Center for American Progress

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The Great Laissez-Faire Experiment

American Inequality and Growth from an International Perspective

By David R. Howell December 2013

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Section 1: Introduction and summary

President Barack Obama made the promotion of middle-class economic interests his highest priority at the start of his second term. In a July speech on the economy at Knox College in Illinois, the president said his top policy agenda is to "reverse the forces that battered the middle class for so long." He argued that this requires not only fighting unemployment with better employment growth but also attacking the recent spectacular growth in income inequality. In making this case, the president pointed to the fact that "nearly all the income gains of the past 10 years have continued to flow to the top 1 percent … [but] the average American earns less than he or she did in 1999."[1]

This presidential attack on extreme inequality was particularly notable because it implied that the recent concentration of the proceeds of America's productivity growth in a tiny number of ultra-rich households is inconsistent with the American Dream of upward mobility and economic growth. As President Obama put it, "growing inequality is not just morally wrong, it's bad economics."[2] In short, the explosion of inequality that America has experienced in recent decades has been so extreme that it is inefficient, leading not just to a "battered middle class" but also to a future of low growth and reduced prosperity for all but the top 1 percent.

During his Knox College address, the president might have added that the dramatic post-1980 redistribution of national wealth to those at the very top has also had severe consequences for those whose standard of living falls far short of what anyone would consider to be "middle class." The opportunity for upward mobility is at the heart of the American Dream, but there is compelling evidence that in the current era—which can appropriately be called the Age of Inequality—income mobility over individual careers has stagnated, and income mobility across generations is substantially lower in the post-1980 United States than in other high-income countries.[3] Labor-market prospects for the vast majority of young American workers without elite college and graduate credentials have dramatically worsened since 1979.[4]

That income inequality has become so high that it may now act as a drag on economic growth flies in the face of conventional economic wisdom, which underscores the importance of market incentives—big income payoffs—to extra effort and risk taking. This textbook economic thinking provided the intellectual foundations for the profound ideological shift toward free-market fundamentalism that began in the late 1970s. It became widely accepted by the end of that decade that the American welfare state—quite modest by international standards—was drastically undermining private incentives for growth. In short, America had become too egalitarian, and the best recipe for economic growth and future prosperity was more inequality. In this view, increasing incentives for work, investment, and risk taking could be achieved by deregulating labor, product, and financial markets; by shrinking the welfare state; and by legislating a much less progressive tax system. In sum, the conventional view was that America had to choose more efficiency and less equality. Reflecting this free-market vision, the United States, much like the United Kingdom, embarked on what Harvard economist Richard B. Freeman has called a great "laissez-faire experiment."[5]

In his influential 2012 book, *Unintended Consequences: Why Everything You've Been Told About the Economy Is Wrong*, Edward Conard, businessman and a visiting scholar at the American Enterprise Institute for Public Policy Research, argued that the recent rapid growth of American income inequality has been necessary to promote risky innovation and facilitate larger and "more liquid" financial markets. Indeed, in this view, soaring post-1980 inequality has been at the root of "what went right" in recent decades, as demonstrated by the (presumed) increasing superiority of U.S. economic performance over Europe and Japan.[6] It all comes down to incentives for risk taking. Conard writes:

> *Europe and Japan lacked the economic incentives to take the risks necessary to transform their economies. … In the United States, more valuable on-the-job training, lower labor redeployment costs, and lower marginal tax rates increased payouts for successful risk taking. Higher payouts, in turn, increased risk taking. The outsized gains of successful risk takers diminished the status of other talented workers, which increased their motivation to take risks. Successful risk taking accelerated growth and the accumulation of equity. With more wealth in the hands of risk takers, US investors underwrote more risk. Larger, more liquid US financial markets allowed investors to further parse risk and sell risks they were reluctant to bear.*[7]

Not surprisingly, the editorial page of *The Wall Street Journal* applauded what it called Conard's "bravado defense" of inequality and wealth creation and wrote approvingly of his conclusion that, "More equal societies work less, invest less, grow more slowly and ultimately leave everyone less well-off."[8]

This incentives-based case for high and rising inequality has been lent strong support by leading academic economists. Most recently and prominently, Harvard University's N. Gregory Mankiw, in a 2012 paper published in the *Journal of Economic Perspectives*—"Defending the One Percent"—concludes, "The story of rising inequality, therefore, is not primarily about politics and rent-seeking but rather about supply and demand."[9] Mankiw, reflecting the mainstream view among economists, argues that the rise of extreme inequality is the outcome of three market developments: the increasing demand for skills in the information age, the failure of workers to develop the skills they need to succeed in the labor market, and the expanding responsibilities of CEOs as corporations have grown larger.[10]

An alternative view is that the post-1980 U.S. trajectory from high to extreme inequality is less the result of politically neutral, technology-driven changes in labor demand that favored skilled workers and happened to correspond with slow growth in the supply of college-educated workers and much more the consequence of policy choices that reflected an ideological shift toward market solutions and away from moderate government regulation and redistribution. Facilitated by technological advances in information processing, communications, and transportation, this new laissez-faire policy regime of deregulation promoted the growth of the financial sector, the financialization of nonfinancial firms (in which the production of financial services and short-run returns to shareholders trumped longer-term investment in physical capital), and the offshoring of production to less-developed countries. Together with the dismantling of institutional protections for less-skilled workers—for example, a sharply declining minimum wage and hostility toward labor unions—these policy choices were at the root of the large-scale shift in political power in the 1980s away from middle-class economic interests and toward those of the top 1 percent, in what is an increasingly "rigged game."[11] In this vision, the rise of extreme inequality has undermined economic welfare and mobility for most American workers, as well as the prospects for economic mobility for their children, with potentially severe consequences for future economic growth and prosperity for the vast majority.[12]

Does rapidly increasing inequality from already extremely high levels help promote economic performance and household welfare, or has the inequality of the post-1980 laissez-faire experiment gone much too far, if our yardsticks are national economic growth and the economic welfare of middle-class households?

This report compares the performance of the United States with other high-income countries on income inequality, economic growth, and the sharing of that growth with the vast majority of households. Because different inequality and growth indicators can make a big difference in these comparisons, our cross-country analysis makes use of three measures of income inequality and three measures of economic growth.

The report begins with a portrait of income inequality in the United States and in other affluent countries. Three common inequality indicators, each of which captures a quite different dimension of the income distribution, were used to create this portrait:

- Top and middle-class pre-tax income shares—the income shares accruing to those in the top 1 percent of income and to everyone falling in the 20th to the 79th percentiles of income

- The 90-10 ratio—the disposable after-tax income earned by households at the 90th percentile of the income distribution relative to the income of those at the 10th percentile

- The Gini index (or coefficient)—a summary measure of the overall dispersion of the income distribution that characterizes household disposable income inequality. An index of 0, for example, would indicate perfect equality, where the top and bottom 10 percent of the population would each receive 10 percent of the total income. In contrast, an index of 1 would indicate perfect inequality, where all income went to one household. Figure 5 reports that the Gini index ranges from 0.24 for Denmark to 0.38 for the United States in recent years.

On all three indicators, the United States ranked at or near the top of rich countries in 1980, and its relative inequality increased sharply over the following three decades:

- U.S. top and middle-class shares of total income tracked each other closely until the early 1980s, when the top income share exploded and the middle-class share began a long and steady decline. (see Figure 1)

- Compared to other rich countries, the United States shows by far the largest increase in the share of income taken by the top 1 percent (see Figure 2) and the largest decline in the middle-class share of total income—the middle 60 percent of households—since the mid-1980s. (see Figure 3) By 2007, the American middle class received the lowest income share in the rich world.

- At the start of the 2008 financial crisis, U.S. household income inequality—whether measured by the top 1 percent share, the 90-10 ratio or the Gini index—was by far the highest in the rich world, having risen substantially since 1980. (see Figures 2, 4, and 5)

- In the post-1980 Age of Inequality, higher income inequality—as measured by the Gini index—is closely associated with lower income mobility across generations. (see Figure 6)

Section 3 outlines alternative laissez-faire and political-economy explanations for the post-1980 explosion in income inequality. While the political-economy account is getting greater traction, the dominant story of the Age of Inequality, certainly among economists, has been that high and rising inequality just reflects competitive market pressures. Stagnant wages and skyrocketing top incomes are the consequences of new information technologies in the workplace that have driven up the demand for skilled workers faster than the educational system has increased their supply.

The political-economy explanation focuses on a radical ideological shift in favor of unregulated market solutions that appeared in the mid- to late 1970s. Political decisions led to institutional and policy reforms, here referred to as the "laissez-faire experiment," which, together with technological advances in information processing, communications, and transportation, greatly empowered the finance sector, financialized the nonfinancial sector, and promoted the globalization of production. The result was squeezed worker wages and an appropriation of nearly the entire increase in national productivity by the top 1 percent, made up mainly of financiers and corporate executives. This political-economy story is outlined in Diagram 1.

Section 4 turns to alternative perspectives on the effects of high inequality on growth. Reflecting the alternative stories about the post-1980 surge in inequality outlined in Section 3, there are two general narratives. In the laissez-faire vision, what matters most for growth and prosperity is small government and strong market-based work and investment incentives, which imply strong economy-wide payoffs to high and rising inequality. Indeed, these incentives will promote the educational attainments that can ultimately at least moderate rising inequality.

In contrast, in the political-economy vision, above a certain moderate threshold, rising inequality can undermine social cohesion and the democratic process as financial elites increasingly dominate the political process. This, in turn, can squeeze wages as worker bargaining power declines. It also leads to inadequate investments in public goods, particularly those related to education, health, and the social safety net, as government budgets are also squeezed; a finance sector that is too large, wasteful, and destabilizing; and too little consumer income compensated for by too much household debt. In short, in this view, economic performance will be best in the long run if government plays an active regulatory, investment, and redistributive role, ensuring that middle-class households experience rising standards of living from market incomes (not debt). This model of shared growth is best promoted by a much more moderate and stable level of inequality than we have seen since the late 1970s. These two narratives are outlined in Diagram 2.

Sections 3 and 4 argue that soaring post-1980 inequality was largely a consequence of political decisions that reflected a strong pro-market ideological shift and that the consequences are not a good recipe for healthy, shared growth. Cross-country evidence is presented that suggests that it was political decisions regarding the regulatory and redistributive role of government—rather than demand-supply pressures—that best account for the exceptional character of the past three decades of American inequality:

- After the financial deregulation of the late 1970s and early 1980s, the United States has shown the fastest growth in the financial sector's share of total compensation among the 15 rich countries for which there are data. (see Figure 7)

- Among 18 other rich countries, U.S. taxes and transfers had less effect on overall inequality than was the case for all other countries except South Korea. (see Figure 8)

- Government size is strongly inversely related to household disposable income inequality: Smaller government expenditure as a share of gross domestic product, or GDP, is associated with higher inequality, and the United States is an outlier on both metrics. (see Figure 9)

In Section 5, the report turns to evidence on U.S. economic performance and asks, "Has the extreme inequality of post-1980 America produced exceptional economic growth?" Attempting to link income inequality to economic growth is greatly complicated by the difficulty of measuring national output over time and especially across countries. Output growth is measured by the change in GDP, which is the sum of the net production in each sector.

For a variety of reasons, estimating the value of output is extremely difficult, particularly for finance, education, health, and government services, which together account—however measured—for an increasingly large share of the economy. There is also the question of what to measure output against. The possibilities include the total population (GDP per person); all adults (GDP per adult); all employees (GDP per employee); and all labor hours (GDP per hour, also known as standard labor productivity). Because the standard measures of growth are GDP per person and GDP per hour, this report focuses on these indicators. But because of the many serious questions that have been raised about the meaningfulness and consistency of the way GDP is measured over time, this report also compares countries with an alternative indicator—called "measureable productivity"—which is GDP per hour for those sectors with relatively well-measured output. (see "The Measurement of Economic Output" text box in Section 5).

The results of Section 5 show that the United States, while top ranked on all three measures of income inequality, is only a mediocre performer on output and productivity growth:

- Using three growth metrics—GDP per capita, GDP per hour, and measurable GDP per hour—to measure cumulative growth between 1980 and 2007 for six rich countries, the United States was never the top performer and was below or similar to Sweden on each. (see Figures 10a, 10b, and 10c)

- On the standard productivity metric, the United States scored below France, slightly higher than Germany, and substantially above Sweden and the United Kingdom on the level of productivity in 1994, 2000, and 2006. (see Figure 11a)

- On measurable productivity, however—which excludes those sectors for which value added is poorly measured—the United States had a lower score than France and Germany in 1994, and it was also below these two countries and Sweden in both 2000 and 2006. (see Figure 11b)

Section 6 addresses the relationship between inequality and growth. As Northwestern University economist Robert J. Gordon has emphasized, U.S. growth performance was impressive from the mid-1990s through 2004 but has since declined back to the lower levels of the 1980s and early 1990s.[13] There is no reason to believe that the steady rise in income inequality since 1980 can help explain this slow-fast-slow pattern of productivity growth. More generally, the cross-country literature on the effects of inequality on growth in affluent countries

is inconclusive. Consistent with this professional consensus, this section finds no evidence of a strong relationship—positive or negative—between levels of income inequality and standard measures of economic growth in advanced countries in recent decades. But there is an intriguing result for measureable productivity—my preferred indicator, since it excludes badly measured sectors, which can have big effects on cross-country results: If there is any relationship since the early 1990s, it appears to be that countries with lower inequality have had higher productivity-growth rates. I also show that the growth in the top 1 percent share grew much faster than standard productivity after (but not before) 1980 and that there is no statistical correspondence across affluent countries between top 1 percent income-share growth and productivity growth.

