting from the methodological assumptions of welfare economics.

We may divide welfare economics into two dominant traditions – classical and neo-classical – which differ in how they perceive and, thus, measure the utility and use of the Pareto's efficiency criterion as the axiom (Brouwer et al., 2008).

1. The classical tradition of welfare economics cardinally measures utility. Hence, this tradition calculates utility level in a population by summing up the utilities of individual units. On the other hand, this tradition positions the social optimum at the point in which total utility reaches its maximum.
2. Neoclassical welfare economics develops in two veins:
 - The new welfare economy measures utility ordinally while deeming comparisons between individuals' utility "impossible," "meaningless," or

“unscientific.” This is due to the fact that an individual’s utility ceased to be an absolute measurable category. Moreover, the social assessment of welfare distribution, and especially its changes over time, was based on the Pareto criterion. Thus, the improvement of total welfare occurred when the increase of utility of one individual was not at the expense of the utility of another. Consequently, scholars perceived as a positive change any increase in the utility of the individual unrelated to the reduction of the utility of another. Moreover, they positioned the social optimum when its change associated with a decrease in the utility of at least one individual, at the given allocation of production factors.

- The second vein compares individuals’ welfare with Bergson-Samuelson social welfare function (Bergson, 1938; Samuelson, 1948). The use of this tool allows researchers to select the preferred divisions at the welfare frontier and establish the basis for the value judgments regarding the distribution on which the Pareto criterion is silent. Noteworthy, all variations of welfare economics deem all non-utility information irrelevant both in determining the level of social welfare and differences in the welfare of individuals.

Thus, mainstream economics shows a narrow cognitive perspective of inequality in positive and normative terms. This is due to the essential tenets of classical and neo-classical welfare economics, namely the utility principle, individual sovereignty, consequentialism, and welfarism.

On the upside, welfare economics characterizes inequality with a twofold narrowing: first, by the difference between people in terms of income from work and property; second, by the effects of economic involvement of factors of production. This is due to two main reasons:

1. The appropriation of utilitarianism as the philosophical backbone of economics results in the axiomatization of the welfare category (Kot, 2004b, p. 109). Economists borrowed utility from Bentham’s utilitarianism, which became the key category in the study of welfare and its distribution. One of the four abovementioned tenets of welfare economics is that the situation of the individual is judged solely on the basis of utility or, as does Sen, utility information. Thus, scholars leave all nonutility information in welfare economics behind a veil of ignorance, especially in the context of measuring welfare, as first noticed by Sen (1973). However, due to the terminological ambiguity associated with utility (Brouwer et al., 2008), this category “has gone through a long and turbulent evolution in economics” (Kot, 2004b, p. 108). Bentham called utility all that

leads to happiness, or a certain balance between pleasure and pain. However, because not everything that people desire and what they are willing to pay for brings them a fortune, economists began to understand utility a little later as *desiredness* (Sosenko, 2012, pp. 108–128). In the first half of the twentieth century, they subjected utility to a kind of “sterilization” (Kot, 2004b, pp. 107–122): they purified it from the psychological dimension and associated it more with preference (Little, 2002, p. 3).

2. The psychological sterilization of utility based on two assumptions (axioms), which result not only from welfarism but also from consequentialism as a methodological viewpoint, according to which we only assess the latter utility on the basis of the results of behavior and processes rather than intentions that lead to specific effects (Brouwer et al., 2008; Schneider, 2012, p. 420). First, utility (preference), or intuition of type of happiness and satisfaction, was closely related to the number of goods and services consumed. For this reason, economists placed at the center of their interest income – as the main determinant of consumption – which made it synonymous with welfare. Second, as a result of the mathematical formalization of economics, utility, or more accurately, the utility function began to be treated as a “convenient tool for mathematical expression of relations of preferences.” Moreover, “to avoid all non-economic subtexts such as happiness, satisfaction, etc., economists are more likely to use the term “function evaluating income” than “utility function” (Kot, 2004b, p. 118).

The positive narrowing of inequality refers to the normative narrowing of this category’s essence. Welfare economists who represent the classical and neo-classical traditions, “share the broader profession’s discomfort with normative concepts such as justice and, until recently and with some distinguished exceptions, have had little to say about it” (Brunori et al., 2013, p. 89). Consequently, it may seem that mainstream economics make the subject of study distribution but not inequality, which, according to the shared view, also refers to value judgments, that is, the normative sense of this category.

