Inequality
First, Do No Harm

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Vincent Geloso and Steven Horwitz

One aspect of the debate surrounding inequality is how problematic inequality really is. Inequality per se is presumably not a problem; rather, inequality is bad because of the problems critics claim it produces. For example, numerous authors (e.g., Ostry, Berg, and Tsangarides 2014) claim that inequality negatively affects economic growth, a claim disputed by others (e.g., Winship 2013). Some scholars argue that inequality has negative externalities that degrade social capital and health indicators (e.g., Wilkinson and Pickett 2009). Here, too, this claim is disputed by other authors (most notably Kahneman and Deaton 2010).

Whatever the merits of the various positions, the participants in this debate have not made important distinctions among how individuals perceive different forms of inequality. For example, we might be more concerned about forms of inequality that prevent people from satisfying their preferences and less concerned about forms of inequality that result from people actually satisfying those preferences. Although some philosophers (e.g., Tomasi 2012) and economists (e.g., Welch 1999) have attempted to make such distinctions, we hope to decompose inequalities more carefully into those that are socially beneficial (or at least neutral) and those that are socially harmful, especially to the least well-off.

Socially beneficial inequalities (what we call "good" inequalities) result from the satisfaction of individual economic preferences or demographic changes and have no perverse impact on economic growth. We argue that using policy to attempt to reduce

Vincent Geloso is a research associate at the Free Market Institute at Texas Tech University and obtained his Ph.D. in economic history from the London School of Economics. **Steven Horwitz** is the Schnatter Distinguished Professor of Free Enterprise at Ball State University.

such inequalities would produce a great deal of positive harm because they are desirable unintended consequences of economic progress that also improve the well-being of the least well-off or are neutral changes resulting from changes in family size, demography, and marriage patterns. Because the results of these inequalities are either good or neutral, and because they are unintended consequences of individual choice, they should at least get a prima facie assumption of not being policy relevant. By contrast, what we call "socially harmful" or "bad" inequalities are problematic because they result from limiting individual choice in ways that expand inequality by limiting overall growth and harming the least well-off. In this way, our criteria of social desirability are broadly Rawlsian (Rawls 1971) in that one key concern is whether inequalities benefit the least well-off. Our argument also parallels that of Tomasi (2012) and other recent literature arguing that inequalities created in largely free markets should be held to the Rawlsian difference principle and that they can meet that test.
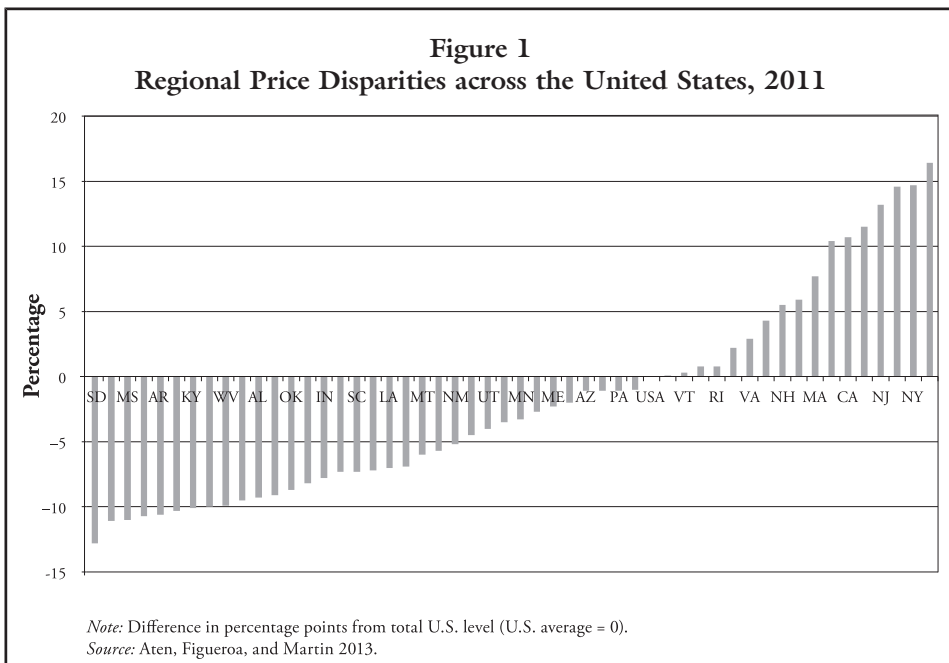
We start our analysis by reviewing the extent of the rise in inequality since the 1970s and argue that although inequality has increased, various problems with mea-surement indicate that the extent of the growth in inequality is overestimated. If overall inequality is actually less than believed, we should be even more hesitant to adopt costly policies that are claimed to reduce inequality. Next we point out that a substantial share of the increase of inequality is explained by "good" inequalities. Then we explore the "bad" inequalities and how they result from government interventions that push down the lower end of the income distribution while pulling up the higher end. Although there are inequalities of birth or family upbringing, we argue that they are much costlier to combat than inequalities resulting from misguided government intervention and thus are far less policy relevant. Rather than combatting inequality per se, we should be looking to address the sources of inequality that generate undesirable unintended consequences. More specifically, we should focus on inequality growth that results from limiting the options of the least well-off and thereby hampering their ability to move up the income ladder. That is, inequality policy should first attempt to do no harm by removing policies that exacerbate inequality by harming the poor and not by penalizing rising inequality that contributes to economic growth and improves the condition of the least well-off.