- There is no statistical association between disposable income inequality—the Gini coefficient for 2000—and standard indicators of output and productivity growth for 1994 to 2007. (see Figures 12a and 12b)

- But using measurable productivity, there is a negative relationship between income inequality and growth across high-income countries. If anything, lower inequality is associated with higher measurable productivity growth. (see Figure 12c)

- Using the conventional indicator, American productivity growth tracked the growth of the top 1 percent share of income almost perfectly from 1970 to 1986, but these indicators diverged sharply afterward, as the top income share rose much faster than productivity. (see Figure 13)

- The cross-country evidence does not suggest that growth in the share of income allocated to the top 1 percent is necessary for good productivity growth: Comparing 12 rich countries, only the United Kingdom showed higher growth than the United States in the 1 percent share between 1980 and 2007, but seven of the other 11 countries had higher cumulative productivity growth. (see Figure 14)

Section 7 asks why we care about economic growth in the first place. If the growth in a nation's income is entirely captured by the top 1 percent—a good approximation for America in the Age of Inequality—the case for maintaining our commitment to the policies that defined the post-1980 laissez-faire experiment in order to maximize output must be made on grounds other than the well-being of the bottom 99 percent. The evidence summarized in this section indicates that America has shared substantially less of its less-than-stellar economic growth with nonsupervisory wage earners than have other rich countries.

An important consequence is that average annual growth in the median income of American households—the typical, middle-class family—has been substantially slower than that of other large, rich countries. At the same time, even this meager income growth has been dependent upon increasing household hours of work. In contrast to most other rich countries that have experienced a substantial decline in average work hours, American work hours—whether measured per worker or per adult—have increased, leading to less time for leisure or for working around the house (called by economists "household production").

Compounding the pressure from stagnant incomes and rising hours of work, American working families pay far more out of pocket for essential education and health services than do their counterparts in other rich countries. The American public sector takes much less responsibility for early childhood education, for example, and this report concludes with an example that illustrates how poorly Americans are now performing on international tests of literacy and math proficiency, with potentially serious consequences for future economic competitiveness and prosperity.

- The United States has shared an exceptionally small part of its manufacturing productivity growth with nonsupervisory workers in the form of compensation since the early 1980s, consistent with the observed declines in the middle-class share of income over these decades. (see Figure 15)

- Compared to five other rich countries, U.S. compensation growth for manufacturing production workers between 1980 and 2007 was the slowest, and the gap with productivity growth was the highest. (see Figure 16)

- Compared to the same five other rich countries, American households had the slowest real median increase in incomes—0.4 percent—between the mid-1990s and mid-2000s, despite sharp productivity increases. (see Figure 17)

- But American adults paid for even this small increase in incomes with a sharp increase in annual work hours for the average working-age adult, from 1,213 hours in 1980 to 1,305 hours in 2002, while households in France, Germany, and Sweden combined faster household market income growth with declines in hours of market work. (see Figure 18)

- While the United States ranked fifth out of six rich nations in math proficiency in 2012 for those educated in the 1960s, its performance was at least close to three other rich countries—the United Kingdom, Canada, and Germany. But Americans who attended primary and high schools in the 2000s were in last place, well below the United Kingdom and far below Canada, Germany, France, and Sweden. (see Figure 19)

The report concludes in Section 8 with a call for a return to shared growth. As President Obama put it, "When the rungs on the ladder of opportunity grow farther and farther apart, it undermines the very essence of America—that idea that if you work hard you can make it here."[14]

This legacy of America's great laissez-faire experiment is undermining the future well-being of America's young workers and, in turn, their children. It is time to return to policies explicitly aimed at reducing income inequality by raising wage levels; increasing the taxation of top incomes and the regulation of the financial sector; increasing job and health security; and above all, increasing public and private investments in skills, neighborhoods, and public infrastructure.

Section 2: American inequality—an exceptional performance

Illustrated by the "We are the 99 percent" slogan of the Occupy Movement and President Obama's recent references to the "top 1 percent" in his early second-term commitment to improving the standard of living of the middle class, no measure of inequality has resonated more powerfully with the public and the media than the share of income captured by the richest American households. It has also been established that the surge in top incomes accounts for an important part of overall inequality growth, as measured by the Gini index.[15] Fortunately, a great deal of work by several academic and government economists has made income-share data available for comparisons over long periods of time and across many rich countries.[16]

For these reasons, this section begins with trends in both top income shares—1 percent and 5 percent—and middle-class shares—the 40th percentile to the 59th percentile and the 20th percentile to the 79th percentile—for households, measured before tax and transfers. In contrast, the two other indicators used in this report measure disposable income, the income available after taxes and transfers. The first of these is the ratio of the 90th percentile to the 10th percentile of the household income distribution, a measure of the distance in income between high and low incomes. The third measure, the Gini index for disposable household income, has been the most widely used indicator of economy-wide income inequality for cross-country comparisons.[17] All three indicators measure monetary income, not in-kind benefits such as health, education, and housing benefits, and do a good job of meeting the criteria of quality, comparability, and availability over time.

All three indicators show that the United States was far more unequal in the mid- to late 2000s than in 1980 and far more unequal than any other rich country for which there are data. It has often been argued that if there is a great deal of mobility over careers and across generations, rising inequality—even to the extreme levels that this report documents—should not be a major concern. For this reason, this report also reports the so-called Great Gatsby Curve for rich countries, which relates overall income inequality, as measured by the Gini index, with a measure of income mobility across generations for rich countries.

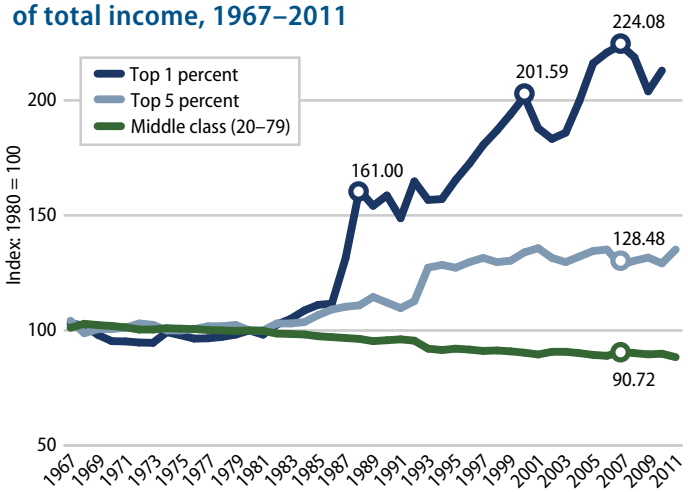
Figure 1 shows that the top 1 percent, top 5 percent, and middle 60 percent shares of national income were almost perfectly unchanged between 1967 and 1980. This distributional stability, however, changed abruptly in the early 1980s. Indexed to 100 in 1980, by 2007, the middle 60 percent's share had fallen by about 9 percent, while the top 5 percent rose 28 percent and the top 1 percent increased by 124 percent. As the figure shows, nearly all of this massive redistribution to the top took place by the late 1990s.

The international data indicate that since 1980 the richest households have increased their share of national income in all the high-income countries for which there are good indicators. But it is also true that top-income households have done much better in some countries than in others. Figure 2 shows the change in the share of total income received by the top 1 percent of households in 1985 and in 2007 for 13 high-income countries. At the beginning of the Age of Inequality, the top 1 percent share ranged from the United States' 9.1 percent to Finland's 4 percent, a ratio of 2.3 to 1. In addition to Finland, three other rich countries also had relatively low top-income inequality in the 1980s: Denmark, Sweden, and Norway.

Between 1985 and 2008, both the United States and the United Kingdom transitioned to even higher income inequality relative to other affluent countries. The top 1 percent in the United States nearly doubled its share to 18.3 percent, a level three times higher than the 6.1 percent of Denmark, the least unequal country in 2008. Three countries show relatively small

FIGURE 1

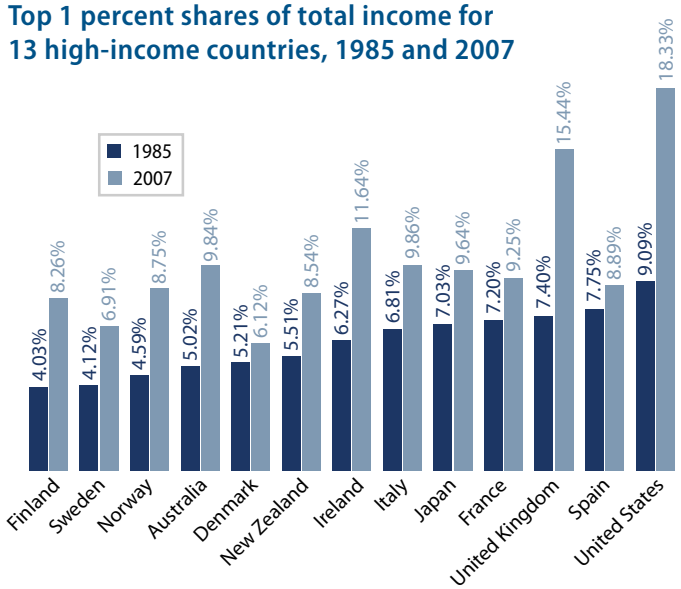
Top 1 percent, top 5 percent, and middle 60 percent of total income, 1967–2011



Source: For the series, U.S. Census Bureau, "Top 5 Percent and the Middle Class, 2012," Table H-2. The top 1 percent series is taken from the World Top Incomes Database, or WTID. All three series are indexed to 100 in 1980.

FIGURE 2

Top 1 percent shares of total income for 13 high-income countries, 1985 and 2007



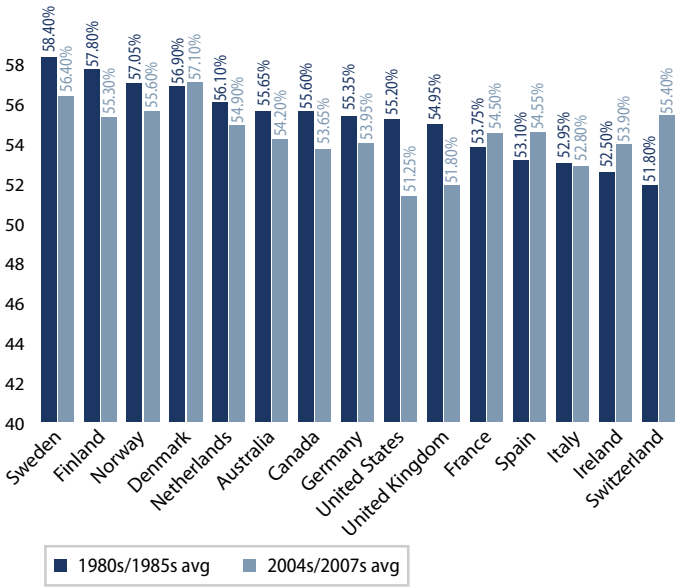
Source: Author's calculations are based on data from the World Top Income Database, or WTID. For Denmark, the values indicate the share of the top 1 percent of the adult population income. For the United Kingdom, the 1985 value refers to the share of the top 1 percent of the income of all married couples and single adults. The 2008 value for the United Kingdom refers to the share of the top 1 percent of the adult population income. The values for Finland are based on the national Income Distribution Survey where the unit of analysis is the individual ages 15 and older with non-zero incomes and the income concept is taxable income. Data for all countries except for Denmark, the United Kingdom, and Finland are the share of the top 1 percent of total population income.

increases in the 1 percent share: Spain, from 7.7 percent to 8.9 percent; France, from 7.2 percent to 9.2 percent; and Denmark, from 5.2 percent to 6.1 percent.

As the 1 percent share exploded over the course of the two decades between the mid-1980s and the mid-2000s, the middle-class share dropped to the lowest level among high-income countries. Figure 3 reports the change in national income received by the middle class—defined expansively as the middle three quintiles of the income distribution—the 20th percentile to the 79th percentile—in 15 countries for two points in time, the early 1980s and the mid-2000s.[18] At the start of the Age of Inequality, the middle class in these 15 countries took home shares of national income that ranged from 52 percent for Switzerland to 58.4 percent for Sweden, with the United States and the United Kingdom in the middle of the middle-class distribution.

FIGURE 3

Middle-class (20th percentile to 79th percentile) income shares for 15 high-income countries, 1980–1985 and 2004–2007



Source: Author's calculations are based on data from the Luxembourg Income Study, or LIS, Database. Middle-income shares are defined as the share of total disposable monetary household income going to 20th percentile through the 79th percentile. Income is bottom coded and excludes income of less than one unit of national currency. The threshold for top coding is 10 times median income. Household income equivalization is conducted by using the square root of the number of household members.

