Is Economic Inequality Really a Problem? A Review of the Arguments

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Review

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Abstract: Increasing economic inequality in recent years has triggered an outpouring of analysis and reflection on the causes and consequences of these changes. Several commentators have argued that inequality does not merit all the attention it has been receiving noting that the focus on inequality can divert attention from the real problem, which is poverty. This article reviews the arguments for and against this position, highlighting the effects of economic inequality on economic growth and efficiency, politics and democracy, individual behaviors that result in poor health outcomes and social disruption, social cohesion, and environmental degradation. Poverty is, of course, a very important social issue but this review of the arguments about inequality shows that economic inequality in itself is also an important social ill that should be addressed.

Keywords: income inequality; wealth inequality; economic growth; democracy; health; social cohesion; environmental degradation

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1. Introduction

Although there is a very long history of concern with economic inequality, interest in this topic has intensified significantly since the Great Recession of 2008–2009. In both popular and academic writing and in public debates, many see increasing inequality in the distribution of income and wealth as an important social problem (see Stiglitz 2013; Piketty 2014; Collins 2016; Milanovic 2016; Sitaraman 2017; Boushey et al. 2017 among many others). While most of those writing about inequality highlight its negative effects, others argue that inequality is really not increasing significantly or, if it is, it is a fair and natural outcome in market economies in which rewards are distributed according to differing contributions to economic output and in which individuals have varying talents and attitudes toward work (Mankiw 2013). These writers often suggest that efforts to counter the rise in inequality will cause significant harm to the workings of capitalist economies that have brought huge material benefits throughout the world (Conard 2016; Watkins and Brook 2016). Still others argue that worries about economic inequality are misplaced seeing poverty as the real problem (Watson 2015; Frankfurt 2015).

This last proposition raises the question of whether there is anything about inequality in itself that is problematic independently of the fact that those at the lower end of the income distribution are always poor, at least by the relevant national standards. Virtually everyone agrees that poverty is a serious social defect that condemns many people to lives that lack not only comfort and basic necessities but dignity and self-respect as well. But when Pope Francis points to economic inequality as “the root of social evil” (O’Leary 2014), is it possible that the iniquity he sees has more to do with poverty than with inequality? Imagine a society in which poverty has been eliminated so that everyone has enough to lead rich and rewarding lives but in which there is still significant economic inequality. No such society has ever existed but if one did, would it be worthwhile to adopt policies there to reduce inequality and if so, why? The purpose of this article is to explore answers to that question. If economic inequality is falling or, at least, not rising, and if it actually has no important effects on perceptions of social justice or the workings of social, political and economic systems, it can be ignored in favor of efforts to reduce poverty as suggested by Watson (2015) and Frankfurt (2015). If inequality is rising and it does affect important social relations, the appropriate policy response would be to attack both poverty and inequality. This makes it important to understand the true impact of economic inequality independently of its relation to poverty. The next section concerns the nature of the inequality that is the subject of this paper and includes background information on the current state of economic inequality. The contention that inequality is not an important social problem is reviewed in the following section after which arguments that inequality is either inherently unjust or that it leads to undesirable social consequences are examined. In the conclusion, the strength of the various arguments is assessed.

2. Some Basic Facts about Inequality

Inequality and poverty are distinct but related concepts. To be poor means that an individual has insufficient resources to be able to function at a socially acceptable level (Sen 1999). National poverty levels are generally measured as the percentage of the population that has income or wealth below a benchmark thought to represent the minimum needed for an individual to flourish. In the United States, poverty thresholds were established in the 1960s on the basis of the cost of a nutritionally adequate but plain food consumption basket. The original thresholds have been adjusted for inflation but are applied equally across the entire country despite great variation in cost of living from one city or state to the next (Stiglitz 2013). The U.S. poverty rate fell from about 22% in the early 1960s to a low of 11% in the mid-1970s after which it has varied between 11% and 15% depending on the state of the economy (Census 2017b). The World Bank has tracked global poverty levels for many years based on an original income threshold of one U.S. dollar a day. More recently, the benchmark for extreme poverty has been adjusted to reflect the purchasing power of national currencies and to take account of inflation with extreme poverty currently defined as an income of less than 1.90 international dollars a day. One of the principal objectives of the United Nations Millennium Development Goals was to reduce by 2015 the incidence of extreme poverty in developing countries by half relative to 1990 when it was 43.4%. This goal was actually achieved by 2008 and the extreme poverty rate in 2013 had fallen further to 12.6% (World Bank 2017). While poverty is an important social problem, it is not the focus of this paper, which is on the effects of economic inequality. Economic inequality measures the position of individuals or groups relative to others in society. In general, it will be the case that the people at the bottom of the income distribution will be both relatively and absolutely poor but one could imagine a society in which absolute poverty had been eliminated even though relative poverty (inequality) was still prevalent.

The inequality that is of interest in this paper has to do with the way in which desirable things, such as income, wealth, prestige, well-being and so on, are distributed across a given population. Economic inequality includes the distribution of both income and wealth and, while these economic variables are of no intrinsic value, they do tend to be positively related to such inherently valuable attributes as good health, longevity, education, and general satisfaction and happiness. This is true of happiness only up to a certain point, however. Skidelsky and Skidelsky (2012) discuss several studies showing that happiness increases with rising income up to a threshold after which continued income increases add nothing to the level of happiness or life satisfaction (see also Deaton 2013 and Payne 2017). On the other hand, it is clear that those with higher incomes tend to have better health, more education and a greater ability to participate in the social and political lives of their communities. While money does not buy everything (Sandel 2012), income distribution can generally serve as a proxy for the distribution of a wide range of desirable things. There is at least one type of inequality, however, that is not well represented by disparities in income and wealth. Therborn (2013) labels this type of inequality "existential," pointing to unequal socio-economic positions as a result of racial, gender, or other types of discrimination based on personal characteristics. This type of inequality seems to transcend inequalities of income or wealth. In the United States, an African-American man will lead a very different life from that of a European-American man even if they are the same age and have the same education, income, wealth, IQ, and health, simply because of the persistent effects of racial discrimination. While the focus of this paper is on inequality in the distribution of income and wealth, it will be necessary to pay some attention to existential (also referred to as "horizontal") inequality as well.

Interest in inequality is not a new phenomenon. In 1753, the Dijon Academy in France organized a competition for the best essay on the question: "What is the origin of inequality among men, and is it authorized by natural law?" (Rousseau 2011). The winning essay was submitted by Jean-Jacques Rousseau who argued that prior to the invention of agriculture and the subsequent creation of property and laws to protect individual property rights, human beings lived in a state of "moral equality" (Rousseau 2011, p. 95). Rousseau observed that there could be physical differences among human beings in the state of nature but believed that moral or political inequality arose only with the creation of the state.

> But from the moment one man needed the help of another, as soon as it was thought to be useful for a single person to have provisions for two, equality disappeared, property was introduced, labor became necessary, and vast forests were changed into smiling fields which had to be watered with the sweat of men, and in which slavery and misery were soon seen to germinate and grow with the crops.... Metallurgy and agriculture were the two arts whose invention produced this great revolution. (Rousseau 2011, p. 76)

Rousseau's response to the original question posed by the Dijon Academy was that the origin of inequality is the development of the political and legal authority induced by these two revolutions. He also argued that inequality cannot be justified by natural law (Rousseau 2011, p. 95).

Contemporary thinkers, such as Therborn (2013, p. 38), agree with Rousseau that inequality is not a natural condition but rather something that is socially constructed. Pringle (2014) detects rising inequality in pre-agrarian societies but other analysts endorse Rousseau's argument that the invention of agriculture led to the creation of states and legal institutions which in turn gave rise to socially-constructed inequality (Boix 2015, Deaton 2013). Boix (2015) shows that even in a Hobbesian state of nature (a war of all against all), it is possible for a stable equilibrium to arise without the creation of a state. But this equilibrium is fragile and can only hold over time if there is a high degree of equality. This matches the archaeological record, which establishes that early hunting and gathering communities, the dominant socio-economic structure for about 95% of human history, were quite egalitarian albeit extremely violent (Pinker 2011). This way of life was disrupted by the invention of agriculture (the Neolithic Revolution), which led to disparities in resource holdings and rising inequality that resulted in more violent conflict. Boix (2015) shows that in some circumstances, people were able to band together to establish republican states with police and armies to control both internal and external violence. In other cases, authoritarian monarchs took on the task of assuring security in return for fealty from their subjects. Morris (2015) claims that human value systems depend on the underlying social organization arguing that hunting and gathering led to egalitarian societies with a lot of violence, while agrarian societies tended to have high inequality with a greater reluctance to resort to violence to settle disputes, and industrialized societies wound up with somewhat greater equality and a decline in the value attached to violent resolution of conflicts.

Following the Neolithic Revolution, the majority of people worked on small farms earning subsistence incomes that were just barely enough to reproduce the population and maintain society. Malthus (Malthus 2004) believed that the tendency for population to grow more rapidly than food supplies meant that average incomes would always be driven down to the subsistence level. His observation matched the historical record prior to the publication of his essay in 1798 quite well. The Industrial Revolution (approximately 1760 to 1840), however, led to extraordinary changes that resulted in an exponential increase in average incomes with the result that almost everyone in high-income countries and a great many in low- and middle-income countries now earn incomes that are much greater than would be required for basic subsistence despite the fact that population today is more than seven times the world population in 1800. Based on data from The Maddison-Project (2013), average real income growth in Malthus's native Britain between 1000 and 1820 was only 0.12% per year compared with 1.28% between 1820 and 2010. While the difference may seem small, it has resulted in an eleven-fold increase in real average incomes in the United Kingdom over the past 200 years compared with a less than three-fold increase over the previous 820 years.

In addition to increases in average incomes, better health, increased longevity and greater food availability, the Industrial Revolution also led to much greater economic inequality as a result of two factors. First, industrialization was geographically concentrated in Western Europe and North America so that the income disparities between those countries and the rest of the world increased dramatically. Second, as the Nineteenth Century unfolded, the concentration of income and wealth in the highly industrialized countries increased giving rise to such historical periods as the Gilded Age (1865 to 1914) in the United States and the Belle Époque (1871 to 1914) in France. Milanovic (2011, 2016) sees global economic inequality as a combination of inequality within countries and inequality between countries. Based on data from the World Bank (2017), the richest ten percent of households in the United States have almost 18 times the income of the poorest ten percent. In Norway, the richest ten percent have a little less than 6 times the income of the poorest ten percent so income disparities in Norway are lower than in the United States. Average income in the United States and Norway (adjusted for inflation and purchasing power) is, respectively, about 34 and 42 times that of Ethiopia, which illustrates the great between-country disparities that characterize the world today (World Bank 2017). Milanovic (2011) reports estimates of the degree of inequality among all the people of the planet that are much higher than in any single country and argues that most of global inequality is explained by the very high disparities between countries. Shin (2014) reports that "the 85 richest people in the world have as much wealth as the 3.5 billion poorest," which suggests that the global wealth distribution is even more concentrated than the global income distribution.