Measuring Inequality

Indicators of inequality generally show a consistent upward trend starting in the 1970s (Galbraith 2012; Piketty 2014). The increase seems consistent across the Western countries, even though inequalities worldwide have been decreasing (Sala-i-Martin 2006). The Organization for Economic Cooperation and Development (OECD) reported that inequality (measured by the Gini coefficient for after-tax income) in-creased by 24 percent from 1980 to 2008 in the United States (2011, 24). In fact, the same report shows that, with a few minor exceptions, inequality in all OECD countries has increased since the mid-1980s (23).

Yet those claims are plagued with measurement problems with regards to *(a)* the price indices used to deflate real incomes and *(b)* the measurement of income. The problem of prices is probably larger because it involves issues across both time and space such that we *overestimate* inflation and fail to account for regional price disparities. Let us start with the latter. Our point here, we must emphasize, is not to review the entire literature and arrive at a conclusion about the "actual level" of inequality. Rather, our contention is merely that the increase in inequality has been more modest than generally believed.

Economic theory suggests that incomes tend to equalize in real terms across regions as factors of production move around. Part of this equalization will occur in noninflation-adjusted wages, but another part will occur through price changes. For example, a greater population moving into New York City from Iowa to take advantage of higher urban wages will increase land prices in New York, and lowered demand in Iowa will reduce land prices there. The result will be a convergence of real wages. That said, one has to be very careful with regional price indices because of endogeneity issues between incomes and baskets of measured prices, including the way income determines the basket of goods demanded by consumers and thereby determines the basket that government agencies construct to measure the cost of living. However, it is still relevant to see how important price disparities are across the United States (see figure 1), as one can see with prices in New York being 15 percent higher than the national price level and prices in South Dakota being close to 13 percent lower than the national price level.

Figure 1
Regional Price Disparities across the United States, 2011

Note: Difference in percentage points from total U.S. level (U.S. average = 0).
Source: Aten, Figueroa, and Martin 2013.