But the relative position of the middle class in both the United States and the United Kingdom worsened considerably over the following two decades. By the mid-2000s, the United Kingdom's middle-class share had fallen by a full 3 percentage points to 51.8 percent, while the U.S. middle-class share fell even further, by about 4 percentage points to just 51.2 percent. Like their showing on the 1 percent-share metric, by the mid-2000s, both the United States and the United Kingdom appear as outliers on the middle-class share of income—at the very bottom of the rich-country distribution. Notably, three of the four countries that experienced stable or growing middle-class shares—Denmark, France, and Spain—also reported the smallest increases in the share going to the top 1 percent. (see Figure 2)

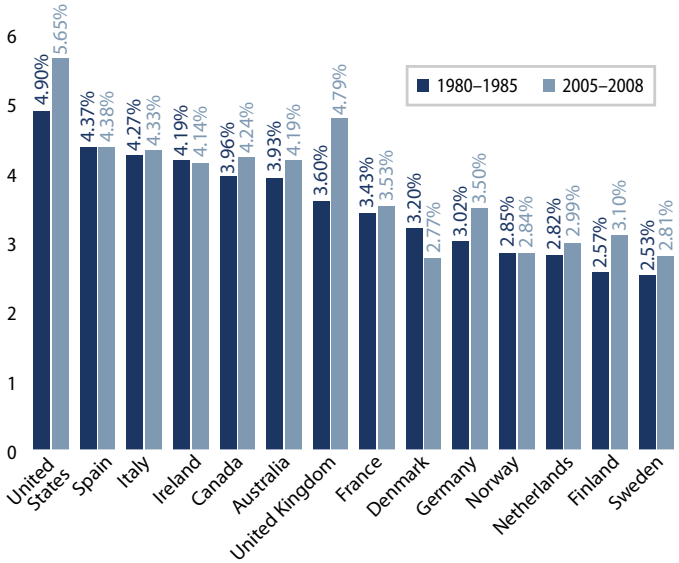
Of course, there are other ways to identify the middle class. Rather than being defined as the middle 60 percent of households, the middle class could be identified by a range relative to the median household income. Common ranges include 75 percent to 125 percent of the median, 75 percent to 200 percent of the median, and 75 percent to 300 percent of the median. Research shows that the rankings of countries using these alternative ranges are fairly similar, as are the changes in the size of

the middle class over time. Using the 75–200 percent definition, for example, the results are similar to those shown in Figure 4: Between 1985 and 2004, the middle classes in the United Kingdom and the United States declined substantially, while the French and Danish middle classes actually increased in size.[19]

Unlike the income shares shown in Figures 1, 2, and 3, our two other indicators of household inequality—the ratio of the 90th percentile to the 10th percentile and the Gini index—are both measured in terms of disposable income—after taxes and transfers—and are adjusted for the number of household members. The pattern remains the same: Most rich countries experienced increasing inequality between the early 1980s and the mid-2000s, but the United States is exceptional on each inequality metric, with the highest levels at the end of the period.

FIGURE 4

The 90-10 ratio of household disposable monetary income (per household member) for 14 high-income countries, 1980–1985 and 2005–2008



Source: Author's calculations are based on data from the Luxembourg Income Study, or LIS, Database. The specifications are the same as in figure 3. The values denominate the income ratio between the 90th percentile and 10th percentile of the distribution.

The 90-10 ratios for household incomes for 1980 to 1985 and 2005 to 2008 are reported in Figure 4. The United States again ranks as the most unequal rich country at the beginning and end of both time periods, with the household income at the 90th percentile rising from 4.9 times to 5.65 times the 10th percentile household income. The United Kingdom also shows a huge absolute and relative increase, from 3.6 to 4.8 times the 10th percentile level. Both Sweden and Germany report moderate increases from very low levels, from ratios of 2.5 to 2.8 and from 3 to 3.5, respectively. But many high-income countries—including Spain, Italy, Ireland, France, Norway, and the Netherlands—show little or no change, and inequality by this measure actually fell in Denmark, from a 90-10 ratio of 3.2 to 2.8.

The same cross-nation pattern can be seen when income inequality is measured by the Gini index. Figure 5 reports the Gini coefficient for disposable income for 1980 to 1985 and from 2005 to 2008 for 17 countries. Inequality increases for most countries, but the United States is distinctive in that it shows not only very high inequality in the early 1980s but also a large increase in the following decades, resulting in a level of inequality that is far higher than that of any other high-income

country. Despite rather substantial increases, Austria, Denmark, and the Scandinavian countries continued to show the lowest levels of overall inequality in the mid-2000s. Notably, the French and Belgian income distributions became more equal over this period.

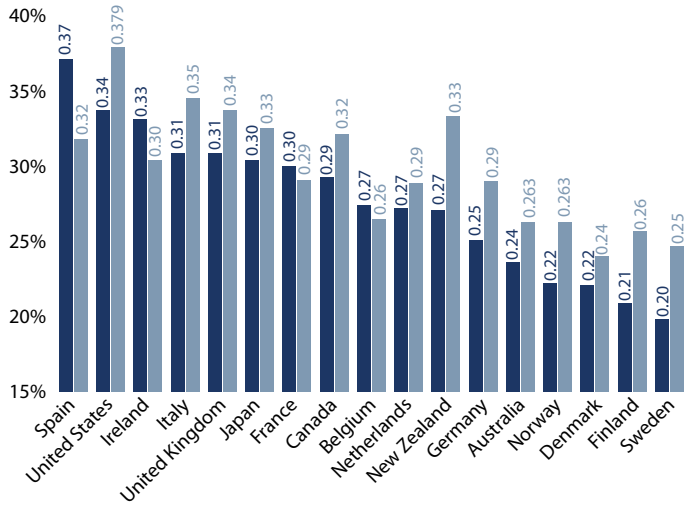
Was the transition from high to extreme income inequality in the United States and the United Kingdom offset in some sense by relatively strong income mobility across generations? According to Figure 6, the answer is "No." Here, mobility is measured by the fraction of economic advantage or disadvantage passed from fathers to sons who were 30 years old in the mid- to late 1990s.[20] The figure shows a remarkably strong positive relationship: The higher the inequality, the lower the intergenerational mobility, with the United Kingdom, the United States, and Italy on the low-mobility end of the spectrum and Denmark, Norway, and Finland on the high-mobility end. In addition, as noted in the next section, as U.S. income inequality has increased since the 1980s, career mobility has fallen. In short, there is little evidence that extreme income inequality in the United States can be rationalized by payoffs in career or intergenerational mobility.

In sum, this section suggests five main lessons about how the relatively laissez-faire United States and United Kingdom have compared to other rich countries on income inequality since 1980:

1. The United States and the United Kingdom, already at or near the top of the inequality ranking in the 1980s, became undisputed inequality leaders by the mid-2000s.

FIGURE 5

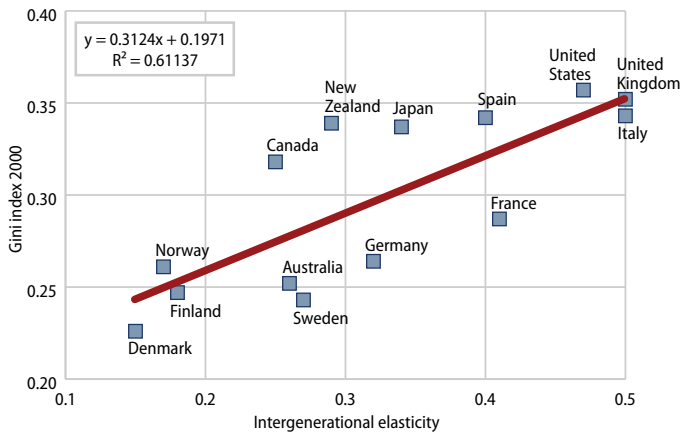
The Gini index for household disposable income (adjusted for household size) for 17 high-income countries, 1980–1985 and 2005–2008



Source: The Gini index is from the Organisation for Economic Co-operation and Development, "Database on Income Distribution and Poverty." Income is defined as disposable monetary household income. Household income equivalization is conducted by using the square root of the number of household members.

FIGURE 6

The "Great Gatsby curve": Income inequality and intergenerational mobility for 14 high-income countries, 1995–2000



Source: For the Gini index, see Figure 5. The intergenerational elasticity estimate comes from Miles Corak, "How to Slide Down the 'Great Gatsby Curve'" (Washington: Center for American Progress, 2012), Figure 2. This figure measures the fraction of economic advantage and disadvantage passed from fathers to sons who were 30 years old in the mid- to late-1990s. Miles Corak, "Income Inequality, Equality of Opportunity, and Intergenerational Mobility," Journal of Economic Perspectives 27 (3) (2013), notes to Figure 1.

2. As measured by the 1 percent share of market income, inequality increased substantially in many other rich countries as well, but all rose to levels far below America's 18.3 percent.

3. Many countries—including Switzerland, Ireland, Italy, Spain, France, and Denmark—reported no significant change or even an increase in their middle-class shares of market income, which was in sharp contrast to the large declines for the United States and the United Kingdom.

4. On the two disposable income indicators—the 90-10 ratio and the Gini index—many countries experienced increasing inequality, but there were also many that did not, including France, Belgium, Denmark, Ireland, and Spain.

5. Increasing income inequality does not appear to be a price that must be paid for high income mobility across generations, since both the United States and the United Kingdom, as well as Italy, have shown the lowest intergenerational mobility, while the highest mobility appears in the low-inequality countries of Denmark, Norway, and Finland.

Section 3: Behind extreme inequality—the laissez-faire experiment

The previous section established that many rich countries experienced rising inequality, especially when measured by the top 1 percent share of income. But the main finding was that the United States moved from its position as merely a high-inequality country in the early 1980s to a position of unrivaled inequality by the mid-2000s, doing so on all three indicators. (see Figures 2, 4, and 5) At the same time, the United States saw its middle-class share of income plummet to the lowest level among the 15 countries for which we have data. (see Figure 3) Only the United Kingdom comes close to matching this performance.

What explains these results? The popular and professional literatures suggest two sharply contrasting visions of the causes of rising inequality, and each leads to different predictions about the effects of extreme inequality on economic performance. This section outlines two alternative explanations for sharply rising inequality in the post-1980 decades. Section 4 then presents alternative accounts of the effects of high and rising inequality on economic growth.

This section begins with the conventional demand-and-supply-shift explanation for America's rise to extreme inequality since 1980. It then describes a very different political-economy narrative about America's rise to extreme inequality in which ideological shifts, political choices, and economic bargaining power appear at center stage.

Extreme U.S. inequality: A simple demand-supply story

The overwhelmingly dominant explanation for wage, earnings, and income inequality, at least among mainstream American economists, is centered on competitive forces in the labor market. According to this explanation, at the root of income inequality is labor-earnings inequality, which is held to be mainly a reflection of rising employer demands for skilled workers, whether on the factory floor or in the CEO suite. It is also argued that this increased demand for skilled

workers has been met with inadequate supplies; there are insufficient numbers of college-educated workers. Until recently, the presumed sharp speedup in the demand for skilled workers was believed to have been caused by computerization. This "skilled-biased technological change," or SBTC, story has been so widely accepted that it is referred to in many circles as the "canonical model."[21] But it should be noted that as far back as the early 1990s, critics have called attention to the failure of the SBTC story to explain the most basic facts of the timing and pattern of wage changes across sectors and occupations.[22]

In particular, skill upgrading had been taking place for decades before the introduction of computers, and there is little evidence that the rate of skill-biased technological change increased over time in a way that could explain the increase and patterns of wage and income inequality. The simple SBTC account also failed to explain the fact that inequality at the bottom—the 50-10 ratio—increased sharply in the early 1980s but failed to do so after about 1987.[23] If the rising demand for more skilled workers was behind changes in the wage distribution, why would wages in the middle—the 50th percentile—fall relative to the wages of the least skilled—those in the 10th percentile?

These stubborn empirical facts led to the development of a more compelling, technology-driven account of American wage inequality, which has become known as the "task-based framework."[24] The idea here is that shifts in the demand for skills caused by computerization and the offshoring of production are not linear, having the greatest displacement effects on the least-skilled workers and the least impacts on the most-skilled workers. Rather, in this account, computerization was argued to affect mainly what have been called "routine" jobs, which are relatively easy to replace by machines or to outsource to cheaper locations. Many of these were once good, middle-class jobs. The result, according to this view, was employment polarization, with well-paying but routine occupations showing declining employment. At the same time, there has been, it is said, an inadequate supply of college-educated workers. The results are classic demand-supply effects: collapsing wages, cut routine jobs, and rising pay for college-degree holders. As Harvard University economists Claudia Goldin and Lawrence Katz conclude in their influential book, *The Race Between Education and Technology*, "Stripped to essentials, the ebb and flow of wage inequality is all about education and technology."[25]

Greatly extending the critiques that date back to the early 1990s, recent research by economists Lawrence Mishel, John Schmitt, and Heidi Shierholz has posed a powerful challenge to this variant of the technology-driven demand-shift inequality story: "… the tasks framework fails to explain the most important developments in wage trends observed since the end of the 1970s."[26] Among these is the fact that the employment share of occupations in the middle of the wage distribution has been falling since the 1950s and that "polarization" only appears to describe employment shifts in the 1990s and not the shifts that took place in the 1980s or the 2000s. Moreover, there is little convincing evidence of a close link between changes in occupational employment shares and occupational wage growth.[27]

The technology-driven demand-supply mismatch story also fails to give a credible explanation for the spectacular rise in U.S. top incomes. As four leading inequality researchers have argued in the *Journal of Economic Perspectives*:

> *Stories based on the supply and demand for skills are not enough to explain the extreme top tail of the earnings distribution. … [The evidence is more consistent with] increased bargaining power or more individualized pay at the top, rather than increased productive effort.*[28]

In sum, there is a need for an account that puts policy choices, institutions, and bargaining power at center stage.