However, the omission of ethical issues in the discussion of inequalities (distribution) does not mean that the statements of welfare economists in this area are normatively sterilized, that is, free from ethical dimensions. Brouwer et al. (2008, p. 332) explain that “the central objective of the study of welfare economics is to provide a coherent ethical framework for making meaningful statements about whether some states of the world are socially preferable to others.” Consequently, mainstream economics associates inequalities as interpersonal differences in welfare with a very specific ethical standpoint, defined by Sosenko (2012) as economic ethics.

“Economistic ethics is one version of utilitarianism,” which forms the basis for “explaining all human behaviour as striving to maximize individual utility” (Sosenko, 2012, p. 112). This ethics does not negate our desire to attain moral good (Simpson, 2009). However, it withholds the typical assumption of economics that individuals are rational in seeking to satisfy their own interests. According to the assumption of economic rationality, every person makes an ethical choice that consists of a subjective cost and benefit analysis. This means that the advantage of the individual occupies a higher place in the evaluation hierarchy than the benefit of the group of individuals. Thus, the concept of economic establishes a platform for liberals to opt for free access to the market, as well as for libertarians to opt for free property and human rights (Nozick, 1974), which authorize individual freedom and self-interest.

Moreover, economistic ethics stems from allocation efficiency that prevents the search for objective ethical legitimacy, which reduces the problem of choice, also related to moral goods, to profitability (Sosenko, 2012, pp. 112–113). Thus, from neoclassical welfare economics comes the controversial message, suggesting that inequalities in welfare distribution are economically justified if they result from free market mechanisms (Cameron, 2000, p. 1034).

Especially in its assumption about the economic rationality of individuals, economistic ethics foreground the concept of a one-dimensional human being (*homo oeconomicus*) who maximizes self-interest. Let us emphasize that it is Becker’s (1981) inalienable achievement to transfer the economic analysis of human behavior in households to areas beyond traditional economics like sociology and psychology. However, any explanation of non-market behavior of people in relation to, say, health, prestige, discrimination against women, or leisure stems from a model of economic rationality borrowed from the Walras equilibrium, which means it perpetuates economic status as Smith’s moral virtue.

Heterodox Economics

Several reasons motivated a separation from mainstream economics in interpreting inequalities and the development of a heterodox approach:

1. Empirical studies of mainstream economics do not give unambiguous conclusions about the economic implications of inequality. The research of Kuznets (1955) and Ahluwalia (1976) showed the dependence between economic growth and inequality in the inverted U-shape (Kuznets hypothesis). However, at the end of the twentieth century, a number of scholars provided weak empirical arguments in support of Kuznets hypothesis, among others, Anand and Kanbur

- (1993), Li, Squire, and Zou (2001), Ravallion and Chen (1997), Easterly (1999), Barro (1999), and Dollar and Kraay (2002).
2. Mainstream economics provide a weak underpinning for economic policy that would stimulate economic growth while limiting income inequalities (Kanbur and Lustig, 1999, pp. 8–9). The literature recommends an economic policy that supports economic growth and limits inequalities. However, these recommendations are based on the assumption that inequalities and growth are separate phenomena. Moreover, some economic policies are double-edged. This means that some growth-enhancing instruments have a negative impact on equality and vice versa (Alesina and Rodrik, 1994; Datt and Ravallion, 1992). Thus, there is no agreement among economists on how to stop the rise of inequalities within countries, observed since the turn of the 1970s and 1980s (Jenkin, 2011).
 3. Mainstream economics is based on rigorous assumptions that are “central to the theory rather than being merely convenient simplifications” (Cowell, 2007, pp. 3–4). Thus, the conclusions from these groups of theories, especially in the context of inequality, prove insufficient (Rosenbaum, 1999, p. 317) and receive severe criticism. The main criticism of welfarist economics is that the problems of obtaining utility and satisfaction excessive focus economists on the level of individual achievement in relation to the possible differences in the freedom of the people to make choices between the available achievements. The welfarist rule of distribution favors those who are more-or-less effective in transforming utility, depending on whether the object of interest is maximizing collective welfare or equal distribution in society.

The scholar who made essential contributions to the development of the new approach to inequality is Sen (1979; 1977; 1973), who thoroughly criticizes welfare economics. Thus, Sen opened the way to reformulating the debate over the essence of inequality in economics. He made it possible by weakening and undermining some assumptions of mainstream economics that prevented the identification of human welfare essence along with its distribution between people (inequality) in a positive and normative dimension.