There are huge gaps between metropolitan and nonmetropolitan areas *within* states. For example, a report from the Bureau of Economic Analysis using data from 2006 indicated that prices in metropolitan areas of New York and California stood at 35.9 percent and 29.8 percent higher than the national price level, whereas prices in nonmetropolitan areas in those same states stood at 20.8 percent and 9 percent lower than the national price level (Aten and D'Souza 2008, 67). These gaps tell us that aggregating individuals together might lead to overestimating the inequalities among Americans. This is because deflating wages and incomes from cities such as New York and San Francisco by a national average or even a state average means that we are deflating their income by a lesser measure than we ought to and deflating the income of nonmetropolitan Americans by a larger measure than we ought to. Given that a large share of inequality in the United States is driven by a few key areas (Galbraith 2012, 144) where prices are well higher than the national average, this point is crucial.

The argument about regional disparities in prices is an argument about the price level, not about price trends. However, there are also problems with how to estimate changes in the cost of living in the United States. Since the 1990s, we have been aware that the Consumer Price Index (CPI) overstates annual inflation by roughly 1.1 percentage points (Boskin 2005). Other authors have offered a wide range of other estimates of CPI biases, but all are positive. One bias is a substitution bias, which means that the CPI does not properly capture changes in relative prices that induce households to shift their consumption to different outlets or substitute goods. The other significant biases are ones linked to quality. Increases in prices linked with increases in quality should not be considered an increase in the cost of living, and treating them as such biases the CPI upward. Significant efforts have been made to estimate biases from quality and substitution and their impact on estimates of inequality (Broda and Weinstein 2008a, 2008b; Broda, Leibtag, and Weinstein 2009). According to this work, the use of the CPI for all urban consumers indicates no real wage growth for workers at the tenth percentile from 1979 to 2005, whereas a correction for the substitution bias shows growth of 13 percent in the same period.

Such biases mean that we likely underestimate the level of real income and wage growth at the bottom of the income distribution. Christian Broda and David Weinstein found such a problem in the case of the United States whereby corrections to the prices actually paid by both rich and poor reduce the ratio of the income of the ninetieth percentile to income of the tenth percentile from 4.49 to 4.26 (for 2006) (2008b, 45). This amounts to roughly 5 percent less inequality. Bruce Meyer and James Sullivan (2013b) have also found that corrections for the biases within the CPI imply that we are underestimating the true level of real income growth at the bottom of the income distribution. We are therefore also likely overestimating both the level and the trend in inequality.

There are also problems with the measurement of income per se. Although prices are the denominators of real incomes, the numerator is subject to disagreement over

definitions. One part of the disagreement stems from which source to use. Thomas Piketty and Emmanuel Saez (2003) believe that using the tax unit better incorporates the top incomes of the distribution. However, Richard Burkhauser, Jeff Larrimore, and Kosali Simon (2012) point out that there is a difference between households and tax units and that the latter tends to underestimate actual incomes. It is well known that household expenditures are not linearly related to the number of individuals in each household. If one household's size increases from two members to four members, this doubling will not result in a doubling of expenditures due to economies of scale. If the size of the average household were not changing over time and all households were relatively similar, the doubling's lack of effect on expenditures would not be a concern. However, household size has grown increasingly heterogeneous. One can correct for such a problem while using tax units only under the assumption that tax units and households overlap, but this is not the case.

If one uses the size-adjusted tax units to measure income growth prior to taxes and transfers from 1979 to 2007, one finds a 14.5 percent increase for the middle class. However, if one switches to size-adjusted households rather than tax units, the increase grows to 20.6 percent. Moreover, Burkhauser, Larrimore, and Simon (2012) point out that once one accounts for transfers, a harder task with the tax units, one finds that the household-size-adjusted income after taxes and transfers of the bottom quintile increased by 15 percent from 1979 to 2007. This increase is less than the increase for the top quintile but more than the tax units data suggest. In fact, in the period from 1989 to 2000 the use of household-size-adjusted income after taxes and transfers suggests a decline in inequality. Although there are relative merits to the two types of units (see notably Jenkins and van Kerm 2009), the shift made by Burkhauser, Larrimore, and Simon suggests that it is likely that the overall trend in income inequality is both lower in absolute amount and increasing at a slower pace than commonly portrayed.