The most commonly used measure of inequality is the Gini coefficient which can take values from zero (perfect equality in which everyone has the same income or wealth) to one (perfect inequality in which one person has everything while everyone else has nothing). Gini coefficients for disposable income after taxes and transfers in high-income countries generally range from about 0.26 (Norway) to 0.41 (United States). South Africa appears to have the most unequal income distribution in the world with an estimated Gini coefficient of 0.64 (World Bank 2017). Another way to measure inequality is to estimate the share of total income or wealth held by the richest percentile (top one percent) or decile (top ten percent) of the population. Piketty (2014), Saez (2017), and Atkinson (2015) use measures such as these to trace the evolution of income and wealth inequality over the Twentieth Century for France, the United Kingdom, the United States, and a few other countries. Their results show that both wealth and income inequality fell during the Twentieth Century but began rising after 1975. Piketty (2014) also finds that about 60% of the total wealth in France, and 70% of the total in the United Kingdom and the United States is owned today by the richest ten percent. These levels are not much different from those recorded during the Gilded Age and Belle Époque.

Some writers suggest that mounting inequality can give rise to forces that subsequently lead to its decline. Sitaraman (2017) suggests that the Progressive Era (1890 to 1920), which contributed to lower inequality in the United States in subsequent years, was triggered by the high income and wealth disparities of the Gilded Age. Milanovic (2016) and Piketty (2014) point to other factors that led to reductions in inequality in the course of the Twentieth Century. Milanovic (2016, p. 56) divides these factors into benign forces such as widespread education, public policies, changes in the age structure of the population and technological change, and malign forces such as wars, epidemics and civil conflicts. In a somewhat more pessimistic assessment, Scheidel (2017) argues that increasing inequality is a fundamental characteristic of civilized societies that is only slowed by wars, revolutions, civil disorder in failed states, and widespread disease outbreaks. Whatever the causal mechanisms, the degree of economic inequality in most high-income countries declined from the very high levels reached at the beginning of the Twentieth Century until about 1975 after which it began to rise once again (Piketty 2014; Milanovic 2016; Stiglitz 2013; Galbraith 2016; Deaton 2013).

Simon Kuznets (Kuznets 1955) laid the foundation for much subsequent research on inequality. Based on the very limited data he was able to find, he concluded that inequality follows a pattern, first rising as average incomes increase along with economic growth and then reaching a peak and beginning to decline as average incomes continue to rise. He referred to this pattern as the "long swing" (Kuznets 1955, p. 18) but it is more commonly known as the "Kuznets curve." The logic of this hypothesis is that as countries industrialize, inequality increases until the country reaches an income level that allows it to establish a social safety net and universal education both of which tend to lower inequality. As more income data became available, however, the evidence tended to disconfirm the Kuznets hypothesis. Milanovic (2016, p. 50) has proposed an alternative representation of the evolution of inequality suggesting that, rather than a single curve in the shape of an inverted "U", there is a sequence of Kuznets curves which he labels "Kuznets waves". He argues that China, where economic inequality has increased substantially since about 1980, is approaching the top of its first Kuznets wave while the United States has completed its first wave and is now climbing a second. Milanovic (2016), Piketty (2014) and other writers on inequality note that the evolution of inequality in relation to economic growth is not mechanistic. Rather, it is driven by events such as wars and social unrest as well as by the specific policies pursued in various countries. The actions of labor unions in the United States during and after the Progressive Era were important in lowering inequality after World War II and their decline beginning in the 1980s has been an important factor in the more recent rise in U.S. inequality. Milanovic (2016) is not entirely confident that the second Kuznets wave currently being traced out in in the United States and other countries will reach a peak and begin to decline as was the case for the first wave. Along with other analysts, he argues that future reductions in economic inequality will only occur if robust policy interventions are initiated to strengthen the bargaining power of workers, raise skill levels, and protect the economic interests of the middle class.

Milanovic (2016) also points out that while inequality is increasing in many high-income countries, there are some low- and middle-income countries, such as China, that appear to be closing the gap in per capita incomes. Capital is scarce in most developing countries and should, therefore, fetch high returns. This should attract foreign investment stimulating economic growth so that these countries begin to catch up with the high-income countries in a process referred to as "convergence." Convergence may also result from the importation of technological innovations developed in other countries. Milanovic (2016) argues that future global inequality will depend on the extent of this convergence and the degree to which within-country inequality increases. Table 1 shows that there has been some convergence in recent years between high-income countries and developing countries in East Asia and the Pacific although most other regions still lag well behind the high-income countries. Most foreign investment is still carried out among high-income countries rather than flowing from rich countries to poor and many technological innovations are still under intellectual-property rights protection limiting their dispersion. Another explanation for the lack of convergence in some regions is that many developing countries do not have effective legal institutions governing contracts, intellectual property, quality standards, and corruption (Acemoglu and Robinson 2012).

Many explanations for the current increases in economic inequality have been offered. Autor (2014), Milanovic (2016), Atkinson (2015) and Deaton (2013) all point to skills-biased technological change as a major cause. Technological innovations in recent years have often led to the replacement of unskilled workers with computerized machines that require highly skilled operators. The result is that demand for skilled workers has increased driving up their wages while the opposite effect occurs for unskilled workers increasing the disparities in labor income. Skills depend on education so wage inequalities may also reflect differences in educational opportunities. Although many believe that globalization and competition from low-wage foreign workers are important factors in the rise in economic inequality, numerous economic analysts consider their effects to be far more ambiguous than is commonly thought (Galbraith 2016; Milanovic 2016). Social changes, such as assortative mating, may also contribute to rising inequality. Assortative mating is the practice of marriage between similar people. It is more likely today for a high-income earner to marry another high-income earner than was the case in the past. The result is that some households have very high income from the two highly paid people while others have to rely on the much lower earnings of one or two low-wage workers (Galbraith 2016). Another social change is the decline of labor unions and the reduction of the bargaining power of workers with low or moderate skills. Stiglitz (2013, 2016) argues that much of the rise in inequality is due to various market imperfections and government policies that reinforce them. In particular, he believes that a major cause of rising inequality is rent-seeking, the practice of using resources not for the production of goods and services but rather to convince policy-makers to introduce economic distortions that benefit special interests at the expense of everyone else. Regressive taxation polices and inadequate social safety nets also contribute to rising inequality and in many countries, racial, ethnic, and gender discrimination may amplify the effects of the other factors (Troutt 2013). Most income gains of the past three decades in the United States appear to have gone to the very rich, many of whom receive very high incomes while middle-class wages have stagnated. Median real income for males in the United States in 2015 was 2.8% below its level in 2001 (Census 2017a). Frank (2017) points to luck as an important factor in the generation of the extremely high incomes currently enjoyed by the rich.

Table 1. Per capita income in low- and middle-income countries (LM), Sub-Saharan Africa (SSA), East Asia and Pacific (EAP), South Asia (SA), and Latin America (LA) as a percentage of per capita income in high-income countries, 1962–2016.

Year	LM	SSA	EAP	SA	LA
1962	8.48	8.87	4.60	5.54	23.91
1965	8.71	8.28	4.13	5.68	23.27
1968	7.36	7.11	3.99	4.26	21.35
1971	7.21	7.29	4.06	3.94	20.69
1974	7.09	7.20	3.72	3.25	21.80
1977	7.22	7.16	3.53	2.88	22.05
1980	6.51	6.66	2.90	2.65	20.77
1983	6.63	6.08	3.18	2.95	19.40
1986	5.72	4.23	3.13	2.62	15.33
1989	4.28	3.49	2.25	2.10	12.00
1992	4.16	2.67	3.77	1.64	13.65
1995	4.11	2.20	2.89	1.54	14.43
1998	4.52	2.16	3.37	1.68	16.46
2001	4.39	1.90	3.81	1.73	14.49
2004	4.62	2.09	4.52	1.87	12.24
2007	6.15	2.71	6.02	2.31	15.48
2010	8.31	3.22	9.48	2.91	19.48
2013	10.40	3.87	13.24	3.35	22.57
2016	10.84	3.67	16.27	3.94	19.38

Source: Author's calculations based on data from World Bank (2017).

3. Arguments that Economic Inequality Is Not a Threat to Social Justice or Economic Stability

While the majority of analysts appear to believe that economic inequality is a significant issue requiring some form of remediation, some disagree. Many of these critics are associated with conservative think tanks such as the Heritage Foundation, the Manhattan Institute, the Cato Institute or the American Enterprise Institute (Furchtgoff-Roth 2014; Mayer 2015; Azerrad and Hederman 2012; Hassett and Mathur 2012). The fact that many of the worries about inequality carry with them implicit criticisms of capitalist economic systems may be one of the reasons conservative writers, who generally favor laissez-faire capitalism, have felt compelled to seek ways to counter arguments about the harmfulness of inequality. Another reason may be the fear that policies to reduce economic inequality may cause significant damage to the economy or to favored groups such as high-income innovators or productive business enterprises. One response to those who see rising inequality as a problem is to deny that there has been any increase in inequality (Winship 2014). To support this claim, the writers often challenge the data used to measure economic inequality arguing that the statistics used by others do not actually measure what they think they do or that statistical analyses showing rising inequality are mistaken (Winship 2014; Armour 2014). Armour (2014) concedes that inequality may be rising but argues that increases in economic inequality are unimportant because everyone is now better off than in the past as a result of robust economic growth. The problem with arguments of this nature is that data on income and earnings show pretty clearly that incomes for the poor and middle class have stagnated over the past forty years in many countries with most of the benefits of economic growth flowing to the top income earners and wealth holders (Stone et al. 2016; Milanovic 2016; Piketty 2014).

Another challenge to the conventional wisdom is the suggestion that consumption expenditures are a better indicator of inequality than income (Hassett and Mathur 2012; Furchtgoff-Roth 2014; Azerrad and Hederman 2012; Wilkinson 2009). The logic of this position is based on the notion of "permanent income", which recognizes that income varies across a lifetime. Younger people with low incomes can borrow to maintain a desired level of consumption, paying off their debts when their incomes increase during the next stage of life. As working adults, these individuals not only pay off debts incurred earlier but begin to save for retirement. When they stop working, they can draw on these savings to maintain their desired level of consumption. In other words, borrowing and saving can smooth out consumption over a lifetime so consumption expenditures are a better indicator of well-being than income. Hassett and Mathur (2012) find that inequality in the consumption of both durable and non-durable goods is less than inequality as measured by income. Meyer and Sullivan (2017) analyze the distribution of consumption expenditures and income in the United States finding that while income inequality has risen over the past 50 years, consumption inequality only appears to have increased for top earners. Overall they find that income inequality has increased more than consumption inequality. Other analysts find that inequalities in income and consumption expenditures in the United States evolved in similar fashions prior to the recession of 2008–2009 but have diverged in later years (Fisher et al. 2013). Brzozowski et al. (2010) attribute lower increases in consumption inequality compared to income inequality in Canada to the effects of the Canadian social safety net. This result suggests that the smoothing of consumption expenditures was due to Canada's welfare policies rather than the use of borrowing and saving as suggested by the permanent-income hypothesis.