Extreme U.S. inequality: A political-economy story

An alternative story is that the transition from high to extreme inequality is mainly a consequence of new policies, institutions, and social norms that reflect the ascendency of free-market orthodoxy. In this account, there has been a massive and pervasive shift in bargaining power away from those whose pay is determined in increasingly competitive labor markets—wage earners—and toward those best positioned to extract resources in highly imperfect markets. Pay setting for financiers and corporate executives has become much less regulated by laws, institutional rules, and social norms.[29]

At least since the late 19th century, public policy in the United States and many other rich countries has featured ideological swings between public and private solutions—swings between active government intervention to produce public goods, regulate, and redistribute on the one hand and an agenda of product and

labor market deregulation and small government on the other.[30] In the United States, the Johnson administration's Great Society was a reaction to the more than 15 years of the Truman and later Eisenhower administrations' reactions to the New Deal of the 1930s and labor-union gains during World War II. In Europe, British economist Tony Atkinson refers to a "May 1968 effect" in which government became much larger, more regulative, and more redistributive in the 1970s, not only in France but also in the United Kingdom, Italy, Finland, and Sweden.[31] The consequences of this swing to the left in Europe are evident in the data, as income inequality in these high-income countries tended to decline between the early 1960s and early 1980s.

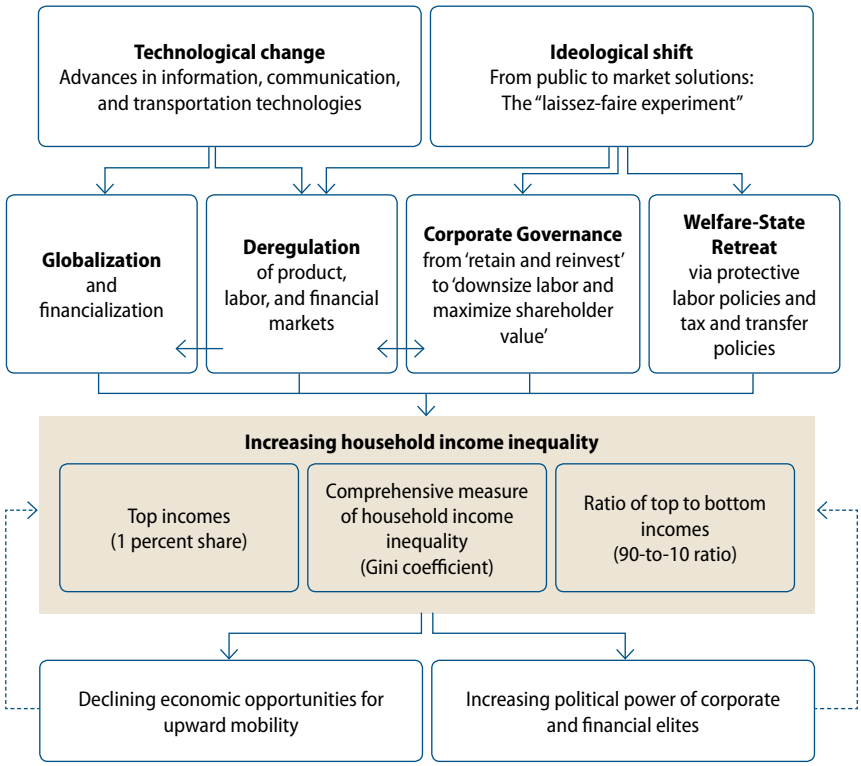
More recently, there has been an ideological swing back to small-government, market-friendly solutions in both the United States and United Kingdom. In the United States, partly in response to declining economic performance—evidenced by rising unemployment and inflation and declining profit rates—the center of political gravity swung sharply to the right by the late 1970s. Free market conservatives and business interests joined forces to change the terms of the political debate from justice and equality to individual incentives, profits, and growth. The success of this political reaction represented a profound policy shift, manifested most clearly in the deregulation of various industries during President Jimmy Carter's administration in the late 1970s—most notably the airline and trucking industries—along with the dramatic weakening of the political and economic power of unions. The latter was followed by the collapse in the real value of the minimum wage during the 1980s and changes in tax laws that sharply reduced tax rates on high-income households.[32]

A remarkably similar shift took place in the United Kingdom at about the same time with the election of conservative British politician Margaret Thatcher as prime minister in 1979. To varying degrees, the same pro-market forces were at work in other high-income countries in the 1990s, promoted by international economic organizations such as the Organisation for Economic Co-operation and Development, or OECD; the International Monetary Fund, or IMF; and the European Central Bank. Illustrating this policy contagion, there were declines in individual and corporate tax rates in many European countries.[33]

The story of extreme inequality begins at the top (see Diagram 1) with the ideological swing to the right. Advances in information, communication, and transportation technologies—coupled with deregulation that accelerated both the financialization and globalization of financial capital, production, and trade—set the stage for winner-take-all gains for corporate and financial elites. Together with the effects of declining labor-union membership and strength and a declining real value of the minimum wage, increasing trade and offshoring of production to low-income countries also helped hold down wages.[34] These forces worked together to increase inequality across the household income distribution, as measured here by the 90-10 and the Gini indicators.

DIAGRAM 1

The laissez-faire experiment and extreme inequality



Finally, in this view, sharply increasing inequality can be expected to produce declining opportunities for children of low- and modest-income families relative to those from top-income households.[35] Especially in the American political system, increases in income and wealth inequality tend to increase the political power of those with top incomes,[36] which, together with inadequate investment in human capital (see Diagram 2), can lead to a cumulative, dynamic process of increasing inequality over decades and generations.

The effects of government policy in the 1980s on the value of the minimum wage, labor unions, and tax policy are well known.[37] The remainder of this section focuses on two other key elements behind the surge in inequality in more detail: increasing financialization and the failure of the state to compensate for rising market inequality with increasing redistribution.

Financialization: Top incomes skyrocket as wages are squeezed

The spectacular growth of top incomes shown in Figures 1 and 2, the decline in middle-class shares shown in Figures 1 and 3, and the increase in overall inequality shown in Figures 4 and 5 can be attributed in part to two key post-1980 developments—the financialization of nonfinancial sectors and the deregulation of the financial sector itself.

One of the most important structural responses to the profitability crisis of the 1970s noted earlier was that nonfinancial firms turned away from commodity production and trade to financial ventures for their profits. The result was that in the 1980s and 1990s, "the ratio of financial to non-financial profits … range[d] (depending on which measure one follows) from approximately *three to five times* the levels typical of the 1950s and 1960s."[38]

At the same time, the compensation systems of these nonfinancial firms produced tremendous increases in executive pay. Top CEO compensation was almost eight times larger in real terms in the early 2000s than in the 1970s—$9.2 million annually compared to $1.2 million annually. Base salary and bonus pay fell from 84 percent to 40 percent over this period, with the difference being the rise in stock options and related incentive compensation.[39] Average CEO pay increased by 169 percent between 1988 and 2005, from $805,000 to $2.165 million.[40]

There are competing explanations for these massive increases at the very top. One is that they mainly reflect competitive outcomes. According to this view, increasing firm size, changes in technology, and the increasing sensitivity of firm performance to managerial excellence—especially in general skills—have increased the demand for and the scarcity of top executive talent.[41]

But there is also considerable evidence that top-executive compensation packages reflect at least as much so-called rent extraction—taking advantage of market imperfections and economic power to increase one's own income—as they do genuine competitive outcomes. According to economists William Lazonick and Mary O'Sullivan, the power to manipulate short-run stock values increased exponentially with financial deregulation in the late 1970s and early 1980s, and not surprisingly, the compensation of corporate executives became increasingly dominated by stock options.[42] This increased the incentive for these same executives to shift corporate priorities from a "retain and reinvest" (in the firm) approach to a "downsize and distribute" (to shareholders) philosophy. An integral part of this

change in corporate policy was the slashing of labor costs to raise shareholder value. Technological changes facilitated blue-collar downsizing in the 1980s, mid-level white-collar downsizing in the 1990s, and the offshoring of both blue- and white-collar jobs in the 2000s.[43]

Stock values—and therefore executive pay—were even more directly manipulated by massive stock buybacks, which became increasingly popular over the course of these three decades and were made possible by Securities and Exchange Commission rulings in the early 1980s.[44]

Similarly, economist and Nobel Prize winner Joseph E. Stiglitz has argued that U.S. laws provide little constraint on the share of corporate revenues executives can take for themselves, so:

> *… when social mores changed in ways that made large disparities in compensation more acceptable, executives in the United States could enrich themselves at the expense of workers or shareholders more easily than could executives in other countries.*[45]

There is also evidence of "board capture"—where corporate boards of directors are dominated by CEOs who set their own compensation and pay packages—which took place in tandem with the growing use of stock options in executive pay, and which in turn put a premium on short-term firm performance.[46] This transformation of corporate governance required a friendly stance by regulators, and there was a massive increase in corporate political activity in Washington, D.C., in the 1970s and 1980s that helped promote deregulation.[47]

In addition to capturing corporate boards and their compensation committees, top executives and financiers effectively captured public tax policy as well, leading to radical declines in top-income tax rates right at the outset of the laissez-faire experiment. With greatly increased power of top executives to set their personal compensation, there was also now a much greater incentive to do so. Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva—leading researchers on tax policy and top incomes—have found a close relationship between the rise in top incomes and the reduction in top-end tax rates. They argue that the international evidence points to a surge in CEO bargaining power as the driving force behind increasing incomes of those at the top, rather than simply a competitive market valuation of their skills.[48]

This radical shift in corporate compensation policy had important consequences not just for CEO pay but also for worker wages. With the rise in the importance of shareholder value, one of the leading tactics used to increase short-term company performance was to lower labor costs. In the mid-1980s, according to the prominent labor-relations specialist Daniel Mitchell:

> *Management, cheered by what is perceived as a shift in the balance of power, has changed its bargaining goals. ... The political and legal climate change has been reflected in a greater willingness by management to take actions in labor disputes that might not have been publicly or politically acceptable in the past.*[49]

These corporate campaigns and political policies designed to reduce labor costs were effective, and depressed wages contributed to stagnant or declining worker purchasing power. In the face of this reality, one solution for low- and moderate-income families was to accumulate personal debt. Low interest rates helped fuel consumer spending, and the result was massive borrowing by households between the late 1990s and the onset of the 2007 financial crisis.[50] The rise in the total household debt-to-income ratio for the bottom 95 percent of households doubled between 1983 and 2007, and by 2007, it had reached twice the size of the debt-to-income ratio of the richest 5 percent of households, mainly due to the growth in mortgage debt.[51] This rising debt incurred by working families meant more business for the financial sector—through financial intermediation services—and an increase in the income share of top earners in this sector, contributing to still higher income inequality.

The second key finance-related development behind the growth of top incomes was the deregulation of the financial sector itself, which contributed to massive increases in activities related to asset management and the provision of household credit through the mid-2000s. The build-up of household credit was particularly destabilizing. It consisted of both residential mortgage debt and consumer debt, the latter in the form of auto, credit card, and student loans. According to prominent finance economists Robin Greenwood and David Scharfstein:

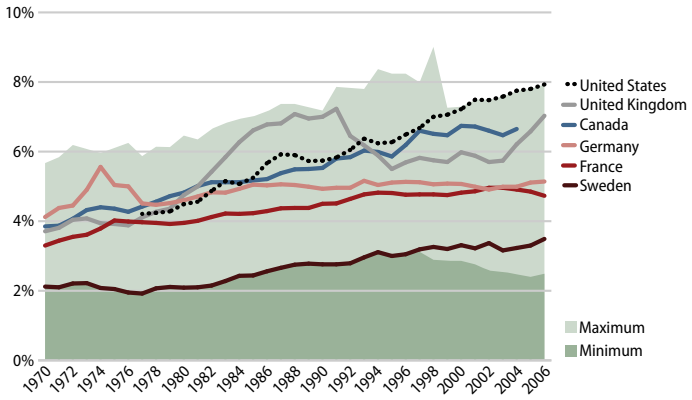
> *The increase in household credit contributed to the growth of the financial sector mainly through fees on loan origination, underwriting of asset-based securities, trading and management of fixed income products, and derivatives trading.*[52]

Another way to look at these fees is as a tax on working- and middle-class families who were driven into debt to maintain living standards, resulting in another avenue for the transfer of resources to top earners in the financial sector.