An additional problem with income measurements is probably as large as the issue with the selection of households—namely, how we can best account for nonmonetary compensation. As Martin Feldstein (2008) notes, wages are a declining share of total compensation. One reason for this trend is that the tax treatment given to health premiums provided by U.S. employers tends to encourage more remuneration in the form of health benefits, at least on the margin. Although one can (and should) question whether individuals would prefer the health benefits provided by employers to the equivalent monetary sum, it would be incorrect to discard the value of health insurance completely from remuneration. Once one adjusts for such a value, one finds that inequality not only is at a much lower level but has also increased more slowly than seen by looking at wage data only. This result is found in numerous studies (e.g., Burkhauser and Simon 2010; Burtless and Svaton 2010; Meyer and Sullivan 2010, 2011, 2013a; Burkhauser, Larrimore, and Simon 2012; Bricker et al. 2015).

In addition, we should ask whether income is the only or the best measure of inequality. Consumption is believed to be a more stable measure of well-being and hence a better measure of inequality. Individuals tend to smooth their consumption

over time even though their incomes are more volatile, so consumption inequality will be lower than income inequality. The data collected by Meyer and Sullivan (2010, 2011, 2013a, 2013b) show that consumption inequality is less than income inequality and has increased much more slowly. Krishna Pendakur (1998) found this same result in Canada, and Matthew Brzozowski and his colleagues (2010) later confirmed it with updated data.

This point is important because we have seen an appreciable increase in the share of the bottom quintile of the population that owns refrigerators, computers, cellphones, automobiles, microwaves, dishwashers, modems, cable TV, and air conditioning. This increase is well documented for the United States (see Eberstadt 2008; Horwitz 2015) and for Canada (see Sarlo 2009). This trend is also indicative of a decline in inequality of well-being especially because many of these goods would initially have been present only in richer households, and data from the past decade or two show a continued decline in the gap in ownership rates between the rich and poor. Orazio Attanasio and Luigi Pistaferri's (2016) recent survey of the literature emphasizes the importance of accounting for the role of utility as well as for increasing hours of leisure in accurately assessing the effects of consumption inequality.

One should be careful with these numbers. The corrections needed are important and complex, but precisely determining overestimation of inequality remains difficult. However, we will rest on the more modest claim that inequality has indeed increased since the 1970s but at a slower pace than the standard narrative suggests.

The Decomposition of Inequality: "Good" Inequality

Our decomposition begins by examining what we call "good" inequality. By this, we mean increases in inequality that derive from demographic changes, the value of the services provided by innovators, and structural changes to the economy. We see the effects of inequality resulting from these causes as either neutral or good.

Demographic changes are probably the easiest to understand. For example, it is fully possible that inequality in the society as a whole increases even while the inequality between different groups does not change. For such a case, consider the role of immigration. An increase of immigration that adds a greater proportion of unskilled laborers to the economy might generate an increase in inequality if it increases the quantity of "poorer" individuals. In Canada, once you exclude recent immigrants from censuses between 1981 and 1996, inequality increased at a slower rate (Moore and Pacey 2003). In the United States, 5 percent of the rise in inequality was explained by immigration (Card 2009). If immigration allows those moving into a country to improve their lifetime prospects and incomes while also enriching the host economy by increasing output and (in some instances) productivity (Peri 2012), it is hard to see this increase in inequality as socially problematic because it is emblematic of upward social mobility and generalized enrichment. The increase in income to the immigrant also represents a decline in global inequality. For these

reasons, we see any increase in domestic inequality created by such processes as being part of the larger desirable process of economic growth and therefore not policy relevant.