In contrast, after making adjustments to data on consumer expenditures to take account of the different types of goods consumed by households with different levels of income, Aguiar and Bils (2015) find that inequality measured by consumption expenditures actually tracks income inequality very closely. Attanasio et al. (2012) also find that measurement errors in the U.S. Consumer Expenditure Survey may account for the apparent lower increases in consumption inequality as compared to income inequality and, after further analysis, conclude that consumption and income inequality have increased by about the same amounts in recent years. In later work Attanasio and Pistaferri (2016) point to further evidence that income and consumption inequality have increased at similar rates in the United States arguing that the increase in income inequality is mirrored by greater inequality in the well-being of American citizens. Note that income is used for three things: consumption, savings and taxes. Studies of income inequality usually are based on measures of disposable income that reflect the effects of government taxes and transfers. As shown by Fesseau and van de Ven (2014), upper-income households in OECD countries have much higher savings than low- or middle-income households. As a result, measuring inequality in consumption expenditures misses an important part of overall inequality. For lower-income households, income may be the same as consumption expenditures while for higher-income households, consumption expenditures are likely to be much less than their income as a result of their savings. In addition, whether borrowing and saving can effectively equalize consumption expenditures depends on how well credit markets function. Piketty (2015) notes that these markets, like other markets involving inter-temporal transfers, such as those for insurance, are plagued with moral-hazard and adverse-selection problems that reduce their effectiveness in resource allocation across time.

A common argument found in the writings of those who oppose efforts to reduce economic inequality is that equality of opportunity is of greater importance than equality of outcomes. Watson (2015) argues that the processes that lead to unequal outcomes may be unjust but the outcomes themselves can be neither fair nor unfair. This perspective is similar to the libertarian position advanced by Nozick (1974) who argues for procedural justice based on just initial acquisition and just exchange. Following Locke (Locke 1993), Nozick (1974, pp. 174–78) suggests that an individual can justly acquire property by "mixing his labor" with an unowned object while leaving enough of the resource to insure that those excluded from its use do not have their situations worsened. Property acquired in this manner can then be exchanged voluntarily through sale, inheritance, gift-giving and so on. As long as the exchanges of justly acquired property are uncoerced, the procedures for arriving at a final distribution are just and that outcome is just no matter how unequal it may be. Watson (2015) suggests that economic inequality can arise from three sources, only one of which (fraud or theft) is malign. Winning the lottery or becoming rich through invention of a new product or procedure may lead to greater economic inequality but inequality caused by these factors is perfectly fair. Wilkinson (2009) echoes this argument suggesting that if inequality stems from malignant activities, the problem is not the resulting inequality but, rather, the malignant activities.

For an unequal distribution of income or wealth to be considered fair, these writers need to identify causal mechanisms that have led to the unequal outcomes and that are not unfair. For Nozick (1974), the causal mechanism is a set of procedures (just acquisition and just exchange) that is deemed to be fair even if the result is great inequality. For others, the solution to problems of inequality is to guarantee equal opportunities (Watson 2015; Mankiw 2013; Azerrad and Hederman 2012). If everyone starts from a position of equality, where individuals end up might be thought to be solely determined by their personal efforts. And if that is the case, individuals can achieve any desired position in the income distribution through variations in their own efforts. Watson (2015), Wilkinson (2009), and Mankiw (2013) do recognize that complete equality of opportunity does not exist in any known society but often seem to feel that there is enough similarity in the opportunities people are afforded for most inequality to result from the actions of individuals themselves rather than from political or institutional biases or large inheritances that result in unequal starting points.

Deaton (2013, pp. 206–7) agrees that working to insure equality of opportunity is an important strategy for achieving social justice and seconds the concern of many more conservative writers that hard-working individuals who make important contributions to their societies not be penalized for their success. He points out, however, that most countries are a long way from assuring equality of opportunity, noting that countries with the greatest degree of inequality are also the countries in which there are significant disparities in opportunities as reflected by the very close correlation between the incomes of fathers and their children. In a study of a large number of countries, Brunori et al. (2013, p. 16) find that " ... an important portion of income inequality observed in the world today cannot be attributed to differences in individual efforts or responsibility". They point to factors such as place of birth, gender, and other personal characteristics over which individuals have little control as the main causes of economic inequality. Ferreira and Pergine (2015) highlight the difficulties in measuring inequality of opportunity pointing to studies of individual countries that show great variation in the observed degree of equality of opportunity. Estimates of inequality of opportunity are many times higher in Brazil and Guatemala, for example, than in countries such as Norway or Sweden (Ferreira and Pergine 2015). Collins (2016) describes the great advantages with which he started life as a result of being born to a wealthy family, advantages that are not available to those born to families of humbler means. Krueger (2012) has found that countries with high levels of economic inequality are often characterized by very low social mobility. Socio-economic status at birth in such countries tends to remain at the same level throughout most individuals' lives. Stiglitz (2016) characterizes equality of opportunity in the United States, a country with high levels of economic inequality, as a "national myth". Putnam (2015, p. 43) argues that social mobility in the United States has "stalled since the 1970s".

Note that the suggestion that equalizing opportunities and then letting the chips fall where they may can lead to an impression that the plight of the poor is their own fault. Fleischacker (2004) suggests that historically, most writers thought that the poor deserved their fate because they are lazy or slow-witted while the rich deserved their good fortune because they are hard-working and creative. Spencer (Spencer 1969) believed that the poor were unfit for survival and argued against public assistance on the grounds that the government should allow the poor to become extinct through Darwinian natural selection. Azerrad and Hederman (2012, p. vi) echo these sentiments, suggesting that one of the factors that threatens the realization of general prosperity in the United States is "...the rise of a slacker culture that disparages hard work and celebrates indolence." In contrast to this perspective, many analysts believe that poverty and inequality result from socio-economic conditions rather than from deficiencies of the poor themselves. Atkinson (2015) argues that inequality is unavoidably generated by social structures and economic institutions so that, as a practical matter, equality of opportunity simply means that individuals all have an equal opportunity to participate in a race that will inevitably result in unacceptable inequalities in the final outcomes. Troutt (2013), Bischoff (2016), and Milanovic (2016) suggest that where a person is born is often the main explanation for that person's subsequent level of prosperity. It has already been noted that the very large citizenship premium received by those born in high-income countries is the main factor in global inequality (Milanovic 2016). Troutt (2013) and Bischoff (2016) point to the way in which policies in the United States have segregated individuals into geographically unequal locations. It is also clear that individuals are born with different genetic endowments that influence their life chances. The circumstances of one's birth play a significant role in how well one fares and the possibilities for evening out these disparities to ensure that everyone has an equal opportunity to succeed appear to be limited.

Even if one believes that opportunities are sufficiently equalized in a given society to leave everyone's fate up to their own efforts, there would still be the problem of luck. Frank (2017) develops a simple simulation model, which shows that with large numbers of contestants, the winner will often be a person who does not have the highest skill level but is simply luckier than the other contestants. "The upshot is that even when luck counts for only a tiny fraction of total performance, the winner of a large contest will seldom be the most skillful contestant but will usually be one of the luckiest" (Frank 2017, p. 156). These results undermine the common merit-based argument against efforts to reduce economic inequality. Students of economics generally begin with analysis of a perfectly competitive economy in which the actions of buyers and sellers cannot affect market prices. In such an economy, it can be shown that firms will maximize profits by hiring inputs, including labor, up to the point at which the last input or worker hired generates additional output that has a value just equal to its cost, in the case of labor, its wage. Overall, profit and utility maximization in competitive markets lead to the most efficient use of resources. For some, it is a simple step from this theoretical result to the conclusion that the fair wage to pay a worker is equal to her "marginal product", that is, the value of the worker's contribution to the firm's revenue. This is the sort of logic that is behind arguments that the very high salaries paid to the top one percent are justified because they are in line with the large economic contributions these individuals make (Mankiw 2013; Becker and Murphy 2007; Conard 2016; Watkins and Brook 2016). An obvious problem with this type of analysis is that most markets are not perfectly competitive and it is not clear that all economic actors are "rational" in the sense that their goal is to maximize profits or utility. In addition, the idea that the Wall Street financiers responsible for the Great Recession of 2008–2009 deserved their multi-million dollar bonuses because of their great contributions to economic prosperity, has not gone unchallenged. Stiglitz (2013) argues that in modern economies, the connection between an individual's wages and her economic contribution is weak concluding that the very high incomes at the top have to do mainly with individual behavior and government policies that actually introduce great inefficiencies into the economy through the practice of rent seeking described earlier.

Watson (2015), Conard (2016), and Watkins and Brook (2016) see danger in the concerns about economic inequality, arguing that efforts to reduce inequality will cause great harm to economic systems that have brought great prosperity to many. Conard (2016) suggests that high salaries for those at the top provide the incentives for talented individuals to obtain useful skills and to take risks that pay off handsomely for the rest of society. Watson (2015) admits that inequalities arising from fraud or destructive rent-seeking are problems but sees other sources of inequality as necessary for economic progress. Watkins and Brook (2016) and Azerrad and Hederman (2012) see much of the discussion of inequality as attacks, often fueled by envy, on the success of those who have been the primary drivers of economic growth and prosperity. According to Mayer (2015, p. 115), "[a] world without wealth and income inequality is in fact a world of universal poverty". From these perspectives, economic inequality is broadly beneficial because it encourages growth and innovation. Thompson and Leight (2011) tested these propositions using state-level data for the United States finding that increases in the share of total income flowing to the top income-earners actually lead to lower incomes for low- and middle-income households contrary to the assertions of Watson (2015), Conard (2016) and Mayer (2015). While these latter writers discount the significance of economic inequality, most of them do recognize that poverty is a serious social ill. Watson (2015), Wilkinson (2009), and Frankfurt (2015) worry that the focus on inequality will distract policy makers from the true problem, which is poverty. For those who feel that economic and social inequalities are unfair, the challenge is to explain how inequality in itself reduces overall well-being independently of the clear negative effects of poverty.

4. Arguments That Inequality in Itself Is a Grave Social Problem

There are basically two broad perspectives that can support contentions that inequality is a serious problem in itself independently of its links to poverty. First, it could be argued that economic inequality violates accepted norms of distributive justice and is, therefore, inherently unjust. Second, one might argue that inequality needs to be reduced because it has negative effects on other important economic and social variables such as economic growth or democratic political systems. In the first case, greater equality is seen as having intrinsic value while in the second, it is seen as being instrumentally valuable.

4.1. The Intrinsic Value of Greater Equality: Distributive Justice

Concerns about economic inequality are tied to questions about the fairness or justice of particular distributions of wealth or income. According to Lamont and Favor (2013, p. 1):

> The economic framework that each society has—its laws, institutions, policies, etc.—results in different distributions of economic benefits and burdens across members of the society. These economic frameworks are the result of human political processes and they constantly change both across societies and within societies over time... Arguments about which frameworks and/or resulting distributions are morally preferable constitute the topic of distributive justice.