Sen (1973; Sen et al., 1997) undermines the view that individual and collective well-being can only be assessed on the basis of utility, preference, or utility information. By the 1970s, scholars employed two dominant approaches to utility (Cameron, 2000, p. 1035):

- The first is based on the diminishing marginal utility of income and the identical utility function for all people. Consequently, the total utility obtained by

the population is assumed to be the maximum value at the equal income distribution. Thus, this approach results in arguments for an egalitarian income.

- The second derives from the observation that more active and healthier people are more efficient in converting their income into utility. Thus, maximization of total utility occurs when those better equipped with resources (health, qualifications) have higher incomes than those with lower resources, thus drawing arguments that justify derogations of income egalitarianism.

Sen accepts neither of the two approaches for ethical reasons because they give equal treatment to people who are unequal in their inner characteristics, such as age, sex, aptitude, or different disabilities. First, these approaches equalize people and, second, accept inequalities that result from human-independent decisions and actions in converting income and resources into utility (Rosenbaum, 1999, p. 317). Against this background, Sen formulates the *Weak Equity Axiom*, which means that income should be shared in such a way that people with lower generalizability capabilities earn more compared to those with higher capabilities. Thus, according to this axiom of distribution, the equality of welfare does not occur necessarily with the egalitarian division of income (Cameron, 2000, p. 1035).

As a result of questioning usefulness as a basic category of comparing welfare between people – and the formulation of the Weak Equity Axiom – Sen broke with velocity and consequentialism as the key principles of welfare economics. Sen indicated that utility is insufficient to describe and compare human welfare; therefore, it needs complementation from personalized capabilities and needs. For this reason, Sen led to the expansion of the cognitive perspective of welfare and positive comparison between people. Thus, next to outcomes in the form of incomes, what gains importance is capability.

Let us emphasize that Sen criticized and, in a sense, dethroned welfare economics axioms with mathematical analysis. Although he used a descriptive method, Sen's inference was always subordinate to the mathematical formulation (Cameron, 2000). So, his works introduce the category of welfare and its division into areas previously conventionally reserved for other social sciences, while using mathematical formulation as a prerequisite for the methodological correctness of strict economic analysis.

As a result, Sen (methodologically) inspired further expansion of the positive definition of inequality. This mainly relates to the emphasis on the (in)equality of opportunities in theoretical, methodological, and recently also empirical research in the field of *responsibility egalitarianism*. The direction of these studies is rooted in the philosophical conclusions of Dworkin (1981a; 1981b), Arneson (1989), and Cohen (1989), which was

subsequently formalized mathematically and, thus, methodologically integrated into strict economics by Roemer (2012, 1998, 1993).

Scholars derived the role of *opportunities* in explaining welfare and its distribution among people (inequality) from the observation that the effects of human actions in the form of socially valued effects defined as advantages – like income, wealth, or health – are determined by two types of factors, namely efforts and circumstances. Efforts are factors for which a person can take responsibility and, therefore, their variation between people is acceptable for normative reasons. On the other hand, people cannot affect the circumstances that affect their income, wealth, and health. Empirical studies on the distribution of outcomes also show that people can identify the differences between the factors that fall within their area of responsibility, their impact (efforts), and what is outside of their influence (circumstances) (Cappelen et al., 2010). Therefore, we cannot accept the circumstances that prevent the achievement of intended outcomes (income, wealth, health) and, therefore, should strive for their limitation (Brunori et al., 2013, p. 3).

Economics changed its approach not only to the positive but also the normative interpretation of welfare and its distribution due to the incorporation in analyses of value judgments, justice – including the distributive justice – fairness, and ethics; therefore, issues that go beyond economic ethics. This was possible by undermining the welfare economic assumption of the perfect rationality of an individual.

Behavioral economics verifies the neoclassical assumption of rationality. Sociological and psychological studies revealed that economic agents are not identical – thereby undermining the assumption of universality – while their decisions are multidimensional and exceed predictability in terms of market benefits and costs. Behavioral economics shows that the noneconomic determinants of decisions are neither random nor individual; therefore, we should include them in descriptions of economic phenomena and processes (Akerlof and Yellen, 1985; Tversky and Kahneman, 1992). What simultaneously grows more important in decision-making processes is economic rationality, emotion, despair, risk aversion, the sense of justice, and fairness.