Another desirable cause of inequality comes from the aging of the population. Thomas Lemieux best summarizes this approach. What we call "residual wage inequality," or inequality within groups of workers who have the same education and experience, "is generally believed to account for most of the growth in overall wage inequality" (2006, 461). This being the case, Lemieux points out that there are always unobserved skills when we estimate the determination of individual wages. If the dispersion of these unobserved variables were even across age groups, then the issue would be moot. However, Lemieux indicates that unobserved skills are more likely to be found among older and more educated workers. Hence, a composition effect is concentrated in one group. Moreover, this measurement error may be growing over time as the relative size of the group that is being mismeasured increases. Lemieux argues, as a consequence, that population aging explains roughly 75 percent of the increase in inequality. Recent research by Ingvild Almås and Magne Mogstad (2016) confirms that a substantial share of the increase in economic inequality might simply be the result of population aging and has little to do with unequal gains. It is not clear why this source of rising inequality is problematic, especially if we think longer, healthier lives are a social good. We also label inequality resulting from this demographic change as "good" and question its policy relevance.

Another cause of measured inequality that is not problematic is innovation. Inventors who bring new goods to the market that allow them to amass large fortunes have not made anyone, except their competitors, worse off. These inventors have provided the market with goods and services that are more valuable to consumers than the price. The general public does not see the innovations by Bill Gates and Steve Jobs, for example, as socially destructive. In fact, it may even be argued that these innovations tend to flatten inequalities of well-being. If we were to ask smartphone users how much it would take for them to give up their connectivity, it is quite likely that the price they ask would be many magnitudes greater than the monthly rate they pay for the service. This response is reflective of William Nordhaus's point that only about 2.2 percent of the total surplus from innovation is captured by the innovators (2004, 33). The rest of the utility is shared among the greater public, such that the utility from this innovation acts as an equalizer in well-being that is not reflected in differences in incomes. If so, this increase in measured income inequality is also socially desirable, and we can label it as "good" and be skeptical of its policy relevance other than in the sense that we might like to see more of it.

The idea that differences in income might not be reflective of differences in well-being is harder to understand than the impact of demographic changes. However, it is more important. The proposition behind this point is simple: the monetary amount we earn (in real terms) is an inferior good for numerous individuals. More precisely, there is a point where the additional income earned provides less and less satisfaction to

individuals, and that point is becoming more and more heterogeneous across the population. At low levels of development, when physical survival is an issue, preferences are relatively homogeneous: individuals will roughly want the same things as others in their group because obtaining the utility of meeting basic needs is interpersonally equal. However, once basic needs are met, individuals will start to have objectives that may not be well measured with dollar signs. Some individuals might work very few hours a week and prefer to enjoy leisure at many times the wage rate they would have been offered to sacrifice their leisure. Other individuals might be more financially ambitious and attribute a much lower value to their leisure. It would be hard to qualify this form of inequality as problematic because the two groups of individuals find higher utility in their choices than the monetary signs attached to the income earned would suggest.

By definition, rich societies will tend to be more unequal on an income basis because wealth provides such a range of choices that individuals will find it easier to increase their well-being in ways that income does not fully capture. As long as some individuals will be more financially ambitious than others and value their leisure less than others, income inequality will rise, but this does not imply any undesirable increase in inequality because the measured rise in income inequality cannot be equated with an increase in inequality of utility or well-being. In fact, there is evidence of such a divorce between income and well-being. Although income inequality has increased in the United States, inequality of "happiness" has actually declined (Stevenson and Wolfers 2008). A similar decline in the inequality of happiness has also been observed across ethnic groups (Stevenson and Wolfers 2013). Another relevant observation is that performance pay also allows workers to self-select according to their preferences over work and leisure. Thanks to the accelerating trend toward performance pay, workers who are more financially ambitious (and hence attribute a lower value to leisure) have tended to head to areas where their ambitions can be more easily met (Lemieux, MacLeod, and Parent 2009). Individuals being able to better select the manner in which they want to maximize their well-being is not a bad form of income inequality.