A consequence of this financialization—and a good measure of it—has been the doubling of the finance sector's share of total compensation from 4 percent in the early 1970s to 8 percent in the mid-2000s, as shown in Figure 7. Nearly all of this growth took place after the early 1980s and sharply contrasts with the stability of the finance sector's share of total employment.[53] Figure 7 contrasts this growth with that of five other rich countries. In the late 1970s, the U.S. finance-sector share of total compensation was not unlike that of the other five high-income countries, and, among the 16 countries for which we have data, it was about midway between the country with the smallest and largest shares. (see the shaded areas on Figure 7) The United States moved steadily toward the top spot on the finance-sector compensation ranking in the 1980s and 1990s, staying always above Germany and always far above Sweden. It passed France in the early 1980s, the United Kingdom in the early 1990s, and was moving with Canada until the late 1990s, when Canada's share stabilized and the U.S. share continued to surge. Since 2000, America's financial share of total compensation has been the highest in the rich world, and as of 2006 was still growing.

FIGURE 7

The financial sector share of total compensation for six high-income countries, 1970–2006



Source: Author's calculations based on the EU-KLEMS Database. The financial sector is defined as the financial intermediation services (industry "J" in the ISIC Rev. 3 nomenclature). Total compensation refers to the compensation of employees. The maximum country share in the Klems database is indicated by the light blue shade; the minimum is indicated by the darker shade.

Alternative measures of financialization include financial-sector profits as a share of total corporate profits, the real wage gap between financial and nonfinancial firms, financial assets as a share of total tangible assets in nonfinancial firms, and the share of dividends in total profits. All these metrics report a dramatic acceleration in the early 1980s in the United States. Many leading scholars have argued that the financial sector has become much too large, extracting resources for financier incomes that could be much better used for productive investment in the nonfinancial sectors.[54]

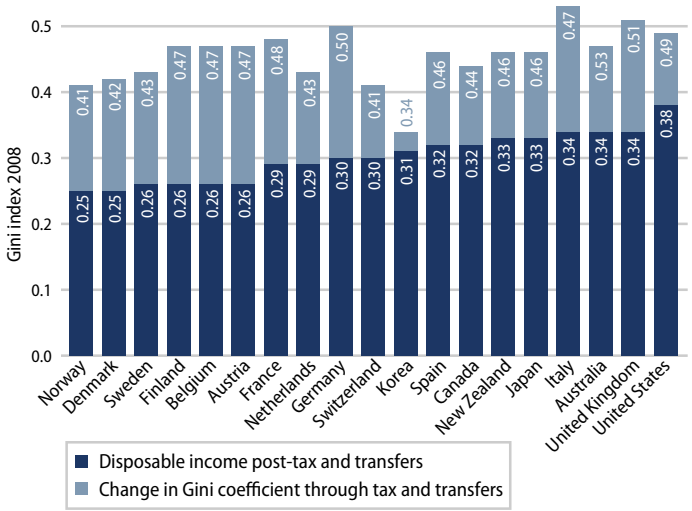
Retreat of the welfare state: Redistribution and income inequality

In addition to changes in the executive compensation system, the deregulation of the finance sector, and the erosion of protective labor-market institutions and policies, cross-country differences in disposable income inequality (see Figures 4 and 5) reflect national tax, transfer, and in-kind benefits policies.

The significance of redistribution is illustrated in Figure 8 for the 2008 Gini index measure of inequality. Both market income and disposable income inequality are shown, with countries ranked by disposable income inequality from low to high—with Norway and Denmark at one end and the United Kingdom and the United States at the other. Once again, the United States is an outlier among affluent nations. At the start of the global financial crisis, the U.S. after-tax and transfer inequality, at 0.38, was substantially higher than that of the next most unequal countries—the United Kingdom, Australia, and Italy, all at 0.34.

FIGURE 8

Redistribution through taxes and transfers: Gini index for market money income and household disposable income for 19 high-income countries, 2008



Source: Author's calculations are based on data from the Organisation for Economic Co-operation and Development, "Database on Income Distribution and Poverty." Income is defined as disposable monetary household income. Household income equivalization is conducted by using the square root of the number of household members. In-kind transfers are not included in this analysis. Gini indexes are for 2008 except for Japan (2006) and Denmark and Australia (2007).

Figure 8 highlights two other notable facts. First, the top of the bars show that U.S. market inequality—pre-tax and transfer—at least as measured by the Gini index, has not been exceptionally high. Three countries—Germany, Italy, and the United Kingdom—show higher Gini market inequality, and others, such as France, are not much below.

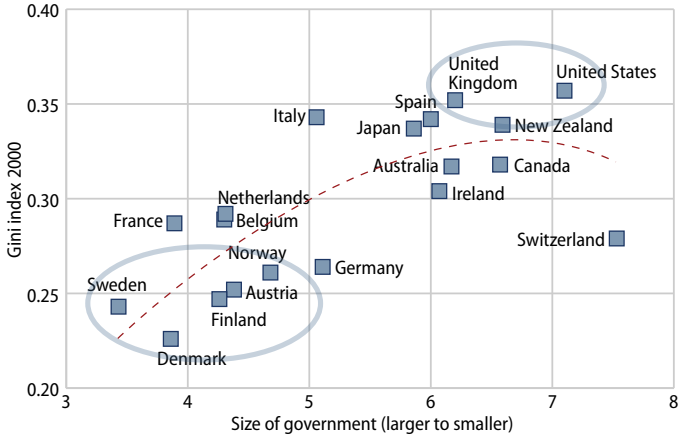
The reason for this compression of market inequality levels is not that inequality of pre-tax and transfer-labor earnings for individual workers is similar across these countries. Rather, this measure of market inequality reflects differences in household market incomes—which in turn reflect cross-country differences in hours worked and labor-market inactivity among household members. This similarity in household market inequality across countries does not appear in the data for full-time workers: According to the OECD, the 2008 Gini index for full-time worker earnings was far higher for the United States, at 0.43, than the United Kingdom (0.36), Germany (0.32), France (0.3), Sweden (0.28), Finland (0.27), and Denmark and Belgium (0.26). Among 32 OECD countries, only Chile and Brazil had higher inequality among full-time workers than the United States in 2008.[55]

Second, Figure 8 shows that the explanation for high U.S. disposable income inequality is that the redistribution impact of U.S. tax and transfer policies—the 0.11 difference between market and disposable income—has been very modest, about half that of Germany, France, Austria, Belgium, Finland, and Italy. Only one country, South Korea, shows a lower redistribution impact for 2008.

When the Gini index for cash-disposable income is further adjusted for in-kind benefits, inequality is further reduced, but this has little effect on country rankings. According to the OECD, among the 27 countries for which it has data, the United States ranked 26th in 2007 on this more comprehensive measure of overall inequality.[56] Although substantially below Mexico, America's inequality ranking was higher (more unequal) than those of Portugal, Greece, and Estonia—which ranked 23rd, 24th, and 25th, respectively. France was eighth on the list. Not surprisingly, the least unequal countries were Sweden, Norway, and Denmark.

FIGURE 9

Household disposable income inequality (2000) and 'freedom' from government (the inverse of government size, 2000–2008 average) for 20 high-income countries



Source: For the Gini index, see Figure 6. Author's calculations of size of government are based on the Cato Institute and the Fraser Institutes, "The Economic Freedom Index." The calculations reflect indices of the size of government consumption, transfers and subsidies, government enterprise output, and government investment. A higher value indicates smaller government.

Another way to look at the key role that government policy has played in post-1980 income inequality in the rich world appears in Figure 9, which shows the Gini coefficient for disposable income in 2000 against the Fraser Institute's measure of the size of government.[57] A higher government-size score indicates smaller government, interpreted by the Fraser Institute as greater "economic freedom." The scatterplot shows an extremely strong relationship—nearly 60 percent of the variation in inequality in 2000 was accounted for by this size-of-government metric. The United States is clearly exceptional, with the second-smallest government and the highest inequality. Four Anglo-Saxon countries—Australia, the United Kingdom, New Zealand, and Canada—show moderately lower inequality and relatively small government size. At the extreme other end of the inequality and government-size rankings are Belgium, Austria, Denmark, and the Scandinavian countries, which all have low inequality and a large government size. Switzerland is unique, with a very small government but only moderate inequality.

In sum, Diagram 1 attributes this high level of U.S. earnings inequality to a massive decline in worker bargaining power since the 1970s, caused by structural changes in the economy—globalization and financialization; profound changes in the norms and political choices that have transformed corporate compensation systems, with spillover effects on workers outside the private sector; and public policies that have drastically reduced the ability of working Americans to bargain for higher pay.

Section 4: From inequality to economic growth—two narratives

It is commonplace to view output growth as the main goal of economic activity. With more stuff to go around—a larger pie—everyone can have a bigger piece, even if others get much larger pieces. As Paul Krugman, Princeton University economics professor and *New York Times* columnist, has put it, "A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker."[58]

But the way the pie is shared can greatly affect not only its subsequent growth but also the economic welfare a given amount of growth generates. How much initial inequality in income and wealth is necessary to maximize growth—and growth of what and for whom? Even if there is some sharing of the growth dividend, how much better is my welfare if the increase in my piece of the economic pie is a tiny fraction of yours? Economists and other social scientists have answered these questions differently at least since Adam Smith's *The Wealth of Nations*, published in 1776. These different answers reflect different visions of what drives greater efficiency and the role that is played by perceptions of fairness: What makes a reasonably equitable distribution of resources, and what are the consequences for economic behavior? Broadly speaking, the answers can be organized into two alternative narratives, each closely related to the two explanations of rising inequality discussed in the previous section. Diagram 2 provides a sketch of these different visions of the relationship between inequality, growth, and household economic welfare.

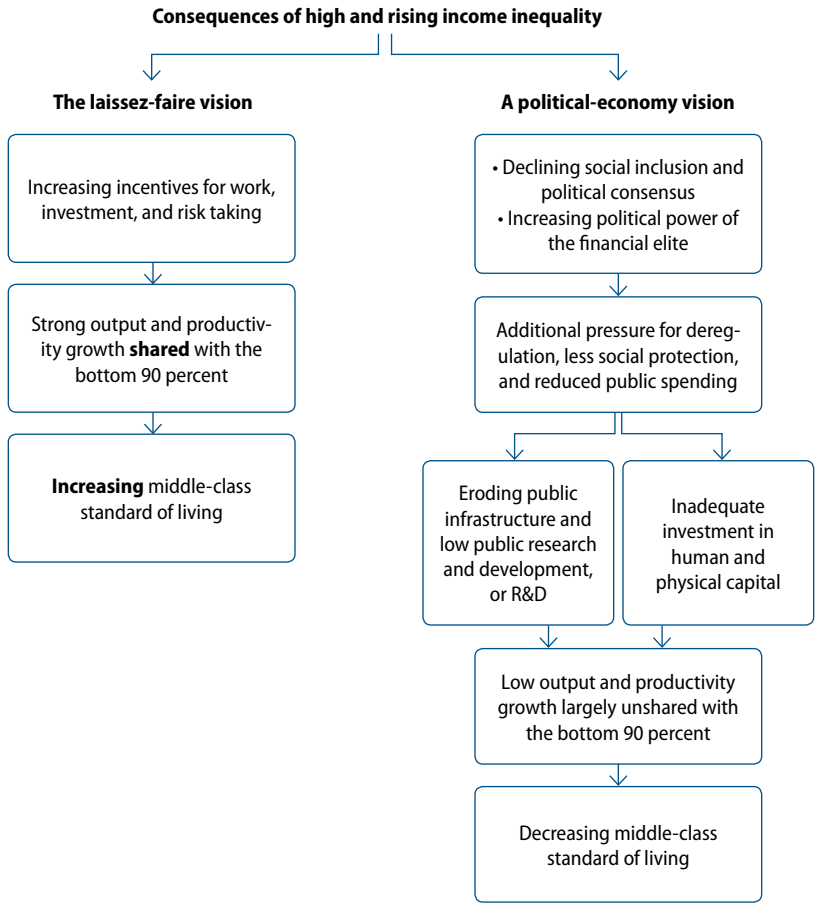
In the laissez-faire vision, leaving individuals free to make the choices they perceive to best promote their own well-being in the marketplace is the best recipe for maximizing economic growth and welfare. This reflects, in turn, a belief that nearly all people have the capacity to make such choices and that markets are sufficiently competitive to ensure that these choices will together promote economic efficiency and equity, as each person is spurred to produce as much as he or she wants and markets ensure that each gets what he or she produces. Such freedom of choice in unregulated markets encourages effort and risk-taking investments, implying a powerful tradeoff between equality and efficiency, or equivalently,

a strong complementarity between inequality and economic performance.[59] The lineage of this vision goes straight back to Adam Smith, who wrote: "By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good."[60]

Taking a much stronger stance on the benefits of laissez-faire than Smith, the influential libertarian economist Ludwig von Mises makes this case without ambiguity: "Inequality of wealth and incomes is the cause of the masses' well-being, not the cause of anybody's distress. Where there is a 'lower degree of inequality,' there is necessarily a lower standard of living of the masses."[61] While most economists would not go this far, the implications of accepting a strong tradeoff between equality and efficiency have direct implications for how the extreme inequality of the post-1980 period is judged. Harvard's Martin Feldstein, a prominent conservative economist and the longtime president of the National Bureau of Economic Research, has argued that the sharp growth in inequality since 1980 has for the most part been "a good thing," independent of the likely positive effects on innovation and growth. He notes, "I want to stress that there is nothing wrong with an increase in the well-being of the wealthy or with an increase in inequality that results from a rise in high incomes."[62]

DIAGRAM 2

From inequality to shared growth in the rich world: Two narratives



A strong commitment to equality-efficiency tradeoffs also has important implications for political democracy. In the laissez-fair vision, political institutions must not be too inclusive. As Harvard University's Robert Barro asks in a paper for the conservative Heritage Foundation, "What effects on the economy would we anticipate from an expansion of democracy, say in the form of an increase in electoral rights?" Reflecting concerns that go back centuries in the struggle over the expansion of voting rights, Barro's answer is that political institutions that are too inclusive are likely to threaten economic freedom and thereby undermine the goal of "maximizing the economy's total output."[63]

In addition to producing incentives for work, investment, and risk taking, high and rising income inequality can also generate greater savings, since the marginal propensity to consume is presumed to decline as income increases. Since saving is a necessary condition for investment, a rise in inequality will promote economic growth. In this laissez-faire narrative, there is a presumption that growth will be shared, so while inequality grows, so will the economic welfare of all—or most—households.[64]

In sum, the laissez-faire narrative is one of positive feedbacks: The establishment of institutions and policies that promote market incentives and minimize the size and role of government will grow the economic pie, making it possible for all those who work and invest to earn the incomes necessary for increased consumption. Higher incomes will, in turn, make possible choices to invest in more education and better health, which will promote future growth in a virtuous cycle.