Thus, at the end of the twentieth century, the notion of inequality was widely rooted in the ethical approach to income distribution (Sen et al., 1997). There are arguments that people care about distributive justice and express concern for justice through their behavior (attitudes) in specific situations (Charness and Rabin, 2002; Cowell, 2007; Fehr and Fischbacher, 2002). Moreover, others show that justice and fairness explain the deviations in human behavior, based on theoretical models of *purely self-regarding*

preferences (Fehr and Gächter, 2000; Fehr and Schmidt, 1999). Consequently, justice and judgments gain importance in the normative interpretation of inequalities.

However, terminological ambiguities gain significance against this backdrop, especially with regard to the ambiguous term of justice. This results not only from the fact that the concepts that form the background for justice – such as "law," "equality," or "fairness" – are blurred but also that the category of justice itself is sensitive to all intuitive and subjectivist interpretations, which changed in the historical development of social sciences; namely in philosophy, law, political philosophy, and sociology. Much controversy arises not only from the definition of justice in ancient (Platon, Aristotle) and modern (Hobbes, Rousseau) philosophy and political philosophy (Bentham, Rawls) but also from its practical application in state administration and law. In order to define it in the most universal manner possible, free from the subjectivism dependent on the philosophical basis, we may apply the view of Chryssides and Kaler (1993, p. 167) who present justice as the "pervasive and crucial aspect of morality," which means that "what is done to people is what ought to be done to them."

It was Sen who suggested the incorporation of justice in the debate on inequalities (Sen, 1973; Sen et al., 1997), as he criticized the economic ethics in justifying the existing differences in the distribution of wealth (income). He suggested that – even if inequalities do arise from the free market – formal economics can and should engage in the debate about fair inequality. Sen returned to his 1973 appeal in his work from 1997, when development economics challenged the neoclassical approach to justice and the new institutional economy was growing in popularity (Cameron and Ndhlovu, 2000).

At the end of the twentieth century, inequalities researchers highlighted the political philosophy of Rawls (1971), who interprets justice as fairness, suggesting that inequalities in the distribution of these goods are permissible only if they benefit the least well-off positions of society (difference principle). Moreover, Rawls emphasizes the important role of equal opportunities in realizing the idea of justice, which occupies a higher place in his hierarchy than efficiency. We see a disagreement with some of Rawls' index of primary goods from Sen (Zwarthoed, 2009, p. 38) in his theory of justice and especially in the context of the problem of positive freedom. However, Sen inclines more to the fact that the choice regarding inequality is more social than moral. After 1980, Sen stresses the role of morality, but his models of inequality and poverty always capture the atomized person with a conscious social choice. Moreover, when applied in its deliberations, cultural relativism is inconsistent with universalism, which Cameron (2000) has to be one of the epistemological features of the timeless character of Sen's works.

Classifications of Inequalities

For methodological reasons, we may identify two main approaches to classifying components of inequality. The first is characterized by a narrow (economically reduced) cognitive perspective based on the mainstream economics methodology. The second is characterized by a wider cognitive perspective, which allows one to associate it with heterodox economics and the interdisciplinary interpretation of inequality. Thus, the essence of inequalities and their constituents derives from the frontiers of various social sciences, economics, sociology, political science, philosophy, and political philosophy.

Classifications Based on Mainstream Economics

In classifications based on economic individualism, the isolation of inequalities components stems from consequentialism, the utility principle, the (perfect) economic rationality, and the associated economic ethics. Thus, this cognitive perspective overlooks these components of inequality which, on the one hand, seem necessary for us to reach the essence of the contrasts between people and their effects on the course of real economic processes and, on the other hand, are of fundamental importance to the general consolidation of inequalities. Such classifications were proposed by Fitoussi and Rosanvallon (1996), Easterly (2007), and the World Bank (Ferreira and Walton, 2005).

Fitoussi and Rosanvallon (1996) deal with inequalities in relation to social structures – like social groups or human relationships within these structures – which may suggest the interdisciplinary nature of their classification. However, they include social structures in order to better identify the contrasts between people in terms of economic outcomes countable in market values. Therefore, Fitoussi and Rosanvallon (1996) find the essence of inequality in the reduced concept of human being by distinguishing two kinds:

- structural (traditional) inequality refers to the differences between groups of people like low qualified workers and highly qualified specialists. Thus, we may measure these inequalities by intergroup differences in income, wage, expenditure, wealth, or access to education;
- dynamic (modern) inequality results from differences within groups treated as homogeneous in the case of structural inequalities. Examples of these inequalities may be the risk of unemployment within the same group, which then leads to income and wealth inequalities.