In economics, a distinction is often made between positive economics, which has to do with the workings of economic systems, and normative economics, which concerns value judgments about the kinds of economic policies that should be implemented. Lamont and Favor (2013) suggest that normative economics is what philosophers refer to as distributive justice. In either case, the goal is to provide advice to policy-makers on the morality of policies that will inevitably have an impact on how well different individuals or groups will fare. Most of the literature on distributive justice focuses on a particular class of societies, generally relatively affluent liberal democracies, but there is also substantial interest in global distributive justice which is often framed in terms of the obligations of those in high-income countries to those in poorer countries (Rawls 1971; Allingham 2014; Armstrong 2012).

If a group of friends has ordered a pizza to share as they watch a football game, the default division of the pizza would be to cut it into equal parts. In a similar manner, it might be thought that an equal division of income or wealth would be the most fair. Even in the case of friends sharing a pizza, however, strict egalitarianism may not be the best approach. If one person has not eaten all day while the others have, an unequal division in favor of the hungry friend may be preferred. Lamont and Favor (2013) note that when there are several goods to be distributed across a population, the fact that individual preferences may vary means that allocating equal amounts of each of the goods to each individual may be inferior to an unequal distribution that is sensitive to their different preferences. This observation raises the question of precisely what goods or benefits are being distributed. For Rawls (1971, p. 92), a set of "primary goods" including "rights and liberties, opportunities and powers, income and wealth" should be taken as the object of distributive justice. Rawls (1971, pp. 440–46) also attaches great importance to self-respect and dignity as part of his primary goods. Sen (2009) and Nussbaum (2000) argue that the focus of distributive justice should be on the things that individuals are able to do or accomplish rather than on some set of goods. A person with a physical handicap may need more goods to be capable of functioning at a level that is equal to that of others who are not similarly disabled. From this perspective, the goal should be fairness in the distribution of "capabilities" which include not only the ability to be fed and sheltered but also the power to participate in the social and political life of one's community and to enjoy human emotions, self-respect and other aspects of a rich human life. The important point to note here is that equalization of these broader categories of goods, capabilities or benefits may require an unequal distribution of income and wealth.

This conclusion is part of the motivation for Rawls's famous difference principle. Rawls (1971) recognizes that a strictly equal division of primary goods may result in a situation that leaves everyone worse off than they potentially might be based on the resources available to a community. If social arrangements lead to complete equalization of income, for example, many individuals might find it pointless to work hard, take risks and develop the innovations that lead to greater economic growth and prosperity. In this case, even those at the bottom of the income distribution may be better off with their share of a larger pie than they would be with an equal share of a smaller pie. Rawls (1971) argues that delegates to a convention charged with designing a social contract and reasoning behind "a veil of ignorance" that filters out concerns related to each individual's personal attributes, would favor principles of justice that include the following rule: "Social and economic inequalities are to be arranged so that they are both: (a) to the greatest benefit of the least advantaged, consistent with the just savings principle; and (b) attached to offices and positions open to all under conditions of fair equality of opportunity" (p. 302). If one believes that economic inequalities are not to the advantage of the least well-off, a case can be made that they should be reduced. Rawls's difference principle is an example of the "maximin" strategy from decision theory according to which the best option is to aim for the highest in a set of minimum payoffs. In terms of social justice, this principle calls for maximizing "...the minimum opportunities and conditions available within a social system" (Piketty 2015, p. 2).

Many social scientists have drawn on the difference principle to argue for reducing inequality by raising the well-being of the least well-off (Milanovic 2011; Piketty 2014, 2015; Galbraith 2016; Payne 2017; Therborn 2013). The capabilities approach of Sen (2009) and Nussbaum (2000) described earlier provides another foundation for arguments that extreme inequality is inherently wrong (Deaton 2013; Milanovic 2011; Therborn 2013; Molander 2016; Skidelsky and Skidelsky 2012; Sayer 2016). Piketty (2014) notes that these two approaches both focus on the well-being of those who are most vulnerable. Rawls, Sen, and Nussbaum are not the only writers who have developed theoretical accounts about the just distribution of economic goods. A libertarian perspective as developed by Nozick (1974) was described in the preceding section. Dworkin (2013) argues that governments should show equal concern to all citizens while respecting their autonomy, that is, their right to decide for themselves what to do with their initial resource endowments. Equality of opportunity would require that everyone start with equal resource sets but Dworkin adds a provision that they be able not only to manage their own resources but also to manage the risk that something will go wrong by purchasing insurance. From this starting point, people would be expected to accept the consequences of the various choices they have made, thereby, insuring respect for their right to decide for themselves. Roemer (1998) also bases his approach on the idea of equality of opportunity recognizing that there are different views on the point at which opportunities are to be equalized (the "starting gate"). He develops an algorithm that would allow a social planner to determine just what equality of opportunity is presumed to mean given the planner's beliefs about the extent to which individuals should be held accountable for their circumstances. Equality of opportunity also figures prominently in Rawls's difference principle and in the writings of the more conservative analysts described above. Other writers develop approaches based on desert (Feldman 2016) or that highlight the problems inherent in balancing equality with individual liberty (Allingham 2014). Many have reflected on the requirements of distributive justice and it seems clear that consensus has not been achieved on what constitutes the best account or what such an account would entail for practical problems related to income inequality. Nevertheless, the extensive interest in this topic highlights its importance and suggests that popular concerns with economic inequality are not misplaced.

A practical approach to determining whether economic inequality violates social norms about distributive justice would build on the expressed opinions of citizens themselves. Norton and Ariely (2011) surveyed a representative sample of U.S. citizens about their perceptions of wealth inequality and their preferences with respect to the desirable degree of such inequality. They found that the respondents believed that the richest 20% of the population holds about 59% of the total wealth when the true figure at the time of the study was 84%. Moreover, the respondents felt that even their estimate of the level of inequality was too high, seeing 32% as the appropriate share for the top quintile. When given a hypothetical choice between the U.S. wealth distribution and a more equal distribution similar to that of Sweden, 92% favored the more equal arrangement (Norton and Ariely 2011, p. 10). In a multi-country study, Osberg and Smeeding (2006) noted that individuals substantially underestimate the degree of inequality in worker compensation and that, across their sample of countries, strong majorities favored more equality in the distribution of wages. Compared to other countries, they concluded that there is greater tolerance for inequality in the United States and that attitudes there are more polarized (Osberg and Smeeding 2006). This result is consistent with survey results on attitudes toward inequality in the United States showing that a majority (65%) believes that the economic system is unfair but that conservatives are less likely to agree with that conclusion than those on the political left (Fingerhut 2016). Newport (2015) reports survey results showing that the proportion of Americans who feel that income and wealth distributions are unfair has remained at or above 60% since 1984. Finally, Hayes (2011) determined that a majority of U.S. citizens support efforts to reduce inequality with the strength of individual support varying predictably in relation to ideological perspectives and economic class.

Similar results have been obtained in global surveys of attitudes toward economic inequality. Wike (2014) reports results of a survey of global business, academic and political leaders in 2015 who saw rising inequality as a significant problem. He also noted that majorities in forty-four countries included in a Pew Research Center survey believe inequality to be an important issue (Wike 2014). In a study of four U.S. regions and some 43 countries, Kerr (2011) found, with some qualifications, that growth in inequality leads to increased support for government programs aimed at redistributing income and wealth. Neither the analyses based on theories of distributive justice nor the results of public opinion surveys offer guidance on the optimum level of inequality. Instead they generally support the idea that economic inequality should be minimized and that, as an empirical matter, current levels of inequality around the world are excessive. It appears that few writers on inequality advocate for complete equality in the distribution of economic goods and the same may be true for public opinion. None of the opinion surveys I was able to locate asked specifically if respondents favored an egalitarian distribution and the sense that seems to emerge from these surveys is that fairly strong majorities believe the economic system is somewhat unfair and that government interventions aimed at reducing current levels of inequality should be pursued without aiming for complete equality. On the other hand, Sen (2009) argues that all theories of distributive justice call for "equality of something—something that is regarded as particularly important in that theory" (p. 291). He suggests that these demands for equality can be interpreted as a requirement that there be impartiality or non-discrimination in the way people are treated. Because Sen sees the world as including a plurality of desirable states, he specifically rejects the idea that individual capabilities should be equalized: "Significant as it is, equality of capability does not necessarily trump all other weighty considerations (including significant aspects of equality), with which it might be in conflict" (Sen 2009, p. 295). His overall conclusion, however, recognizes that equality in some sense is central to theories of justice even if it does not always override other elements of freedom. It seems safe to conclude, at the very least, that many would agree that high levels of economic inequality do, in fact, violate widely accepted norms of distributive justice and that current inequality levels are morally problematic.

4.2. The Instrumental Value of Reducing Inequality

There are at least four domains that might be adversely affected by high and rising levels of economic inequality: economic growth and prosperity, political systems and democracy, individual behaviors and health, and social and environmental conditions. If the effect of inequality in these areas is negative, there would be instrumental value in reducing it regardless of one's beliefs about the inherent moral value of greater equality.

4.2.1. The Economic Effects of Inequality

Economic inequality may affect economic growth and the efficient use of resources such as labor and capital. Conard (2016, p. 11) argues that countries with high levels of inequality experience greater economic growth. If true, this would suggest that efforts to lower economic inequality are costly because they reduce growth and prosperity. By definition, economic growth is equal to population growth plus growth in per capita output (Peterson 2017; Piketty 2014). Real (inflation-adjusted) average annual values for per capita GDP growth and GDP growth for selected countries are shown in Table 2 along with average population growth rates. The Gini coefficients for the five countries show that Norway, France and Korea have relatively more equal income distributions (after taxes and transfers) than Mexico and the United States. Norway, the country with the lowest Gini coefficient, has consistently registered real economic growth that is higher than that of the United States and Mexico. Korea, another relatively egalitarian country, has had even better economic performance compared to Mexico and the United States over the past one hundred years. Note that Norway and France have lower population growth rates than Mexico and the United States and this affects overall economic growth. Over the period 1960 to 2015, average annual French economic growth was 2.75% compared to 3.04% for the United States.

But the U.S. growth rate was only higher because of faster population growth: 1.03% compared to 0.65% in France. In fact, annual real per capita GDP growth in France (2.10%) over the period 1960 to 2015 was slightly higher than that of the United States (2.01%). Per capita economic growth reflects productivity increases and is a better indicator of rising economic prosperity than GDP growth, which is heavily influenced by changes in population. For the longer period of 1913 to 2010, all three more egalitarian countries realized higher real per capita economic growth than the United States or Mexico. While there is significant variation in economic performance among countries and over time, the statistics reported in Table 2 do not support the argument that greater inequality leads to higher economic growth. This result does not change if a larger sample of countries or geographic regions and different time periods are examined (see Peterson 2017). Galbraith (2016, p. 125) notes that among high-income countries, it has been "...the most egalitarian that have become the wealthiest of all, thanks to high levels of investment and productivity growth".