On the other side of Diagram 2, a very different tale is told about the effects of high inequality on the prospects for future growth and prosperity. In the political-economy vision, markets can produce strong and shared growth only if they are effectively regulated and supplemented with substantial social protection and public investments in infrastructure and human capital. In this story, economic growth is best promoted by inclusive political and economic institutions designed to limit income inequality.[65] As economist Daron Acemoglu and political scientist James Robinson argue in *Why Nations Fail: The Origins of Power, Prosperity and Poverty*:

> *[E]conomic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract; it also must permit the entry of new businesses and allow people to choose their careers.*[66]

The establishment of inclusive economic institutions requires a political system that promotes inclusive political institutions—those that are relatively centralized and pluralistic. As Acemoglu and Robinson put it, "Instead of being vested in a single individual or a narrow group, political power rests with a broad coalition or a plurality of groups."[67] Since greater inequality can reduce the inclusiveness of political and economic institutions, it can also undermine economic growth.

In the professional literature, this complementarity between limited inequality and growth has appeared most prominently in attempts to explain the growth paths of less-developed countries. According to a recent survey of this research, there are three main economic mechanisms through which inequality harms growth. High levels of inequality may generate the following: 1) imperfect capital markets in which inadequate access to resources, especially credit, reduces productive physical and human capital investments; 2) high levels of fertility, which may result in inadequate human capital investment per person; and 3) small domestic markets and therefore a "lower exploitation of the economies of scale."[68]

Of these three mechanisms, only the first seems potentially important for high-income countries. In the political-economy vision, markets function best within a strong regulatory framework, since decision makers, information, and markets are all far from perfect. Choosers make mistakes. Some participants invariably have much more information and many more assets—physical, financial, human, and social capital—than others. Many important markets are incomplete or absent—credit markets for students, for example; people are imperfect decision makers; and luck matters a great deal for individual economic outcomes. As a result, laissez-faire institutional arrangements will be characterized by extreme disparities in bargaining power and by a persistent growth in inequality, leading to a cumulative increase in bargaining-power disparities and political domination by economic elites.[69]

No less than the laissez-faire vision, the intellectual lineage of this political-economy vision can also be traced back to Smith's *The Wealth of Nations*.[70] Smith was unequivocal in his view that bargaining power was at the root of the employment relationship and that employers and financiers could be counted on to play a dominant and self-interested role in the design of public policy. In the absence of meaningful state regulation, Smith underscored the presence of a powerful tendency of employers to "combine" and use state power to raise prices for consumers and lower wages of workers.[71] In short, government capture by business and financial interests was a clear and present danger, especially under the toxic combination of extreme inequality and the dependence of elected office on campaign contributions.[72]

A closely related second source of inefficiency associated with extreme inequality stems from the effects of imperfect capital markets on the ability of the vast majority of households to finance appropriate levels of health and education. In the absence of universal access through government funding, the need to invest in education and health services requires financial markets to make available affordable loans and insurance policies. This need for credit and insurance tends to increase over time, since services such as education and health get relatively more expensive over time. This is due to what is known as "Baumol's cost disease," caused by the much slower productivity growth that can be possible in the delivery of services that require personal attention, which limits opportunities for labor-saving technological changes.[73] But private markets for both education loans and health insurance are either incomplete or missing. With growing inequality, therefore, private credit market failures will generate underinvestment in health and human capital.[74]

A third source of the inefficiency of extreme inequality is the economic cost of maintaining it.[75] If those at the bottom are increasingly unhappy about their economic standing and the legitimacy of the prevailing institutional arrangements is under challenge, high inequality may impose substantial direct costs to protect prevailing governance structures through public spending on police and prisons; employer spending on workplace monitoring and security personnel; and private spending on security guards, weapons, and infrastructure including walls and gates. These costs have been rising rapidly in the United States, which with the United Kingdom has the highest "guard-labor" shares of total employment in the rich world.[76] It is likely not a coincidence that these costs have escalated so dramatically as inequality has surged in these already highly unequal countries. If rising inequality also means declining real household incomes, it may become imperative to raise social welfare spending, which must be paid for by tax revenues, which impose additional inefficiency on the economic system.

A fourth source of economic inefficiency linked to extreme inequality is associated with what have been termed "arms races" by consumers. That is to say, as inequality increases and the material gaps between income strata grow, the declining relative standing of those below the top may also lead to inefficient consumption patterns by promoting competition by consumers over positional goods—those goods with value found in their rank rather than their use. An example that Cornell University's Robert H. Frank likes to use to illustrate this destructive competition is the steadily increasing size of homes in expensive neighborhoods, purchased to gain access to high-quality schools, since American public schools

continue to be funded largely by property taxes. In such a zero-sum game, families compete against one another for access to a fixed stock of housing in a good school district, with the result being too much spending on housing and no effect on the number of children with access to the best schools.[77]

Finally, as the income and wealth inequality become extreme, it may become more difficult to adopt productivity-enhancing institutions and policies.[78] This is because growing inequality of income and material assets, together with income instability and a shredded safety net, may undermine behaviors critical to high levels of productivity—hard work, maintenance of productive equipment, risk taking, the production and use of knowledge, and the like.[79] An example of a productivity-enhancing institution is a labor union, which can provide greater job satisfaction, job security, and a collective voice. It can do so at the firm or industry level or at the national level through cooperation between social partners, which include employers, workers, and the state—as is the case in Germany and Sweden.[80] It is also widely accepted that without a meaningful social safety net, the threat of job loss can undermine productive risk taking, ranging from job changing to entrepreneurial behavior.

While these and other arguments for turning back the rising tide of U.S. and U.K. inequality have been made in recent years, especially in response to the post-2007 global financial crisis, public policy discourse remains powerfully influenced by the laissez-faire vision. This is partly due to ingrained free-market ideological preferences but also—as was noted in the introduction—a belief that post-1980 economic performance has confirmed the superiority of the laissez-faire model. This claim is addressed in the next three sections.

Section 5: American economic growth—an unexceptional post-1980 performance

Have America's exceptional growth and levels of income inequality translated into exceptional economic growth? To address this question, U.S. performance is contrasted with that of five other rich countries, which offer examples of a wide variety of capitalisms, reflecting different approaches to market incentives and regulation; coordination between the state, employers, and labor unions; and redistribution levels and the extent to which social spending is universalistic or targeted to particular populations. Closest to the United States are the United Kingdom and Canada, in the middle stand Germany and France, and at the opposite end of the varieties-of-capitalism spectrum is Sweden.

The comparison of cross-country growth rates in this section makes use of three indicators: standard GDP per capita, standard GDP per hour, and measureable productivity.

Economic growth is usually measured by GDP per person, but, as noted in the introduction, this indicator has substantial weaknesses as a measure of performance. First, it will reflect demographic changes—for example, a higher rate at which a country's population is aging (the effects of "baby booms") and improved health care that increases the populations of infants and the very elderly will tend to reduce this standard measure of economic growth. Alternative measures include GDP per prime-age person, per employee, per full-time equivalent employee, and per hour worked. Second, there is good reason to believe that an increasingly large part of GDP is very poorly measured—in ways that make it particularly problematic for cross-country comparisons. (see the text box)

For these reasons and others, some recent careful studies have limited their analysis of international comparisons of economic growth to the well-measured market economy.[81] For the same reasons, in addition to GDP per person and GDP per hour—standard labor productivity—this report uses a third measure of growth, measurable productivity, which omits from total GDP a number of poorly measured sectors, following the work of prominent Yale University economist William D. Nordhaus, among others.[82]

Measurement of economic output

Economic growth is measured by the change in a nation's output, or GDP, which is calculated as the sum of the value added produced in each economic sector. This text box briefly identifies some of the most important problems in the measurement of GDP for the purposes of examining cross-country comparisons and changes over time.

Each sector's value added should, in principle, reflect the outcome of competitive market transactions, under the assumption that prices reflect the value buyers place on products. Even for products in sectors with relatively well-measured value added, such as automobiles, there are major difficulties to the extent that there is pricing power. With more monopoly power, prices are likely to be higher, and consequently, so will be value added and GDP. As a result, anti-trust and intellectual property rights policies can affect the level of GDP.

Illustrating this point, *The New York Times* recently published a story highlighting the experience of one American patient who learned that the market price of hip-replacement surgery at one hospital in the United States would be $78,000—not including the surgeon's fees—a great deal more than an equivalent replacement in Belgium, which could be found for $13,660. The same goes for the cost of standard steroid inhalers for asthma, which go for $175 in the United States but cost just $20 in the United Kingdom and are dispensed free of charge.[83] As the United Nations' "The Stiglitz Report"—a commission of experts chaired by Nobel Prize-winning economist Joseph E. Stiglitz—notes, "Measurement differences from the health care industry carry over—albeit with reduced strength—to total measures of government production and GDP."[84]

The measurement problem gets still harder as economies become increasingly dominated by services that do not have market prices and easily measurable value added, such as insurance and banking, business services, education and health care, and government services. A common solution is to impute the value of the output from the value of the inputs. But in that case, productivity, or output per unit input, becomes meaningless. In the *New York Times* example above, the imputed value of hospitals would then be, for instance, the incomes of the hospital personnel, which makes productivity simply worker incomes per hour. Higher pay for doctors or more inefficient use of hospital personnel will then increase health-sector output, and thereby, national GDP. Countries with more highly paid doctors working inefficiently will apparently have better economic performance. As noted in "The Stiglitz Report":

> *An immediate consequence of this procedure is that productivity change for government-provided services is ignored … It follows that if there is positive productivity growth in the public sector, our measures under-estimate growth.*[85]

This, in turn, means that in cross-country comparisons, productivity growth in countries with large, well-run public sectors with moderately paid doctors will be lower, all else equal, than inefficient health systems in which doctors get top incomes.

Accounting for changes in output over time leads to another serious complication—how to account for changes in quality. The quality of many goods and services is constantly increasing—a personal computer today is a lot better and cheaper than it was 10 years ago—but by how much? National statistical agencies attempt to adjust for quality in the deflators they use to estimate changes in the value of output, but these are rough approximations, and the methodology may vary across countries.[86] There is also the simple fact that economic activity in some rich countries, such as the United States, is more concentrated in poorly measured service sectors than it is in other countries, such as Germany.

For cross-country comparisons, the GDP measurement problem is still further complicated by the fact that some output, such as expenditures on prisons, military expenses, and environmental cleanup, is "defensive" in that it is used to fix bad things rather than to expand the economic pie of valuable goods and services. Externalities are those positive or negative spillover effects on the value of other products that are unpriced by the market. For example, injuries from unsafe cars and sickness from air pollution are costs from poorly maintained cars that will not be reflected in the car price by the unregulated market. If these injuries and sicknesses are treated, these health care costs will cause GDP to increase.

Continued page 36

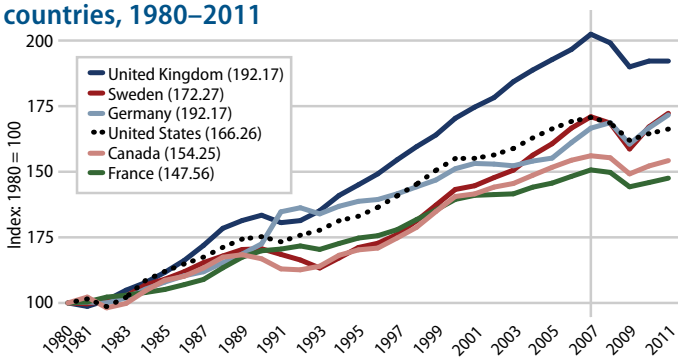
In response to these and other concerns, some studies have developed what might be called a "measurable GDP" and, when expressed per hour, "measurable productivity." In a Brookings Institution article, Nordhaus excluded construction, financial intermediation, real estate, rents and business activities, public administration, education, health and social services, and some others, resulting in a smaller measurable GDP.[87] Similarly, the recent London School of Economics, or LSE, Growth Commission presented results for the market economy that "excludes the sectors where value added is hard to measure: education, health, public administration and property."[88] The measurable productivity indicator used in this report is similar to the Nordhaus measure, but unlike the latter, it includes construction. The specific definition appears in the endnote of Figure 10c.