Easterly (2007, p. 756) also uses a narrow cognitive perspective of inequality, which distinguishes two types: structural inequality and market inequality. Structural inequali-

ties result from historical conditions such as conquest, colonization, slavery, and the division of land by the state and the colonizer. In turn, market inequalities refer to the invisible hand of the market and market incentives. Thus, they may be associated with income inequalities, labor productivity, access to education, and health care services.

The World Bank (Ferreira and Walton, 2005) employs a narrow approach to the interpretation of inequality. In 2005, the World Bank issued a special report focusing on opportunities that should be aligned between people to stop the consolidation and the deepening of inequalities in general. As a result, the World Bank distinguishes two major types of inequalities: effects and opportunities. The effects refer to income, salaries, assets, therefore categories within the domain of theoretical-methodological research of mainstream economics. In turn, opportunities refer to non-economic determinants, essentially limited to education and health.

World Bank's identification of opportunities as a component of inequality may suggest that this classification exceeds mainstream economics, which this institution strongly advocates. However, what the World Bank understand as opportunities refers not to the Roemer's responsibility egalitarianism or Sen's capability concept but a meritocratic interpretation that stems from the considerations of Bell (1972) and Arrow, Bowles, and Durlauf (2000). Thus, the World Bank considers chances narrowly and limits them to talent as qualifications, skills, and effort associated with gaining a certain level of wellbeing, which leaves behind the veil of ignorance any determinant of inequality on which the individual has no influence.²

Classifications Based on Heterodox Economics

Interdisciplinary classifications break with economic individualism as a methodological basis. Thus, they lead away from the assumptions of mainstream economists, who view culturally-shaped social mechanisms and relationships between people as subordinated to the economic transactional relationships of members of a given community (market mechanism; Polanyi, 1944). Some of the most proposals to classify inequalities according to heterodox economics are Filek et al. (2004), Baker et al. (2009), and Burchardt (2006).

The wide classification of inequality by Filek et al. (2004, pp. 19–20) explains that we can reduce all kinds of inequalities into three types: material, social and cultural. They

² Noteworthy, the 2005 World Bank report (Ferreira and Walton, 2005) became the subject of intense criticism not only by J.E. Roemer (2006) – an outstanding authority in the field of opportunity – but also the authors themselves, i.e. Bourguignon, Ferreira, and Walton (2007). The controversy surrounding this report is widely discussed by Jenkin (2011).

refer to the unequal access of people to specific goods in the broad sense: material (material inequalities), inequalities related to the position the people occupy, and their social role and prestige (social inequality) and to the various spheres of culture (cultural inequalities). The authors explain that the most visible inequalities occur in the context of sharp interpersonal material contrasts. This is especially true of extreme poverty and misery that makes it impossible to meet basic needs and endanger human life. Concentration on survival under conditions of extreme poverty is conducive to the degradation of individual's subjectivity, since the person reaches the cultural and other values to a limited extent, thereby withdrawing to the margins of the community and limiting own development potential.

A similar approach to inequality appears in Carter and Reardon (2014, p. 4), who distinguish its four domains: socioeconomic, political, health, and cultural. By socioeconomic, they mean wealth, income, work, and education. The political domain encompasses not only participation, power, legal, and civil rights but also resources, social policy, and public policy. The health domain incorporates both physical and mental wellbeing. Finally, the cultural domain includes power, the structure of stereotypes, media control, representation, and access to cultural tools.

Baker et al. (2009) also use the interdisciplinary approach to inequality. They distinguish inequalities in access to resources, social care, social solidarity, power, work, learning, and inequality of respect and recognition. However, the authors assign no fundamental role to fixing general inequalities in material conditions like Filek et al. (2004) but to conditions related to changing social structures.

An interesting way of dividing inequalities between people was proposed by Burchardt (2006), who distinguishes three types of inequalities: inequality of outcome, opportunity, and process. Inequalities of outcome are the most intuitive type of contrast between people because they refer to the distribution of effects of an economic operation. Thus, they account for the diversity of people in the field of material resources in a narrow way: in the form of income, accumulated wealth, and – more broadly – education, health, social capital, and the various dimensions of wealth and individual wellbeing (Jenkin, 2011, p. 50). Owing to the ease in capturing the essence and measurement of such inequalities, the inequalities of outcome are firmly established in the theoretical, methodological, and empirical research of mainstream economics.