The Decomposition of Inequality: "Bad" Inequality

It takes considerable effort to identify the inequalities caused by innate factors, and it also takes considerable effort to correct such inequalities. Some would then argue that it is necessary to provide some public services such as education or health care to offset innate differences. There remains much debate over whether such policies would be helpful. However, the benefits of addressing these innate inequalities might be considerable. They may also be high-hanging fruit in the sense that the initial costs are high and the fruit tend to take a long time to fully grow. And this possibility assumes that the policy will be implemented as planned, which public-choice theory gives us reason to doubt.

By contrast, a government policy that first does no harm may allow us to pursue more effective low-hanging policy fruit. That is, we must ask: Are existing policies

exacerbating inequality in ways that are problematic, and if so, what would be the consequences of eliminating these policies? At the very least, we might agree that government should not make inequality worse, especially because such existing policies might exacerbate innate inequalities. Numerous government policies act to limit upward mobility and increase inequality and should be carefully assessed. Some of them push poor individuals down (through agricultural tariffs, zoning laws, the war on drugs), whereas others pull up the richest individuals (through bank bailouts, subsidies, regulated industry access).

Policies that would push the poorest down are those that distort prices in ways that disproportionately burden the poor. A prime example of this type of policy is agricultural tariffs. The bulk of trade distortions caused by governmental duties and regulations in international trade are concentrated in the agricultural sector. The result is that prices are higher than they would be if trade were liberalized, and the poorest are hurt disproportionately by those higher prices because of the large share of their expenditures that goes to food. Kym Anderson, John Cockburn, and Will Martin (2011) conclude that if international agricultural trade were liberalized, the number of poor individuals worldwide would drop by 3 percent, thereby reducing the global level of inequality. Although that study is concerned with the world economy, Kristian Niemietz in Great Britain points out that the Common Agricultural Policy of the European Union hiked prices by roughly 25 percent (2012, 17).

Niemietz also considers the impact of zoning laws that restrained the housing supply in Britain, resulting in a housing price increase of 40 percent. This increase is also a greater burden for poorer households. Christian Hilber and Wouter Vermeulen (2016) found that for England housing prices would have been 25 percent to 30 percent lower even in areas outside London. Combining the effect of zoning restrictions and agricultural tariffs and comparing them with Niemietz's figures for household expenditures in Britain suggest that liberalization of both sectors would increase the income of the bottom decile of the population by 13.5 percent. That is an appreciable increase in real income.

Peter Ganong and Daniel Shoag (2015) show how land-use restrictions can increase inequality by restricting the mobility of low-skilled workers. High housing costs in high-productivity areas are affordable only to high-skilled workers, so low-skilled workers move out of high-productivity areas. Poor workers' limited mobility is sufficient to explain 10 percent of the increase in inequality from 1980 to 2010. A recent study by Dustin Chambers and Courtney A. Collins (2016) combined data from the Consumer Expenditure Survey, the CPI, and a data set of the regulatory burden (RegData) and found that these sorts of regulations have highly regressive effects. These regulations tend to increase both the volatility and the level of prices for goods that represent a larger share of total income for poor households than for rich households. Thus, this argument offers support to the idea that scaling back such policies might reduce inequality.

In addition to the expenditure side, various labor-market regulations reduce the income-earning options and therefore the upward mobility of the poor. Economists

have long debated the precise effects of minimum-wage laws, but to the extent that such laws do cause unemployment among the least-skilled workers, they serve as an impediment to upward mobility. There is more agreement about the effects of occupational licensure. Laws that force new entrants to an industry to spend large amounts of time and money to obtain a license make it especially difficult for those of limited means to enter those industries, and they keep prices of the goods and services these individuals provide higher than they would be otherwise. Estimates of the burden suggest that licensing requires an average fee of $209 across all occupations and an average of nine months of training (Carpenter 2015). Zoning restrictions and general business licenses make it hard for poorer people to open business, especially ones based in their own homes.