Table 2. Average Annual Real GDP Growth, Population Growth and Real Per Capita GDP Growth in Selected Countries over Various Periods of Time (percent) and recent Gini Coefficients.

Country. Period	Real GDP Growth	Population Growth	Real Per Capita GDP Growth	Gini Coefficient, Most Recent Year *
Norway, 1913–2010	3.22	0.71	2.51	0.253
France, 1913–2010	2.34	0.47	1.87	0.306
Korea, 1913–2010	5.51	1.59	3.92	0.302
Mexico, 1913–2010	3.67	2.13	1.54	0.457
United States, 1913–2010	2.99	1.19	1.80	0.401
Norway, 1960–2015	3.13	0.67	2.46	
France, 1960–2015	2.75	0.65	2.10	
Korea, 1960–2015	6.96	1.28	5.68	
Mexico, 1960–2015	3.90	2.18	1.72	
United States, 1960–2015	3.04	1.03	2.01	
Norway, 1990–2015	2.44	0.85	1.59	
France, 1990–2015	1.48	0.53	0.95	
Korea, 1990–2015	4.84	0.66	4.18	
Mexico, 1990–2015	2.68	1.58	1.10	
United States, 1990–2015	2.38	0.98	1.40	

Source: (Peterson 2017). * After taxes and transfers, OECD (www.oecd.org/social/income-distribution-database.htm).

Stiglitz (2013) argues not only that greater inequality does not enhance economic growth but that it actually has the opposite effect. He notes that rising inequality means that greater shares of economic output flow to the wealthy who are less likely to spend their income on consumption thereby reducing aggregate demand. This might not be a problem if the economy is over-heated but in periods of slow growth, lowered consumption is likely to result in higher unemployment. Overall, Stiglitz (2013) argues that greater inequality leads to economic instability and lower output than would be possible given a country's resources. Inequality may also adversely affect the economy through the inefficiencies introduced by politicians responding to their high-income constituents who lobby for reduced regulations, lower public investment in scientific research and infrastructure, and economic distortions that benefit them at the expense of everyone else (Stiglitz 2013). These inefficiencies mean that productive resources are being wasted so that less output is obtained than would be possible if there were no such distortions. In a statistical analysis of the relationship between economic growth and inequality in countries belonging to the Organization of Economic Cooperation and Development (OECD), Cingano (2014) finds that greater income inequality leads to lower economic growth noting that efforts to reduce inequality will not only advance social justice but may also contribute to increased economic prosperity. One way inequality might slow economic growth is through its impact on the behavior of economic agents. Ku and Salmon (2009) set up an experiment to test whether workers in unequal settings become discouraged and reduce their work efforts. They find strong support for this "discouragement effect" and argue that such behavioral changes affect not only the individuals themselves but also the broader economy which grows more slowly.

Economic growth is affected by many factors, of course, and it may be that inequality plays only a small role in its evolution. Some studies find that causal relationships between growth and inequality are unclear. Bernstein (2013) highlights the difficulties in finding empirical evidence to support theories showing adverse impacts of inequality on growth noting that confounding factors such as the credit bubble that led to the Great Recession of 2008–2009 obscure the causal relationships. On the other hand, he points to potential ties between inequality and the credit bubble itself that may lend additional weight to conclusions that there is a negative relationship between rising inequality and economic growth. Brückner and Lederman (2015) argue that greater inequality in low-income countries enhances economic growth through its effects on investment while the reverse is true for high-income countries. The effects of inequality on economic growth may operate indirectly through other avenues such as changes in individual behavior or public policies making it difficult to tease out the causal relationships. While the evidence may be somewhat ambiguous, it does appear that rising inequality can have adverse effects on economic growth at least in some circumstances. Moreover, there appears to be very little concrete evidence to support the idea that efforts to reduce inequality slow economic growth as suggested by Conard (2016), Watson (2015), and others.

4.2.2. Inequality, Politics, and Democracy

An example of how inequality may indirectly affect economic performance is the practice of rent seeking as described by Stiglitz (2013). Income and wealth give rise to political power making it much easier for wealthy individuals to influence public policies in favor of their own interests (Domhoff 2017). These distortions reduce efficiency and slow economic growth to the detriment of those with lower incomes. In addition, they lead to self-reinforcing cycles in which the exercise of power associated with great wealth and income leads to policy distortions that further increase the wealth and income of the rich who then have an even greater ability to induce policy distortions that support their interests (Milanovic 2016, p. 190). In a careful statistical analysis, Gilens (2012) shows that the U.S. political establishment is much more responsive to wealthy individuals than to those at lower levels in the income distribution. He notes that U.S. politicians do respond to their constituents but the policies that are eventually enacted are generally much more closely aligned with the preferences of the affluent than those of individuals of more modest means. In a series of experiments, Butler (2014) shows that the perceptions of U.S. politicians that drive their policy decisions reflect their own attitudes and preferences which turn out to be similar to those of their wealthy constituents because most elected officials in national offices are wealthy themselves. Page et al. (2013) studied the political perspectives of extremely wealthy Americans finding that they participate actively in politics and hold views that are much more conservative than the general public. They suggest that the influence of these wealthy individuals may explain why many public policies in the United States differ significantly from the preferences of the majority of U.S. citizens.

Government capture by wealthy elites is not limited to the United States, of course. The authors of an Oxfam Briefing Paper note that economic inequality is increasing in most countries around the world bringing with it government policies that advance the interests of the rich (Oxfam 2014). They reported polling results showing that majorities in Spain, Brazil, India, South Africa, the United Kingdom, and the United States believe that the legal and regulatory systems in their countries have been crafted for the benefit of the rich. Based on data from a panel of 100 countries, Krieger and Meierrieks (2016) found statistically significant negative impacts of inequality on measures of economic freedom stemming from the ability of elites to transform their economic power into political power which is then used to advance their social and economic interests. These results held for both democratic and non-democratic countries suggesting that democracy may not be able to overcome the influence of wealthy minorities. Deaton (2017) notes that while the social safety-nets in high-income countries do appear to lower inequality to some extent, rent seeking often offsets these effects and, in low-income countries, governments generally seem to favor policies that actually increase inequality.

If public policies are set by wealthy politicians responding to the constituents who are rich enough to make sizable campaign contributions or otherwise influence government officials, the political system may come to be seen as undemocratic (Noah 2013). Thompson (2012) traces the evolution of American thought on economic inequality from colonial times to the present, emphasizing that from the beginning, U.S. intellectuals associated substantial equality with robust democratic institutions. He fears that the decline of this intellectual tradition is a threat to the survival of democracy in the United States. Sitaraman (2017) expands on this theme arguing that republics have generally implemented one of two types of constitutions. The first, which he labels the "class warfare constitution", is based on the assumption that societies are inherently unequal so that the best way to structure the rules of the game is to give the different socio-economic classes more or less equal power to prevent one group from dominating others. In contrast, when the U.S. constitution was written, there was much greater equality among those who were able to vote than was the case in Europe or other parts of the world. This fact meant that the U.S. founders were able to design a constitution that did not include income requirements for political offices and that relied on checks and balances among the three branches of government to control the exercise of power. The assumption behind this constitution was that the economic equality prevalent at the time it was written would continue to be the norm (Sitaraman 2017, pp. 3–4). It is important to note, of course, that this equality only existed among males of European origin as women, African slaves and Native Americans were all excluded. Sitaraman (2017) calls the U.S. constitution a "middle class constitution" that works best when there is a large and prosperous middle class made up of individuals with fairly equal economic positions. He believes that the current rise of inequality in the United States presents a real challenge to the continued effectiveness of its constitution.

Milanovic (2016) points out that the middle classes in countries other than the United States are also in decline although the experience in the United States appears to be somewhat more dramatic. He argues that the rich in European and North American countries have benefitted the most from rapid globalization since the end of the Second World War and can be expected to work to maintain open economies even if democratic majorities have strong reservations about their effects. He notes that U.S. democracy has already been significantly diminished through the effects of very long electoral campaigns driven by enormous monetary contributions from the rich, gerrymandering of political districts, and, in presidential elections, the small-state bias of the Electoral College. A vote cast for a presidential candidate in Wyoming, for example, is equivalent to 3.88 votes cast in California. Of the three individuals who have held the office of U.S. president since 2000, two were initially chosen by the Electoral College despite the fact that they had lost the popular vote. Milanovic (2016) argues that the United States is developing into a plutocracy in which the rich control both the economy and the political system. He contrasts this situation with Western Europe, seen as more democratic than the United States and, therefore, more responsive to popular preferences. There, he argues, the conflict between globalization and democracy is likely to be resolved in favor of democratic movements promoting nativism and populism. He concludes: "To put it in an extreme form, plutocracy tries to maintain globalization while sacrificing key elements of democracy; populism tries to preserve a simulacrum of democracy while reducing exposure to globalization" (Milanovic 2016, p. 211). This passage was written prior to the United Kingdom vote to exit the EU and the 2016 U.S. presidential election but the predictions seem to be pretty consistent with actual events.

4.2.3. Behavioral Changes and Health Disparities

Rising inequality may influence individual behavior and such behavioral changes are likely to have an impact on a wide variety of socio-economic variables. As noted earlier, Ku and Salmon (2009) found that inequality can give rise to a "discouragement effect" that causes workers to reduce their efforts to the detriment of economic growth. Piketty (2014) fears that rising inequality will result in the revival of the kind of "patrimonial capitalism" that was prominent in the 19th and early 20th centuries. He uses a story from Honoré de Balzac's 1835 novel, *Le Père Goriot*, as illustration. In the novel, a scoundrel named Vautrin advises an ambitious young man named Eugène de Rastignac that he could never amass as great a fortune pursuing a career in law or medicine as he could marrying the daughter of a wealthy family. For Piketty (2014), this type of calculation is socially disadvantageous because it will result in less innovation and hard work as talented individuals set off in pursuit of inherited wealth rather than the construction of a socially-beneficial career. Payne (2017) argues that human beings develop understandings of their place in society through comparisons with others. Those feeling they have low status behave differently than those who see themselves as higher in the status hierarchy. In particular, Payne suggests that those at the top of the income distribution often come to believe that they deserve their good fortune because they are more worthy than everyone else while those at the bottom, seeing little prospect for the kind of lives led by the rich and famous, often adopt behaviors described as "live fast, die young" (Payne 2017, pp. 66–72).