However, we should emphasize that it is insufficient to narrow the analysis of inequalities to outcomes only. This is especially the case in the analysis of the occurrence of polarization of people by (Burchardt, 2006, pp. 7–8):

- needs that arise from differences between individuals' internal characteristics; because of highly individualized diverse needs, the same amount of resources (outcomes) in the form of income or wealth translates differently into the ability of people with different internal qualities (age, sex, health status) to obtain a given standard of living. Thus, for example, disabled people need more resources to achieve a comparable standard of living such as the number of goods and services consumed in relation to healthy persons;
- professed systems of values and preferences; due to the different hierarchy of goals within confined value systems and preferences, people may value the same income differently. Therefore, the fundamental question is not whether part of the population has access to a given good, but whether it has the opportunity to benefit from it;
- the ability to bear responsibility for the consequences of own decisions; only concentrating on the equality of effects in the form of, say, income can reduce the motivation to actively engage in production processes; thereby it may trigger opportunistic attitudes. For this reason, pressure for the equality of resources may counteract economic efficiency.³

Consequently, the essential role in reaching the essence of inequality in general is the opportunity of the members of a given community to achieve people's desired goals, because of their possessed material and non-material resources (competencies: skills and talents), the effort made, their placement in social structures (institutional environment), and coincidence (luck). We identify the inequality of opportunity against this background. It refers to a situation when individuals with similar resources (physical capital, human capital), comparable tendencies to the effort of management (work, competence development, entrepreneurship), and location in social structures have the possibility to achieve different outcomes in the form of, say, living standards.⁴

The inequality of the process refers to the fact that members of a given community are unequally treated in relations with other individuals and institutions. One example of this kind of polarization is the inequality of respect (Baker et al., 2009). Although the equality of respect requires the avoidance of extensive inequalities in resources and opportunities, what gains importance is the quality of interpersonal relationships and interactions along with institutions (Burchardt, 2006, p. 6). In extreme manifes-

³ Thus, perhaps in works based on mainstream economics and, hence, inequalities in the context of effects (income, wealth) show the problem of reducing income differentials among people as contrary to economic efficiency. Thus, the literature embedded in mainstream economics, inequalities and economic growth are treated as substitutes.

⁴ However, chances in the context of equality or inequality are differently interpreted according meritocratic approach (Arrow et al., 2000; Bell, 1972) or egalitarianism of responsibility (Cohen, 2001; Dworkin, 2000, 1981a, 1981b; Roemer, 1998; Sen, 1973).

tations of such inequality, the members of a community may be pushed to the margins of social life, that is, experience exclusion from participation in economic, social, and cultural processes.

This isolation and its outcomes, not to mention the inequality of opportunity and process, appears as an attempt to integrate mainstream and heterodox economics; especially including Sen (1992, 1973) who indicates that opportunities are an important factor in abolishing the existing inequalities between people.

Empirical Studies on Inequality Factors

Empirical studies on inequalities within countries can be divided into two main groups: microeconomic and macroeconomic. Microeconomic analyses use data from household budget surveys, as the identification of the forces of change in inequality stems from the decomposition of partitioning metrics in the population studied for a variety of variables. The empirical macroeconomic studies rely on regression analysis, in which the influence of potential macroeconomic variables should change inequalities within countries. Thus, empirical studies use the numerical values of the Gini coefficient or another measure of inequality as the explained variables.

However, microeconomic research has a longer tradition than macroeconomic. Microeconomic studies of inequality driving forces follow three basic approaches (Okatch et al., 2013, p. 19). The first stems from a methodology suggested by Shorrocks (1980, 1984) and Jenkins (1995). One applies it by decomposing the value of inequalities for the population into sections that describe the income differentials in its subgroups by, for example, the place of residence (urban, rural) or the level of education (primary, secondary). Thus, the goal of these studies is to identify what proportion of total inequalities in the population results from differences between and within distinct groups of individuals.

The second, factor approach, decomposes values of inequalities in a given population by *decomposition by factor components*. Shorrocks (1984) conducted the first studies of this kind, based on the disposable income of USA households to explain the contribution of different types of income (work, capital, transfers, taxes) to total inequality. Shorrocks shows that in 1968–1977 salaries had a greater contribution to income inequality in comparison with income from capital. However, let us emphasize that the results of the verification (positive or negative) ambiguously impact different sources of income on inequality. The positive impact of non-farm income on income inequality was

demonstrated in the USA (El-Osta et al., 1995), China and Egypt (Adams, 2002, 2001), and in the Philippines (Leones and Feldman, 1998). In turn, Elbers and Lanjouw (2001) along with Adams (2001) show that income from non-agricultural activity intensifies income inequalities in Ecuador and Jordan.