In comparing national growth rates, this section follows the LSE Growth Commission's approach, which shows cumulative growth indexed to 1980. For these figures, faster growth is shown by steeper lines, or equivalently, by where each country ends on the vertical scale at the end of the period. Figures 10a through 10c report the cumulative growth in real output per person or per hour for six high-income countries between 1980 and 2011. A vertical line marks 2007, the last year before the world financial crisis.

Like the LSE Growth Commission's findings, Figure 10a shows that the United Kingdom, at an index of 202, or a cumulative 102 percent increase, was clearly the best performer on GDP per person over the entire 1980–2007 period. The United States and Sweden, each

FIGURE 10a

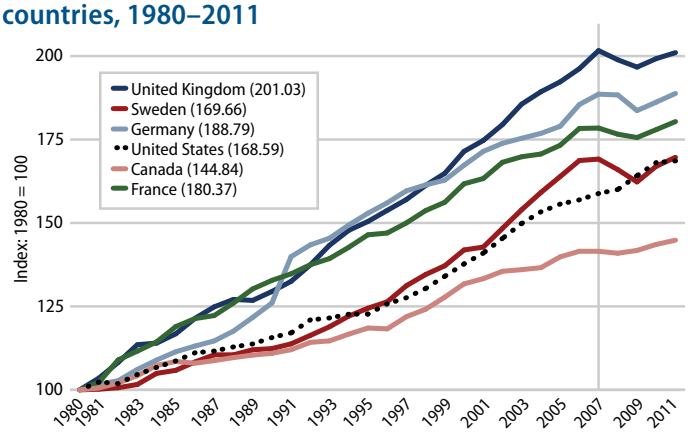
Growth in real output per person for six high-income countries, 1980–2011



Source: Author's calculations based on the U.S. Bureau of Labor Statistics, "International Comparisons of GDP per Capita and per Hour, 1960–2011," Table 1a.

FIGURE 10b

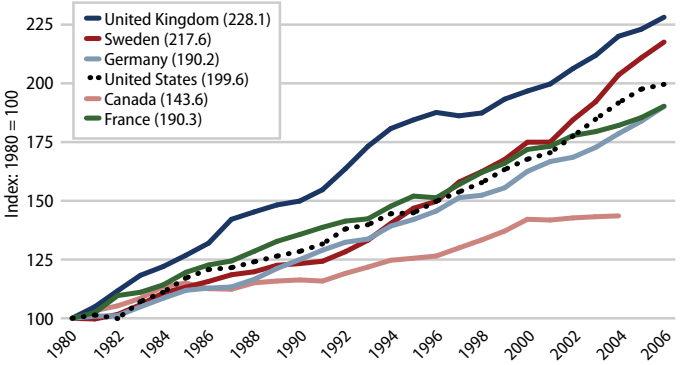
Growth in real output per hour for six high-income countries, 1980–2011



Source: Author's calculations based on the U.S. Bureau of Labor Statistics, "International Comparisons of GDP per Capita and per Hour, 1960–2011," Table 3a.

FIGURE 10c

Growth in real measurable output per hour for six high-income countries, 1980–2006



Source: Author's calculations based on the EU-KLEMS Database. These series are constructed by excluding industries associated with finance and government, in which the accuracy of output measurement methods is heavily challenged. In particular, the finance, insurance, real estate, and business services (ISIC Rev. 3 codes J-K), as well as public administration, defense, compulsory social security, education, health, and social work (ISIC Rev. codes L-N) have been excluded from the output and employment measures in order to obtain the productivity of more accurately measured economic activity. Productivity is defined as output per hour employed.

showing a cumulative 71 percent increase, were slightly ahead of Germany (67 percent) and much better performers than Canada (56 percent) and France (50 percent).

It is important to recognize, however, that the results of this exercise can be quite different for different parts of the post-1980 period. Because of limited space, this report does not present the figures, but as will be described, the results are in some cases much different for the first and second halves of the post-1980 period.[89]

In terms of relative performance on GDP per person in the period between 1994 and 2007, only France keeps the same ranking as it has over the entire 1980–2007 period shown in Figure 10a—last place. For this more recent 1994–2007 period, Sweden, with a 45 percent cumulative increase in GDP per person, displaces the United Kingdom as the fastest growing among these six countries. The United States, which was tied for second place with Sweden in Figure 10a for the period of 1980 to 2007, now shows a cumulative growth rate for 1994 to 2007—26 percent—that is far below Sweden and not much above the last-place France (20 percent). In sum, over the course of the 1980–2007 laissez-faire experiment, the United States was increasingly outperformed by the highly regulated Sweden on the standard GDP-per-person measure of growth.

Turning to the standard productivity measure—GDP per hour—Figure 10b again has the United Kingdom in first place, with a 102 percent cumulative increase between 1980 and 2007, but the rankings for the other five countries are quite different on this indicator: Germany is now second with an increase of 89 percent, followed by France at 80 percent, Sweden at 70 percent, the United States at 69 percent, and Canada at 45 percent. In short, on standard productivity, U.S. performance was next to last among these six affluent countries.

As with the GDP-per-capita measure, a more recent focus on productivity performance changes the results considerably. For 1994 to 2007, which is again not presented as a figure, Sweden is now the top performer on GDP per hour, followed by the United Kingdom and the United States. Canada shows the slowest growth. The cumulative American productivity growth of 30 percent falls squarely in the middle of the pack for this recent period, almost exactly halfway between Sweden, at 38 percent, and Canada, at 21 percent.

Cross-country growth performance using measurable productivity was available only through 2006—and 2004 for Canada. Cumulative growth rates for

1980 to 2006, and from 1980 to 2004 for Canada, are shown in Figure 10c. The United Kingdom once again shows the greatest cumulative increase between 1980 and 2006 with a 128 percent increase, followed by Sweden (with a 118 percent increase), the United States (with a 100 percent increase), and France and Germany (each with a 90 percent increase).

But using 1994 as the starting point, which is again not shown, Sweden is by far the best performer with 55 percent, displacing the United Kingdom with 26 percent, which, remarkably, drops to last place.[90] Between 1994 and 2006, the United States, at 38 percent, and Germany, at 37 percent, track each other closely for the second and third spots.

In sum, using our measurable productivity metric, the United States falls in the middle of the distribution, about halfway between Sweden (best) and France (worst) for the entirety of the 1980–2006 period, and improves to second place for the more recent 1994 to 2006 period, but even here, it was only slightly ahead of Germany and far below Sweden.

The main takeaways from Figures 10a, 10b, and 10c are that the United Kingdom and Sweden—representing two quite different economic models—were the best performers over the entire period from 1980 to 2006-07 and that the results differ substantially for the second half of the period. Sweden remains a top performer on all three indicators and in both time periods. The lesson with respect to the American laissez-faire experiment is that using three alternative measures of growth and two base years among these six rich countries, the United States displays neither the best nor the worst performance between 1980 and the mid-2000s.

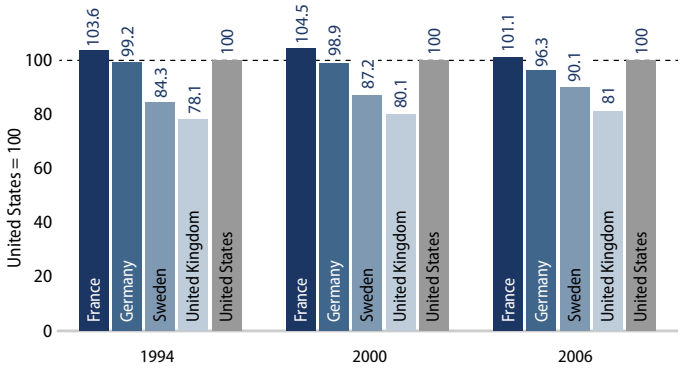
Figures 10a, 10b, and 10c report cumulative growth rates. But how has the United States performed in terms of levels of output per hour? Figures 11a and 11b present results for our two productivity measures for the six countries for 1994, 2000, and 2006. Figure 11a shows that U.S. productivity levels in each year were higher than those of Germany, Sweden, and the United Kingdom but not higher than levels in France, which outperformed the United States throughout the 1994–2006 period. Sweden shows some narrowing of the gap with the United States, but the country rankings were unchanged between 1994 and 2006—France ranked at the top in 2006, followed by the United States, Germany, Sweden, and the United Kingdom.

The results shown in Figure 11b confirm that excluding the poorly measured output sectors can make a big difference for productivity rankings. Using the measurable productivity indicator, Germany is now the leader in each of the three years, followed by France. Sweden's measurable productivity is 95 percent of the U.S. level in 1994 but surpasses the United States in 2000 and is 6 percent higher in 2006. The relatively laissez-faire United Kingdom is about as far below the United States as Germany and France are above it, and it performs increasingly poorly between 1994 and 2006, dropping from 89 percent to just 81 percent of the U.S. level. The contrast of the United Kingdom's relative performance on measurable productivity with the results shown in Figure 10 underscores the importance of the measure of growth that is used.

In sum, Figures 10 and 11 make clear that the United States was not a top growth performer in the Age of Inequality. Since 1980, on each of the output-growth measures (shown in Figures 10a, 10b, and 10c), the big government, egalitarian country of Sweden matched or outperformed the small-government, highly inegalitarian United States through 2006, and it outperformed the United Kingdom as well after 1994. On measurable productivity levels, the United States and the United Kingdom both show much lower performance than either Germany or France, and between 1994 and 2006, Sweden passed the United States and increased its productivity advantage over the United Kingdom. Indeed, on measurable productivity growth and levels, the United Kingdom was the worst performer in the post-1994 period.

FIGURE 11a

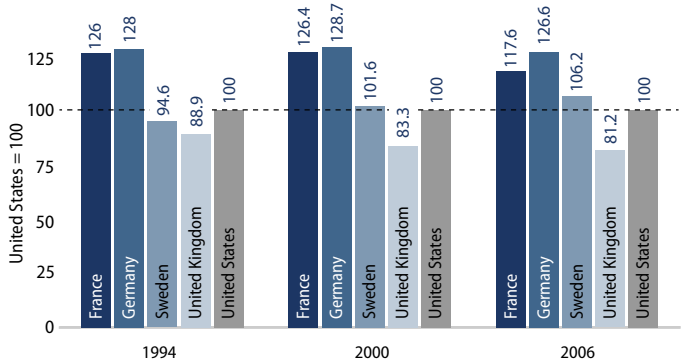
Real productivity levels (GDP per hour) for five high-income countries, 1994, 2000, and 2006



Source: Author's calculations based on the U.S. Bureau of Labor Statistics, "International Comparisons of GDP per Capita and per Hour, 1960–2011," Table 3a.

FIGURE 11b

Real measureable productivity levels for five high-income countries, 1994, 2000, and 2006



Source: Author's calculations based on the EU-KLEMS Database. "Measureable productivity" is constructed by excluding industries associated with finance and government, in which the accuracy of output measurement, especially for cross-country comparisons, has been challenged (see text). In particular finance, insurance, real estate and business services (ISIC Rev. 3 codes J-K), as well as public administration, defense, compulsory social security, education, health, and social work (ISIC Rev. codes L-N) have been excluded from the output and employment measures. Productivity is defined as output per hour employed. All currencies are converted to U.S. dollars using 2011 purchasing power parity, or PPP.

Section 6: Inequality and growth —a payoff to lower inequality?

Section 2 established that, by all standard indicators, American income inequality has become truly exceptional under the post-1980 laissez-faire experiment. The previous section, in sharp contrast, reported that America's recent growth performance, however measured, has not been particularly impressive compared to other affluent countries. But if high levels of inequality tend to generate higher growth, America's growth might be expected to improve in the future. Does the evidence suggest such a positive inequality-growth connection? This section turns to an international perspective on the relationship between income inequality and growth and asks: Does the recent evidence point to a growth payoff to high inequality in the rich world?

In fact, the recent cross-country literature on income inequality and growth has not produced a compelling case for a strong relationship across affluent countries—either positive or negative. This section briefly reviews this literature and then presents new results on this relationship.