In the 1960s, Oscar Lewis introduced the concept of a "culture of poverty" to describe behavioral patterns common among the poor in Mexico, Puerto Rico, and New York that were useful in their local settings but which hindered their ability to adapt to the wider society (Lewis 1966). The idea of a culture of poverty has been somewhat discredited as it seems to blame the poor themselves for their situation. As noted earlier, most social scientists see structural factors and institutions as the causes of poverty rather than deficiencies of the poor. Some recent research, however, does appear to support the notion that people in poverty and at the lower end of the income distribution often adopt coping strategies that seem to be effective for their daily lives but prevent transition to higher levels of income and status. As an example of such "live fast, die young" strategies, Payne (2017) cites studies showing that low-income women often have children at younger ages than the more affluent. He notes that behavior of this nature may make sense if one's life expectancy is low: if the likelihood of dying at a relatively young age is high, it is better to reproduce as soon as possible to insure that one does not die before having a child. Huang et al. (2010) found that the HIV/AIDS pandemic in Southern Africa lowered life expectancies and led to a decrease in educational attainments as the potential payoff from investments in human capital was reduced by the increased prospects of earlier death. Payne would probably not disagree that some prosperous individuals may also adopt a "live fast, die young" strategy. The tragic early deaths of numerous rock music stars do not seem to fit his profiles although it is possible that these individuals began their lives in stressful circumstances that may have influenced later behavior. Payne (2017) points out that individuals of low status, whether they are absolutely poor or not, experience greater stress which can have serious negative effects on their health as well as on social cohesion: "Inequality divides us, cleaving us into camps not only of income but also of ideology and race, eroding our trust in one another. It generates stress and makes us all less healthy and less happy" (Payne 2017, p. 4).

The research reported by Payne (2017) offers an answer to the question posed at the beginning of this essay: is there anything about inequality in itself that is bad independently of the clear negative effects of poverty? As an example of particular negative effects resulting from inequality, Payne (2017) points to the problem of air rage. There are two ways to load passengers onto commercial jets. The first is for passengers to enter at the front just behind the flight deck and then walk through the first and/or business class seats on their way to the cramped and uncomfortable economy section. The second is for passengers to enter at the side of the plane behind the first and business class seats moving directly to the economy class seating. Payne (2017) reports that incidents of air rage are far more common on flights on which the economy passengers were reminded of their inferior status by being forced to witness the opulence of the privileged few in first and business classes than on those on which they bypassed the front of the plane. The behavioral problems on these flights do not stem from poverty as virtually no-one traveling on jet airplanes is poor. In cases such as this, the problems arise entirely from the feelings and behavior engendered by economic inequality. Payne (2017) recognizes that poverty may be a more significant problem than inequality in low-income countries but he argues that in high-income countries, poverty is always relative so that inequality is as significant a social problem as poverty.

It is important to note that the behaviors developed in response to inequality have both individual and social repercussions. Air rage affects everyone on the airplane as well as the individuals directly involved and everyone shares in the social costs of behaviors that result in shortened lives or earlier pregnancies. The interaction of environmental factors that may lead to stress and individual decisions aimed at coping with difficult circumstances is complex and it can be difficult to disentangle the causes of particular social outcomes. Pryor (2012) investigates the link between inequality and individual values and attitudes that might affect behavior finding that inequality does influence values related to religion and family but the relation of these values to particular behavioral patterns remains unclear. The relationship between inequality and health disparities, on the other hand, does seem to reflect the influence of risky behavior that may be brought about by the stress of everyday life for those with low status as well as by bad decisions voluntarily made by individuals. Case and Deaton (2015) have documented a surprising reversal of a long-term decline in death rates for Caucasian Americans between the ages of 45 and 54. Mortality rates among other groups in the United States and among people in Canada and Western Europe have continued to fall. The main causes of this reversal appear to be related to changes in behavior that include increased alcohol and drug abuse, suicides, and diseases related to unhealthy food and beverage consumption. Case and Deaton (2015) note that the greatest mortality increases have been for those without education beyond a high-school degree who have been particularly hard hit by the Great Recession of 2008–2009.

Deaton (2013) and Floud et al. (2011) document the extraordinary progress made in raising life expectancies and improving health over the past 200 years. Life expectancy at birth in England in the early 1800s was about 40 years compared with around 80 today. Overall, there is a positive correlation between health improvements and rising incomes but within these general movements there are significant differences in health outcomes between individuals at opposite ends of the income distribution (Deaton 2013). Wilkinson and Pickett (2009) and Graham (2007) argue that inequality has negative effects on both mental and physical health. In an investigation of empirical links between health outcomes and inequality, Leigh et al. (2009) note that the direction of causality is uncertain: poor health could cause greater inequality, greater inequality could lead to poor health, or both outcomes could be simultaneously determined. In contrast to the work of Wilkinson and Pickett (2009) and other social epidemiologists, they find little evidence that there is a significant relationship between health outcomes and inequality but argue that further research on this issue is needed. While there is a strong correlation between health disparities and economic inequality, the precise causal mechanisms are more difficult to discern (Underwood 2014). It is clear, however, that inequality leads to behaviors that can have negative social and individual impacts on health and many other facets of human life.

4.2.4. Inequality and Social and Environmental Ills

Wilkinson and Pickett (2009) document correlations between inequality and a wide range of social ills including crime, murder rates, teenage pregnancy, family conflict, obesity, poor health, and social mobility. Although they recognize that correlation is not the same as causality, their conclusions seem to blur this distinction. When Leigh et al. (2009) looked more deeply at the correlation between poor health outcomes and inequality, they were unable to find strong evidence of causality and the same is likely to be true for correlations between inequality and crime or teenage pregnancy rates. Nevertheless, even if it cannot be shown that economic inequality is the prime causal factor behind these problems, there is clearly a strong association and it is likely that it is a contributing factor. Other scholars have investigated the link between inequality and particular sets of problems and much of this work does support the idea that inequality contributes to social and environmental problems. The research reported by Payne (2017) focuses on the effect of inequality on various behaviors some of which do, in fact, lead to crime, violence and conflict. Troutt (2013) argues that inequality is at the root of discrimination in U.S. housing markets and unequal support for public education that have the effect of cutting off avenues out of poverty and economic inequality. He argues that those who are relatively affluent worry that mixing with those at the lower end of the income distribution will threaten their property values and diminish the quality of their schools. Residential sorting in the United States, often driven by racial discrimination, has resulted in enormous spatial inequality. Because public schools are financed primarily from local property taxes, school quality varies with the wealth of the neighborhood in which the school is located. Troutt (2013, p. 216) agrees with other scholars who see U.S. educational and housing policies as tightly connected and driven by a reverence for local control with the result that schools and neighborhoods remain segregated by both economic class and race.

There are two ways environmental concerns are linked to economic inequality. First, greater inequality leads to more environmental degradation because high-income individuals often benefit from polluting activities and have the political power to shield these activities from government regulation (Boyce 2017; Stiglitz 2013; Sayer 2016). Downey (2015) argues that organizations and institutions controlled by high-income elites are the primary causes of current environmental crises ranging from declines in biodiversity and soil fertility to growing global pollution. Baek and Gweisah (2013) find that a more equal distribution of income in the United States would lead to improved environmental quality. The second way that environmental degradation is tied to inequality is through its impacts on people with limited means. Andersson and Agrawal (2011) find that rising inequality has a negative impact on the protection of common property resources such as forests in Asia, Africa, and Latin America as a result of the actions of low-income families. Those at the bottom of the income distribution may find that they have little choice but to move into environmentally fragile areas where their activities can lead to environmental damage. Hsiang et al. (2017) show that the effects of climate change are worse in parts of the United States where incomes are lowest. The environmental justice movement has drawn particular attention to the fact that ethnic and racial minorities in the United States often live and work in locations afflicted by pollution and toxic waste (Skelton and Miller 2016). In both low- and high-income countries the effects of such phenomena as air and water pollution and climate change fall most heavily on the least well off. As noted in The Economist (2017):

> The rich are disproportionate contributors to the carbon emissions that power climate change. It is cruel and perverse, therefore, that the costs of warming should be disproportionately borne by the poor. And it is both insult and injury that the wealthy are more mobile in the face of climate-induced hardship, and more effective at limiting the mobility of others. The strains this injustice places on the social fabric might well lead to woes more damaging than rising temperatures themselves. (p. 66)

5. Conclusions

The literature on economic inequality is vast and growing by the day. While this survey is based on a substantial sample of that literature, there are undoubtedly many valuable studies and analyses that have not been included. Moreover, the discussion focuses on just one aspect of the debates, whether inequality in itself represents a social ill that is distinct from the problem of poverty. Important issues such as the causes of rising economic inequality around the world or potential policy responses to this problem have been touched on only lightly or not at all. I have tried to select a representative sample of the works on inequality that speak to the question posed at the outset. I believe that these works do represent the best of current thinking about this topic and that they provide a strong foundation for the conclusion that inequality is, in fact, a social ill that is separate from the equally important problem of poverty. Economic inequality has increased substantially in recent years and is widely considered to be excessive. In addition to violating norms of distributive justice in most societies, it undermines democracy, causes widespread stress and illness, erodes social cohesion and trust, contributes to environmental degradation, and slows economic growth. Reducing current levels of economic inequality would thus have both intrinsic and instrumental value.

This does not mean, however, that all the arguments on the other side of the issue are invalid. Most people would probably not challenge Watson (2015) claim that we should not begrudge individuals who have made great contributions to human well-being or who have won the lottery, the wealth and prestige that ensues. Large rewards for those who have accomplished great things would seem to be generally acceptable although some may question whether they really need to be quite so substantial. At the same time, however, it would clearly be incorrect to conclude that all those at the top of the income distribution have made beneficial social contributions that justify their incomes and wealth. Beyond those who have acquired their riches dishonestly, others may have benefitted from large inheritances without doing anything for the greater good or earned very large incomes in industries that may not actually serve a useful purpose. Watson (2015) includes a table showing the proportions of people in the top one percent of taxpayers in the United States working in various professions in 2005. Business executives and financial professionals made up about a third of this group with lawyers and medical professionals accounting for another 22%. Surprisingly, less than two percent were cinema, television, or sports stars. While many in the top one percent are undoubtedly worthy, it is not clear that financial experts who cash in on other people's investment decisions by taking advantage of tiny differences in the time it takes to complete transactions originating at some distance from the main trading computers are making stock markets more efficient or simply enriching themselves without adding anything of value (Bowley 2011). It would not be easy to determine which individuals in the top one percent have actually contributed to the general good and whether the rewards they have received are actually justified. But a broad argument that all rich people deserve their good fortunes because of their great contributions is difficult to sustain.

Many of those who oppose efforts to reduce economic inequality emphasize equality of opportunity while dismissing concern about the inequality of outcomes. Some political philosophers include equality of opportunity as an important objective but generally do not believe that unequal outcomes would be acceptable even if equality of opportunity were insured. In any case, most would agree that opportunities are not equal so if both sides of the debate can agree that working to insure greater equality of opportunity is a worthy objective, there may be room for useful collaboration. A further argument supporting priority for poverty reduction over working to lower inequality has been based on the differences between high- and low-income countries. Payne (2017) suggests that poverty may be a more pressing problem than inequality in developing countries, and Brückner and Lederman (2015) believe that inequality in these countries will actually enhance economic growth because the rich save more than people of more modest means with the result that there are more resources for investment. Some development economists held this position in the 1960s and 1970s but currently, most specialists in economic development reject the idea that there is a trade-off between reducing inequality and economic growth (Kindleberger and Herrick 1977). Todarao and Smith (2012) argue that income inequality in developing countries leads to inefficient resource use that slows economic growth, social instability, and affronts to common perceptions of fairness.