Moreover, some explain growing inequalities with a factorial approach (Slottje and Raj, 1998, p. 5):

- technological changes resulting from the development of international trade and the improvement of the quality of education (Bishop et al., 1991);
- changes in the distribution of skills in the community and an increase in the rate of return of skilled workers (Juhn et al., 1993; Murphy and Welch, 1992);
- changes in the age at which men enter the labor market, the increasing share of the service sector, and the declining share of the manufacturing sector in employment (Blackburn and Bloom, 1987; Ryu and Slottje, 1998);
- change in the employment rate of women, rising employment in the service sector, and changes in the age of white men who retire (Slottje et al., 1992).

The third approach to microeconomic research stems from regression analysis developed by Oaxaca (1973) and Blinder (1973). They include the two abovementioned approaches: (1) decomposition of total inequalities into parts that describes the differentiation in the subgroups of the studied population and (2) factor analysis. The use regression analysis to calculate the values of parameters that illustrate the relationships between decomposed measures of inequalities and variables, which account for the potential factors of inequality. The advantage of this approach is the ability to weaken the imperfections of the two approaches mentioned above. It allows us to capture the endogenous nature of relationships between the factors of inequality and their effect on inequality (Cowell and Fiorio, 2011).

These studies were arbitrary almost until the end of the twentieth century (Morduch and Sicular, 2002). This especially applies to measures of inequality (Gini or Theila) and decomposition methods. Only Fields (2003) methodology for calculating levels of income inequality within a country between two periods has provided a reliable and, more importantly, comparable research.

Most of the microeconomic studies base on the decomposition of inequality and use regression analysis to show a strong positive effect from education on the differentiation in income distribution. This positive effect applies not only to highly developed countries like the USA (Bourguignon et al., 2008; Cowell and Fiorio, 2011) or Finland (Cowell

and Fiorio, 2011) but also to developing countries like China (Wan and Zhou, 2005), Cameroon, and Brazil (Bourguignon et al., 2008).

However, the weakness of research based on the decomposition of inequality with regression analysis is that it illustrates the averaged impact of potential factors on all parts of income distribution. As Fournier and Koske explain (2012, p. 13), different parts of income distribution – such as the poor and the rich – respond differently to the expansion of educational offer at different levels of education. Thus, changes in income distribution at the upper – and lower-income levels will follow different paths. Research develops against this backdrop based on conditional and unconditional *quantile regressions*. Koenker and Bassett (1978) developed its methodological basis for conditional regression, whereas Firpo et al. (2009) for unconditional regression (Budría and Pereira, 2005; Prieto-Rodriguez et al., 2008; Fournier and Koske, 2012).

Macroeconomic empirical research on the determinants of inequality gained popularity at the turn of the twenty-first century. That is, until the last decade of the twentieth century, the mechanism of the influence of macroeconomic variables on inequality was poorly described in the theory of economics. Thus, scholars encountered difficulties in conducting empirical research based on unquestioned theoretical foundations (Slottje and Raj, 1998, p. 6). In turn, the last two decades saw many theoretical studies develop from the effects of various macroeconomic conditions on inequalities within countries, which led to more reliable research in this area.

Until the 1990s, these studies focused on the so-called traditional economic growth driving forces related to unemployment, the level and structure of employment, fiscal and monetary policies, and their impact on inequality. For example, Mocan (1999) and Blejer and Guerrero (1990) describe inflation and unemployment as explanatory variables, while Auten et al. Auten and Carroll (1999) along with Feenberg and Poterba (2000) use tax rate to reflect the impact of fiscal policy on inequality. Others, analyze the impact of variables that illustrate economic factors (including institutional) on income distribution, for instance corruption (Li et al., 2003), government expenditures and economic duality (Bourguignon and Morrisson, 1998), the share of agricultural sector in the economy (Okatch et al., 2013, p. 19). Most of these studies show that employment growth has a strong positive effect on reducing inequalities and that inflation and changes in money supply determine the changes in income distribution within countries (Slottje and Raj, 1998, p. 5).