Among the policies that harm the poorest, the war on drugs probably has the largest effect. As Pettit (2012) points out, the vast majority of America's large penal population is composed of younger members of ethnic minorities. These ethnic groups already exhibit lower-than-average earnings. However, because the majority of these individuals are young, prison time impairs them considerably on the labor market in the long run. The wage penalty is considerable relative to both preincarceration income and potential earnings had incarceration not occurred (Lott 1990; Lyons and Pettit 2011). The result is that, as Bruce Western and Becky Pettit (2005) point out, the apparent narrowing of the wage gap between whites and blacks in America is largely an artefact caused by the facts that a larger share of the black population ends up in prison and that this share is concentrated among low-wage earners and young individuals, who are then not part of the wage-earning labor force. When these individuals exit prisons, they are more likely to be unemployed and unmarried and therefore to live in single-person households, where the likelihood of poverty is greater (Western and Pettit 2005). As a consequence, the rate of wage growth for former inmates is slower. To the degree that those prison sentences are due to victimless drug crimes (as opposed to acts of violence), the increased inequality this factor generates is another example of bad inequality. Repealing drug prohibition would reduce the incarceration of many currently poor Americans, increase the income they earn, and thereby reduce inequality, with no harm to others and with positive effects on economic growth.

The other inequality-enhancing effect of some government policies is that they increase the income of the rich. A good case in point is the aforementioned agricultural tariffs. By limiting market access to foreign competitors in developed countries, the government is pushing up agricultural incomes. Farmers who benefit from agricultural protection are not in the middle of the income distribution. In Canada, annual farm household income was slightly higher than CAD$100,000 (U.S.$75,000), compared with CAD$72,000 (U.S.$54,000) for the average Canadian (Dumais 2012). These statistics place farm households well above the average standard of living, and a part of this relative position stems from higher prices caused by limitations on competition. A recent paper found that the burden of production quotas in Canada represented 2.3 percent of the income of the poorest 20 percent of households, compared with

0.5 percent for the richest 20 percent (Cardwell, Lawley, and Di 2015), and another found that the quotas were responsible for at least 3 percent of Canada's poverty rate (Geloso and Moreau 2016).

Policies that serve these rent-seeking interests are by their very nature conceived to create inequalities. Their aim is to restrict competition from lowering prices and increasing quality so that there is a redistribution of the gains of exchange to the producer rather than the consumer. Think here of taxicab companies lobbying to raise Uber's costs or to block Uber entirely. Bailouts and subsidies have similar effects. If a bank is bailed out at taxpayer expense after having taken risks that its shareholders should have assumed, a wealth transfer from the overall population to individuals in the banking industry (who tend to be richer) increases inequality. The same applies to corporate welfare in the form of government subsidies to business: they redistribute wealth regressively. Ending policies whose net effect is a regressive transfer up the income ladder would end a bad form of inequality and thereby not only reduce inequality but also enhance economic efficiency and growth.

Conclusion

Measured inequality has increased in recent decades. However, we have argued that some portion of this increase actually stems from mismeasurement. With respect to what remains, we believe that it is necessary to distinguish socially beneficial or neutral from socially problematic causes of inequality. Attacking what we have called the "bad" inequalities generated by government policy has two major advantages over other strategies for fighting inequality. First, it avoids attacking forms of inequality that are either desirable or neutral and thereby destroying those benefits. Second, the explicit costs of reducing the policy-driven bad forms of inequality are, we believe, far less than trying to reduce inequalities of birth or environment. Admittedly, it is difficult to get the political process to roll back its power even when the fruit hangs low. However, if such interventions are exacerbating inequality while also either harming economic growth or worsening the condition of the least well-off or both, attempting to remove them seems a less-risky and less-damaging way to address inequality than by expanding high-cost policies that are unlikely to work as planned. Those who believe that market economies are to be preferred can both acknowledge the existence of some degree of increasing inequality and argue that some of the causes are policy relevant. Careful examination of the issue of inequality should not force defenders of markets to the sidelines. We have important insights and policy recommendations to offer as ways to reduce problematic forms of growing inequality.

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