In the end, policy initiatives focusing on either poverty reduction or inequality need not be mutually exclusive. Policies designed to raise the incomes of the poor contribute to both poverty and inequality reduction. Such policies include higher minimum wages, public support for early childhood education and enhanced educational opportunities at all levels, infrastructure development, income support for those who are disabled or otherwise disadvantaged, re-training for people who have lost jobs to technological change and globalization, and other social programs aimed at the least well-off. Other policies should be aimed at reducing the economic disparities between the rich and poor through progressive taxation, inheritance taxes, regulations and laws to control the negative effects of rent-seeking, and elimination of loopholes in the tax codes that protect the rich. These policies would also generate the resources needed to attack poverty. Taxation systems in high-income countries are generally less progressive than often thought (Piketty 2015) and higher taxes on the wealthy would have very little impact on their well-being while potentially giving them a greater stake in the overall prosperity of their societies. It is important to note that virtually no-one believes complete equality in the distribution of income and wealth is a desirable state of affairs. There is no clear agreement that an optimal level of inequality would be achieved at some given value for the Gini coefficient but there does appear to be widespread agreement that a value of zero would be unsuitable as well as impossible to achieve. The evidence from the Twentieth Century, however, shows that there can be great general prosperity with lower economic inequality than at present so that, given the clear distress caused by rising inequality, lowering it appears to be a worthy aspiration.

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References

Acemoglu, Daron, and James Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Business, Random House.

Aguiar, Mark, and Mark Bils. 2015. Has Consumption Inequality Mirrored Income Inequality? *American Economic Review* 105: 2725–56. [CrossRef]

Allingham, Michael. 2014. *Distributive Justice*. New York: Routledge.

Andersson, Krister, and Arun Agrawal. 2011. Inequalities, Institutions, and Forest Commons. *Global Environmental Change* 21: 866–75. [CrossRef]

Armour, Philip. 2014. How the Top's Share of Income Changes with Comprehensive Measurements. In *Income Inequality in America: Fact and Fiction*. Edited by Diana Furchtgott-Roth. New York: Manhattan Institute.

Armstrong, Chris. 2012. *Global Distributive Justice: An Introduction*. Cambridge: Cambridge University Press.

Atkinson, Anthony B. 2015. *Inequality: What Can Be Done?* Cambridge: Harvard University Press.

Attanasio, Orazio, and Luigi Pistaferri. 2016. Consumption Inequality. *Journal of Economic Perspectives* 30: 1–27. [CrossRef]

Attanasio, Orazio, Erik Hurst, and Luigi Pistaferri. 2012. The Evolution of Income, Consumption, and Leisure Inequality in the US, 1980–2010. Working Paper 17982, National Bureau of Economic Research, Cambridge, MA, USA.

Autor, David H. 2014. Skills, Education, and the Rise of Earnings Inequality among the 'Other 99%'. *Science* 344: 843–51. [CrossRef] [PubMed]

Azerrad, David, and Rea S. Hederman. 2012. *Defending the Dream: Why Income Inequality Doesn't Threaten Opportunity*. Washington: Heritage Foundation.

Baek, Jungho, and Guankerwon Gweisah. 2013. Does Income Inequality Harm the Environment? Empirical Evidence from the United States. *Energy Policy* 62: 1434–37. [CrossRef]

Becker, Gary S., and Kevin M. Murphy. 2007. The Upside of Income Inequality. *The American (Journal of the American Enterprise Institute)* 1: 20.

Bernstein, Jared. 2013. *The Impact of Inequality on Growth*. Washington: Center for American Progress. Available online: https://www.americanprogress.org/wp-content/uploads/2013/12/BerensteinInequality.pdf (accessed on 28 August 2017).

Bischoff, Kendra. 2016. Geography of Economic Inequality. In *Delivering Equitable Growth: Strategies for the Next Administration*. Washington: Washington Center for Equitable Growth.

Boix, Carles. 2015. *Political Order and Inequality: Their Foundations and Their Consequences for Human Welfare*. New York: Cambridge University Press.

Boushey, Heather, Bradford DeLong, and M. Steinbaum. 2017. *After Piketty: The Agenda for Economics and Inequality*. Cambridge: Harvard University Press.

Bowley, Graham. 2011. New Speed of Money, Reshaping Markets. *New York Times*. Available online: http://www.nytimes.com/2011/01/02/business/02speed.html?pagewanted=all (accessed on 12 October 2017).

Boyce, James K. 2017. *Inequality and the Environment*. Medford: Tufts University, Available online: https://www.peri.umass.edu/images/BoyceInequality_and_the_Environment_-_Leontief_lecture.pdf (accessed on 5 October 2017).

Brückner, Markus, and Daniel Lederman. 2015. *Effects of Income Inequality on Aggregate Output*. Washington: World Bank.

Brunori, Paol, Francisco Ferreira, and Vitro Peragine. 2013. *Inequality of Opportunity, Income Inequality and Economic Mobility: Some International Comparisons*. Bonn: Institute for the Study of Labor (IZA).

Brzozowski, Matthew, Martin Gervais, Paul Klein, and Michio Suzuki. 2010. Consumption, Income, and Wealth Inequality in Canada. *Review of Economic Dynamics* 13: 52–75. [CrossRef]

Butler, Daniel M. 2014. *Representing the Advantaged: How Politicians Reinforce Inequality*. New York: Cambridge University Press.

Case, Anne, and Angus Deaton. 2015. Rising Morbidity and Mortality in Midlife among White Non-Hispanic Americans in the 21st Century. *Proceedings of the National Academy of Sciences of the United States of America* 112: 15078–83. [CrossRef] [PubMed]

Census. 2017a. Table p-36. Full-Time, Year-Round All Workers by Median Income and Sex: 1955 to 2015. In *Historical Income Tables: People*; Suitland: U.S. Bureau of the Census. Available online: https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-people.html (accessed on 18 August 2017).

Census. 2017b. Table 2. Poverty Status of People by Family Relationships, Race, and Hispanic Origin: 1959–2016. In *Historical Poverty Tables: People and Families—1959–2016*; Suitland: U.S. Bureau of the Census.

Available online: https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html (accessed on 17 November 2017).

Cingano, Federico. 2014. *Trends in Income Inequality and its Impact on Economic Growth*. Paris: OECD Publishing.

Collins, Chuck. 2016. *Born on Third Base*. West River Junction: Chelsea Green Publishing.

Conard, Edward. 2016. *The Upside of Inequality: How Good Intentions Undermine the Middle Class*. New York: Penguin Random House.

Deaton, Angus. 2013. *The Great Escape: Health, Wealth and the Origins of Inequality*. Princeton: Princeton University Press.

Deaton, Angus. 2017. Without Governments, Would Countries have More Inequality, or Less? *The Economist*. Available online: https://www.economist.com/news/world-if/21724910-angus-deaton-nobel-prize-winning-economist-explores-question-intrigued-him-without (accessed on 18 August 2017).

Domhoff, G. William. 2017. Wealth, income, and Power. Who Rules America? Available online: http://www2.ucsc.edu/whorulesamerica/power/wealth.html (accessed on 12 September 2017).

Downey, Liam. 2015. *Inequality, Democracy, and the Environment*. New York: NYU Press.

Dworkin, Ronald. 2013. *Justice for Hedgehogs*. Cambridge: The Belknap Press of Harvard University Press.

Feldman, Fred. 2016. *Distributive Justice: Getting What We Deserve from Our Country*. New York: Oxford University Press.

Ferreira, Francisco, and Vito Pergine. 2015. *Equality of Opportunity: Theory and Evidence*. Bonn: Institute for the Study of Labor (IZA).

Fesseau, Maryse, and Peter van de Ven. 2014. *Measuring Inequity in Income and Consumption in a National Accounts Framework*. OECD Statistics Brief No. 19. Paris: Organization for Economic Cooperation and Development.

Fingerhut, Hannah. 2016. *Most Americans Say U.S. Economic System is Unfair, but High-Income Republicans Disagree*. Washington: Pew Research Center. Available online: http://www.pewresearch.org/fact-tank/2016/02/10/most-americans-say-u-s-economic-system-is-unfair-but-high-income-republicans-disagree/ (accessed on 22 August 2017).

Fisher, Jonathan D., David S. Johnson, and Timothy Smeeding. 2013. Measuring Trends in Inequality of Individuals and Families: Income and Consumption. *American Economic Review* 103: 184–88. [CrossRef]

Fleischacker, Samuel. 2004. *A Short History of Distributive Justice*. Cambridge: Harvard University Press.

Floud, Robert, Robert W. Fogel, Bernard Harris, and Sok Chul Hong. 2011. *The Changing Body: Health, Nutrition, and Human Development in the Western World since 1700*. New York: Cambridge University Press.

Frank, Robert H. 2017. *Success and Luck: Good Fortune and the Myth of Meritocracy*. Princeton: Princeton University Press.

Frankfurt, Harry G. 2015. *On Inequality*. Princeton: Princeton University Press.

Furchtgoff-Roth, Diana. 2014. How Changing Demographics affect Inequality. In *Income Inequality in America: Fact and Fiction*. Edited by Diana Furchtgott-Roth. New York: Manhattan Institute.

Galbraith, James K. 2016. *Inequality: What Everyone Needs to Know*. New York: Oxford University Press.

Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton: Princeton University Press.

Graham, Hilary. 2007. *Unequal Lives: Health and Socioeconomic Inequalities*. Berkshire: Open University Press.

Hassett, Kevin A., and Aparna Mathur. 2012. A New Measure of Consumption Inequality. In *AEI Economic Studies*. Washington: American Enterprise Institute.

Hayes, Thomas J. 2011. *American Attitudes toward Economic Inequality*. Riverside: University of California. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1961432 (accessed on 12 September 2017).

Hsiang, Solomon, Robert Kopp, Amir Jina, James Riing, Michael Delgado, Shashank Mohan, Robert Muir-Wood, Paul Wilson, Michael Oppenheimer, Kate Larson, and et al. 2017. Estimating Economic Damage from Climate Change in the United States. *Science* 356: 1362–69. [CrossRef] [PubMed]

Huang, Rui, Lilyan Fulginiti, and E. Wesley Peterson. 2010. Health and Growth: Causality through Education. *China Agricultural Economic Review* 2: 321–44. [CrossRef]

Kerr, William R. 2011. Income Inequality and Social Preferences for Redistribution and Compensation Differentials. Working Paper 17701, National Bureau of Economic Research, Cambridge, MA, USA.

Kindleberger, Charles, and Bruce Herrick. 1977. *Economic Development*, 3rd ed. New York: McGraw-Hill Book Company.