Due to the growing popularity of the theory of endogenous growth and, especially, the use of its solutions in models of dual economy, empirical research also developed to

explain the effects of new growth factors on inequalities within countries. However, most of these studies concern individual countries. For example, Ding et al. (2011) along with Rattsø and Stokke (2014) analyze the impact of technology on inequalities in China and Norway, respectively, while Birchenall (2001) – human capital for income distribution in Colombia (Sequeira et al., 2017, p. 91). Eckwert and Zilcha (2007, p. 288) state that endogenous growth literature investigates the cause of inequality in income distribution by concentrating on: (a) the stock of human capital of parents, (b) the rate of technological change that affects the return to investment in education, (c) differences between people in unobservable individual talents that, in turn, (d) may be responsible for agents' choice of various levels of investment in education.

Jaumotte et al. (2013) concentrate more on globalization while overlooking potential links between economic growth and inequalities. Their research shows that the development of international trade (trade globalization) is limited while financialization – therefore financial globalization – intensifies income inequality within countries. In particular, using statistical data for the OECD countries for 1970–2008, Assa (2012) shows a positive correlation between the share of the financial sector in value added and total employment and the inequality measured by the Gini coefficient.⁵ Similarly, based on data for the same group of countries for 1995–2007, Kus (2012) presents a positive correlation between the values of financialization and Gini income inequality measure. Moreover, Sequeira et al. (2017) reveal that the accumulation of human capital deepens income inequalities in the majority of the 156 surveyed countries. However, Barro (2000) evidences that we should not link the positive impact of human capital on income inequality with higher education.

Summary

The literature review shows that the definition of inequality is an extremely complex matter. We should not understand inequalities as a synonym for differences, nor as an antonym for equality between people. Much controversy arises in the context of the positive and normative nature of this notion since it is difficult to maintain ethical neutrality in its interpretation, which makes it avoid precise definition.

The economic thought about inequality developed in two main directions. The first is economically reduced because it stems from utilitarianism. Thus, in the positive dimen-

⁵ Assa (2012, p. 38) indicates that the one percent increase in the financialization of economies was accompanied by an increase in inequalities by 0.49–0.81%, depending on the measure used.

sion, inequalities between people are narrowed down to contrasts in terms of income from work and wealth, as a result of utilization of the production factors. On the other hand, in the normative dimension, the cognitive framework of inequality is defined by the economic ethics, which reduce the problem of individual choice to the cost and benefit analysis countable in market values that is a universal currency of moral reflection. The second direction of research formed on the basis of criticism of the assumptions of mainstream economics. Especially Sen undermined utility as an appropriate way of comparing human welfare while emphasizing the importance of capabilities and needs to reach the essence of inequality. On the other hand, behavioral economics questioned the legitimacy of the assumption about the perfect rationality of economic entities. Thus, in the positive interpretation of inequalities opportunities gained in importance along with outcomes. The rejection of the axioms of mainstream economics opens a way to widen the interpretation of inequality in the normative dimension. What especially gains popularity is the notion that inequalities are deeply rooted in the ethical approach to income distribution. Thus, the importance of justice, fairness, and ethics other than economic grows.

Due to the different directions of research on inequalities, we may base the identification of their components on different theoretical grounds, often with unfounded rules of methodological correctness. Consequently, classifications that fall within mainstream economics often offer fewer different types of inequalities compared to heterodox approaches. Due to the narrow perspective of interpretation in the positive and normative sense, the classifications of inequalities based on mainstream economics simultaneously distinguish the set of components more closed and finite with respect to heterodox approaches, which allows us to indicate new types of inequalities that arise from the evolution of the process of economic and social life.

It is difficult to indicate the key factor of inequality changes within countries. The level and changes in inequalities within countries are due to factual factors such as employment, accumulation of physical and human capital, or technological change. The literature provides convincing arguments that state intervention and economic integration in the area of international trade also determine changes in country income distribution. Finally, factors related to the independence of the financial sector in economies gained importance, toward the end of the twentieth century, in explaining the changes in income inequalities within countries. Thus, we may assume that inequalities within countries result from many complex and mutually reinforcing factors and circumstances, as "things happen the way they happen, because many things happen at the same time" (Kolodko, 2011, p. 26).

As it addresses the issues of within-country inequality in terms of concept, perception, types, and driving forces, this study obviously does not exhaust the general debate over inequality in economics. Moreover, the above conclusions open new research areas. In particular, there remains the question about the state of art of research dedicated to other kinds of inequality, such as dynamic inequality or inequality in historical perspective. Moreover, there is a need to overview the theoretical and empirical research dedicated to inequality in terms of not only its driving forces but also economic outcomes. It refers to studies that cover research based on paradigms other than mainstream economics. We expect that confronting the research of various methodological origins will contribute to the debate about the inequality in the context of fairness, justice, and economic efficiency.

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