Krieger, Tim, and Daniel Meierrieks. 2016. Political Capitalism: The Interaction between Income Inequality, Economic Freedom and Democracy. *European Journal of Political Economy* 45: 115–32. [CrossRef]

Krueger, Alan B. 2012. *The Rise and Consequences of Inequality in the United States*. Washington: Center for American Progress.

Ku, Hyejin, and Timothy C. Salmon. 2009. The Incentive Effects of Inequality: An Experimental Investigation. *Southern Economic Journal* 79: 46–70. [CrossRef]

Kuznets, Simon. 1955. Economic Growth and Income Inequality. *American Economic Review* XLV: 1–28.

Lamont, Julian, and Christi Favor. 2013. Distributive Justice. In *Stanford Encyclopedia of Philosophy*. Available online: https://plato.stanford.edu/entries/justice-distributive/ (accessed on 15 August 2017).

Leigh, Andrew, Christopher Jencks, and Timothy Smeeding. 2009. Health and Economic Inequality. In *The Oxford Handbook of Economic Inequality*. Edited by Wiemer Salverda, Brian Nolan and Timothy Smeeding. New York: Oxford University Press.

Lewis, Oscar. 1966. *La Vida: A Puerto Rican Family in the Culture of Poverty—San Juan and New York*. New York: Vintage Books.

Locke, John. 1993. *Two Treatises of Government*. New York: Everyman Paperback, First published 1689.

Malthus, Thomas R. 2004. *An Essay on the Principle of Population*. New York: Oxford University Press. First published 1798.

Mankiw, N. Gregory. 2013. Defending the One Percent. *Journal of Economic Perspectives* 27: 21–34. [CrossRef]

Mayer, Thomas H. 2015. Income Inequality: Piketty and the Neo-Marxist Revival. *Cato Journal* 35: 95–116.

Meyer, Bruce D., and Kames X. Sullivan. 2017. Consumption and Income Inequality in the U.S. Since the 1960s. Working Paper No. 2017-12, Becker Friedman Institute, University of Chicago, Chicago, IL, USA.

Milanovic, Branko. 2011. *The Haves and the Have-Nots: A Brief and Idiosyncratic History of Global Inequality*. New York: Basic Books.

Milanovic, Branko. 2016. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge: Harvard University Press.

Molander, Per. 2016. *The Anatomy of Inequality*. Brooklyn: Melville House Publishing.

Morris, Ian. 2015. *Foragers, Farmers, and Fossil Fuels: How Human Values Evolve*. Princeton: Princeton University Press.

Newport, Frank. 2015. Americans Continue to Say U.S. Wealth Distribution is Unfair. Available online: http://news.gallup.com/poll/182987/americans-continue-say-wealth-distribution-unfair.aspx (accessed on 10 August 2017).

Noah, Timothy. 2013. *The Great Divergence: America's Growing Inequality Crisis and What We Can do about It*. New York: Bloomsbury Press.

Norton, Michael I., and Dan Ariely. 2011. Building a Better America—One Wealth Quintile at a Time. *Perspectives on Psychological Science* 6: 9–12. [CrossRef] [PubMed]

Nozick, Robert. 1974. *Anarchy, Sate and Utopia*. New York: Basic Books, Inc.

Nussbaum, Martha C. 2000. *Women and Human Development: The Capabilities Approach*. New York: Cambridge University Press.

O'Leary, Naomi. 2014. Pope Francis 'Evangelii Gaudium' Calls for Renewal of Roman Catholic Church, Attacks 'Idolatry of Money'. *Huffington Post*. Available online: http://www.huffingtonpost.com/2013/11/26/pope-francis-evangelii-gaudium_n_4342964.html (accessed on 12 October 2017).

Osberg, Lars, and Timothy Smeeding. 2006. 'Fair' Inequality? Attitudes toward Pay Differentials: The United States in Comparative Perspective. *American Sociological Review* 71: 450–73. [CrossRef]

Oxfam. 2014. Working for the Few: Political Capture and Economic Inequality. Oxford Briefing Paper 178. Available online: https://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequality-200114-summ-en.pdf (accessed on 5 October 2017).

Page, Benjamin I., Larry M. Bartels, and Jason Seawright. 2013. Democracy and the Policy Preferences of Wealthy Americans. *Perspectives on Politics* 11: 51–73. [CrossRef]

Payne, Keith. 2017. *The Broken Ladder: How Inequality Affects the Way We Think, Live, and Die*. New York: Viking Press.

Peterson, E. Wesley F. 2017. The Role of Population in Economic Growth. SAGE Open October-December: 1–15. Available online: http://journals.sagepub.com/doi/pdf/10.1177/2158244017736094 (accessed on 1 December 2017).

Piketty, Thomas. 2014. *Capital in the 21st Century*. Cambridge: The Belknap Press of Harvard University Press.

Piketty, Thomas. 2015. *The Economics of Inequality*. Cambridge: The Belknap Press of Harvard University Press.

Pinker, Steven. 2011. *The Better Angels of Our Nature: Why Violence Has Declined*. New York: Penguin Books.

Pringle, Heather. 2014. The Ancient Roots of the 1%. *Science* 348: 822–25. [CrossRef] [PubMed]

Pryor, Frederic L. 2012. The Impact of Income Inequality on Values and Attitudes. *The Journal of Socio-Economics* 41: 615–22. [CrossRef]

Putnam, Robert D. 2015. *Our Kids: The American Dream in Crisis*. New York: Simon and Schuster.
Rawls, John. 1971. *A Theory of Justice*. Cambridge: The Belknap Press of Harvard University Press.
Roemer, John E. 1998. *Equality of Opportunity*. Cambridge: Harvard University Press.
Rousseau, Jean-Jacques. 2011. *Discourse on the Origin and Foundations of Inequality among Men*. Helena Rosenblatt, trans. and ed. New York: St. Martin's, First published 1753.
Saez, Emmanuel. 2017. Taxing the Rich More: Preliminary Evidence from the 2013 Tax Increase. *Tax Policy and the Economy* 31: 71–120. [CrossRef]
Sandel, Michael. 2012. *What Money Can't Buy: The Moral Limits of Markets*. New York: Farrar, Strauss and Giroux.
Sayer, Andrew. 2016. *Why We Can't Afford the Rich*. Chicago: The Policy Press and University of Chicago Press.
Scheidel, Walter. 2017. *The Great Leveler: Violence and the History of Inequality from the Stone Age to the Twenty-First Century*. Princeton: Princeton University Press.
Sen, Amartya K. 1999. *Development as Freedom*. New York: Alfred A. Knopf.
Sen, Amartya K. 2009. *The Idea of Justice*. Cambridge: The Belknap Press of Harvard University Press.
Shin, Laura. 2014. The 85 Richest People in the World Have as Much Wealth as the 3.5 Billion Poorest. *Forbes*. January 23. Available online: https://www.forbes.com/sites/laurashin/2014/01/23/the-85-richest-people-in-the-world-have-as-much-wealth-as-the-3-5-billion-poorest/#6f5224d91753 (accessed on 17 August 2017).
Sitaraman, Ganesh. 2017. *The Crisis of the Middle-Class Constitution: Why Economic Inequality Threatens Our Republic*. New York: Alfred A. Knopf.
Skelton, Renee, and Vernice Miller. 2016. *The Environmental Justice Movement*. New York: Natural Resources Defense Council (NRDC). Available online: https://www.nrdc.org/stories/environmental-justice-movement (accessed on 12 October 2017).
Skidelsky, Robert, and Edward Skidelsky. 2012. *How Much Is Enough? Money and the Good Life*. New York: Other Press.
Spencer, Herbert. 1969. *Social Statics*. New York: Augustus M. Kelley. First published 1851.
Stiglitz, Joseph E. 2013. *The Price of Inequality: How Today's Divided Society Endangers our Future*. New York: W. W. Norton and Company.
Stiglitz, Joseph E. 2016. *The Great Divide: Unequal Societies and What We Can Do About Them*. New York: W. W. Norton & Company.
Stone, Chad, Danilo Trisi, Arloc Sherman, and Emily Horton. 2016. A Guide to Statistics on Historical Trends in Income Inequality. In *Policy Futures*. Washington: Center on Budget and Policy Priorities.
The Economist. 2017. Climate Change and Inequality. Available online: https://www.economist.com/news/finance-and-economics/21725009-rich-pollute-poor-suffer-climate-change-and-inequality (accessed on 27 September 2017).
The Maddison-Project. 2013. Maddison Project Database. Groningen Growth and Development Center 2013 version. Available online: http://www.ggdc.net/maddison/maddison-project/home.htm (accessed on 8 June 2017).
Therborn, Goran. 2013. *The Killing Fields of Inequality*. Malden: Polity Press.
Thompson, Michael J. 2012. *The Politics of Inequality: A Political History of the Idea of Economic Inequality in America*. New York: Columbia University Press.
Thompson, Jeffrey, and Elias Leight. 2011. Searching for the Supposed Benefits of Higher Inequality: Impacts of Rising Top Shares on Standard of Living of Low and Middle-Income Families. Working Paper 258, Political Economy Research Institute, University of Massachusetts-Amherst, Amherst, MA, USA.
Todarao, Michael, and Stephen Smith. 2012. *Economic Development*, 11th ed. New York: Addison-Wesley.
Troutt, David D. 2013. *The Price of Paradise: The Costs of Inequality and a Vision for a More Equitable America*. New York: New York University Press.
Underwood, Emily. 2014. Can Disparities Be Deadly? Controversial Research Explores Whether Living in an Unequal Society Can Make People Sick. *Science* 344: 829–31. [CrossRef] [PubMed]
Watkins, Don, and Yaron Brook. 2016. *Equal is Unfair: America's Misguided Fight against Income Inequality*. New York: St. Martin's Press.
Watson, William. 2015. *The Inequality Trap: Fighting Capitalism Instead of Poverty*. Toronto: University of Toronto Press.
Wike, Richard. 2014. *With 41% of Global Wealth in the Hands of Less than 1%, Elites and Citizens Agree Inequality is a Top Priority*. Washington: Pew Research Center. Available

online: http://www.pewresearch.org/fact-tank/2014/11/08/with-41-of-global-wealth-in-the-hands-of-less-than-1-elites-and-citizens-agree-inequality-is-a-top-priority/ (accessed on 27 September 2017).
Wilkinson, Will. 2009. Thinking Clearly about Economic Inequality. In *Policy Analysis*. Washington: Cato Institute.
Wilkinson, Richard, and Kate Pickett. 2009. *The Spirit Level: Why Greater Equality Makes Stronger Societies*. New York: Bloomsbury Press.
Winship, Scott. 2014. Should we Care about Income Inequality? In *Income Inequality in America: Fact and Fiction*. Edited by Diana Furchtgott-Roth. New York: Manhattan Institute.
World Bank. 2017. World Development Indicators Databank. Available online: http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators (accessed on 16 October 2017).