As in Section 2, I begin with top income shares, the dimension of inequality that has shown the greatest increase over the past two decades and that largely accounts for the transition of the United States to levels of extreme inequality. Two important recent studies have looked at the effects of the growth in top income shares. Three leading inequality researchers, Dan Andrews, Christopher Jencks, and Andrew Leigh, explored the relationship between top-income inequality and growth for a panel of 12 developed countries. According to the authors, "We find evidence that from 1960 to 2000 a rise in top income shares was associated with a rise in developed nations' growth rates during the following year. But we also find that this effect is fairly small."[91]

On the other hand, Piketty, Saez, and Stantcheva find a strong negative relationship between top income shares and the top marginal tax rate in rich countries and that there is "no evidence of a correlation between growth in real GDP per capita and the drop in the top marginal tax rate in the period 1975 to the present."[92] So

according to Piketty, Saez, and Stantcheva, reducing the top tax rate increases top income shares but does not increase economic performance as measured by GDP per capita. Viewed together, these two studies of top-income inequality suggest little or no positive relationship between top income shares and growth for rich countries in the post-1975 period.

Nearly all the research in this literature employs the Gini index as the measure of inequality. Harvard University economist Robert Barro has found little or no effects in two recent studies.[93] Another influential recent analysis of 21 high-income countries finds mixed results, concluding that the effects of income inequality on growth depended on whether it was located mainly at the top or the bottom of the household income distribution: "[I]nequality at the top end of the distribution is positively correlated with growth, while inequality at the bottom of the distribution is negatively correlated with subsequent growth."[94] But another recent study concluded that income inequality had an overall negative effect on growth in an aggregate sample of 46 countries and in smaller sample sets that included the 22 most developed countries over the period from 1970 to 1995.[95]

This failure to find a strong robust relationship between inequality and growth in the affluent world has been confirmed by the OECD. In its massive and hugely influential project on inequality and growth, the OECD concluded:

> *Despite a vast theoretical literature on the link between inequality and growth, no general consensus has emerged and the empirical evidence is rather inconclusive. A simple scatter plot of inequality and growth also shows no link.*[96]

In this scatterplot, the OECD measured inequality with the 2008 Gini coefficient for household disposable income and used annual average growth in real GDP per capita from 1994 to 2009 for its measure of economic growth.

Given the sensitivity of cross-country performance to the dates and measure of growth, it is worth replicating the OECD's analysis using our three output measures and the same measure of inequality for years prior to the 2007 financial crisis. This may be particularly important in light of the huge effects that the global crisis had on many standard economic indicators. It may make a difference that the OECD chose to measure inequality one year after the onset of the crisis—2008—and included in the growth measure two years of severe recession—2008 and 2009.

Figures 12a, 12b, and 12c show the relationship between household disposable income inequality in 2000 and average annual growth rates between 1994 and 2007—2006 for Figure 12c—for high-income countries. Figures 12a and 12b plot the increase in GDP per capita and GDP per hour, respectively. Like the OECD's scatterplot, neither shows any statistically significant relationship. The data points in Figure 12a indicate that both very high-inequality countries—the United Kingdom, Spain, and the United States—and very low-inequality countries—Denmark, Sweden, Norway, and Austria—had broadly similar growth rates of GDP per capita, ranging between 2 percent and 3 percent. Another way to look at this figure is that 13 countries with lower disposable income inequality than the United States had higher growth per capita.

Figure 12b shows that countries with similar productivity growth—1.8 percent to 2 percent—have widely varying levels of income inequality, with the United States and Japan at one end and Germany, Norway, and Austria at the other. The high-inequality United States shows lower productivity growth than the less unequal star performers—South Korea and Ireland—but the United States also had substantially lower growth than the egalitarian welfare states of Sweden and Finland. At the same time, high-inequality Spain and Italy also show the lowest rates of productivity growth among these 20 countries. There is simply no relationship between Gini index inequality and recent economic growth in the high-income world using the standard GDP metric.[97]

FIGURE 12a

Household disposable income inequality and average annual real output growth per person (1994–2007) for 20 high-income countries

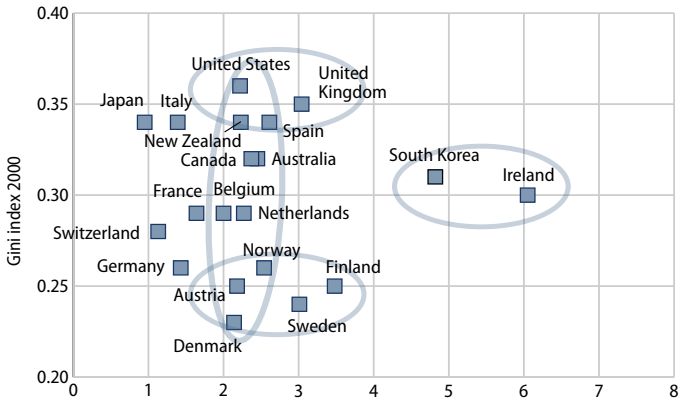
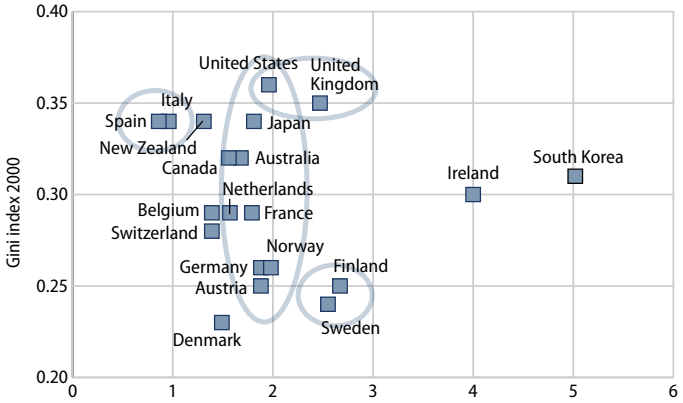


FIGURE 12b

Household disposable income inequality and average annual real productivity growth (GDP per hour, 1994–2007) for 20 high-income countries



Source: For the Gini index, see Figure 6. Author's calculations based on data from the Organisation for Economic Co-operation and Development, "Database on Income Distribution and Poverty"; Organisation for Economic Co-operation and Development, "National Accounts Data"; and the EU-KLEMS Database. For the definition of measurable productivity, see Figure 10c.

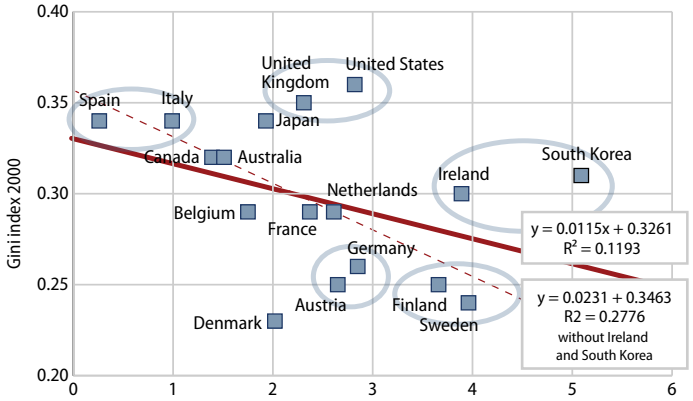
In Figure 12c, the Gini index for disposable household income is set against our measurable productivity-growth indicator. Interestingly, when the poorly measured sectors are excluded—mainly finance, business services, health and education, and other government activities—a negative relationship appears between income inequality and productivity growth, which is even stronger if South Korea and Ireland are omitted, as they are arguably special cases over this time period. Figure 12c shows that, using measurable labor productivity, the higher the income inequality, the lower the 1994–2006 rates of growth. (see the dashed trend lines)

A widely accepted claim in the United States and the United Kingdom is that resources must flow to those who are most successful to provide the work and investment incentives that stimulate output and employment growth. If this is correct, the growth in top incomes should be associated with higher productivity over time and across countries. As noted earlier, recent studies have found little or no empirical support for this so-called payoff-to-top-incomes hypothesis. This report's approach to this question is shown in Figures 13 and 14.

Figure 13 plots the standard measure of productivity—GDP per hour—against the 1 percent share for the United States from 1980 to 2011. As the figure shows, the rates of growth of both indicators were nearly identical between 1980 and 1986, and this was also the case for the 1970–1980 period, which is not shown on the figure. But the top income share surged after 1986, showing unequivocally that the growth of the top 1 percent share was far greater than the growth in economy-wide productivity: Indexed at 100 in 1980, the cumulative increase of top income shares reached 224 in 2007, compared to just 159 for productivity.

FIGURE 12c

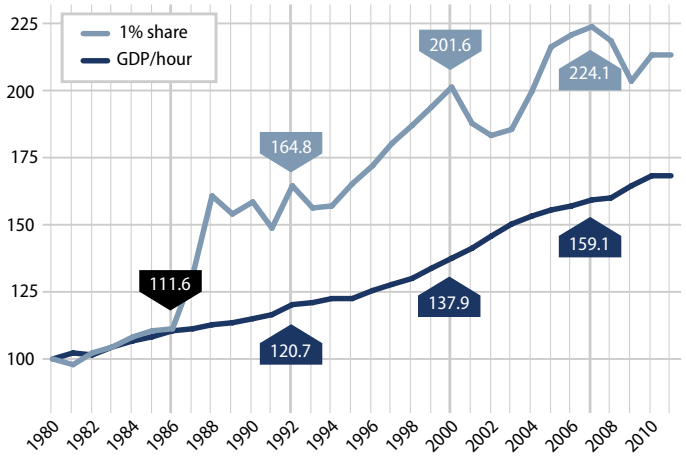
Household disposable income inequality and average annual real measurable productivity growth (measurable GDP per hour, 1994–2007) for 15 high-income countries



Source: For the Gini index, see Figure 6. Author's calculations based on data from the Organisation for Economic Co-operation and Development, "Database on Income Distribution and Poverty"; Organisation for Economic Co-operation and Development, "National Accounts Data"; and the EU-KLEMS Database. For the definition of measurable productivity, see Figure 10c.

FIGURE 13

U.S. growth in real productivity (GDP per hour) and top incomes (1 percent share), 1980–2011



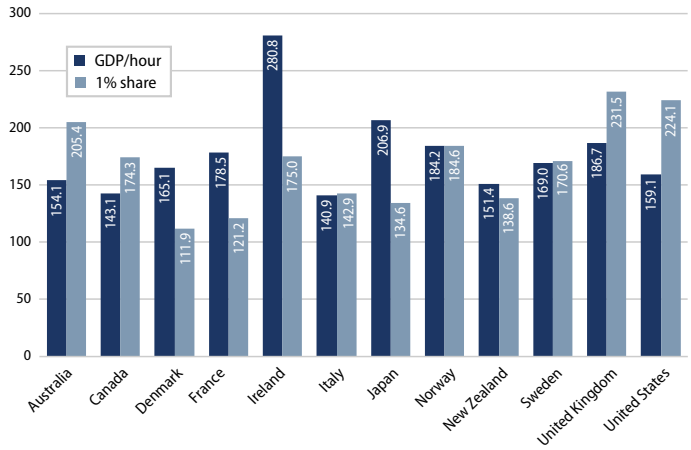
Note: * indicates average percent change over the period

Source: Author's calculations based on data from Organisation for Economic Co-operation and Development, "National Accounts Data for GDP per hour"; Congressional Budget Office, "Trends in the Distribution of Household Income Between 1979 and 2007" (2011).

It might be argued that productivity might conceivably have been even worse had it not been for the explosion in the top 1 percent share. This cannot be formally tested here, but if that were generally so, countries with greater increases in top income shares should show the highest rates of productivity growth.

FIGURE 14

Cumulative productivity growth and top income share growth for 12 high-income countries, 1980–2007



Source: The 1 percent shares are taken from the World Top Income Database. Cumulative productivity is calculated from the Organisation for Economic Co-operation and Development, "National Accounts Data."

For this reason, Figure 14 reports the growth in the top 1 percent share and productivity growth for 12 high-income countries between 1980 and 2007. The figure shows no support for this top-income-growth-to-productivity-growth conjecture. The United States, with a cumulative 124.1 percent increase in the top 1 percent share, was second only to the United Kingdom (131.5 percent). But U.S. productivity growth was just 59.1 percent, which was lower than the growth rates of all other countries except New Zealand, at 51.4 percent; Italy, at 40.9 percent; Canada, at 43.1 percent; and Australia, at 54.1 percent.

In sum, Figures 12 through 14 confirm the general finding in the recent literature that there is little or no relationship between income inequality and economic growth in the rich countries in recent decades. Indeed, the evidence in Figure 12c, which looks at measurable productivity and the Gini index, and Figure 14, which shows the relationship between standard productivity and top income shares, suggest, if anything, a negative relationship: Countries with higher levels of inequality (see Figure 12c) and higher increases in inequality (see Figure 14) tend to display lower productivity growth.

This section has confirmed that the empirical evidence does not support the view that rich countries tend to have higher economic performance with more laissez-faire, high-inequality economies. But in the final analysis, the question this report asks is not whether moderately more inequality or moderate increases in inequality are good or bad for growth but rather whether America's transition to extreme inequality is likely to promote growth and economic welfare for the broad middle class and those who still aspire to that status. The key issue for widespread increases in economic welfare is the extent to which growth, whether fast or slow, is shared with the vast majority of working families.

Section 7: Shared growth—the United States gets a failing grade

The reason we care about economic growth is presumably because it will be widely shared, improving the material quality of people's lives. As The Heritage Foundation's Terry Miller has explained:

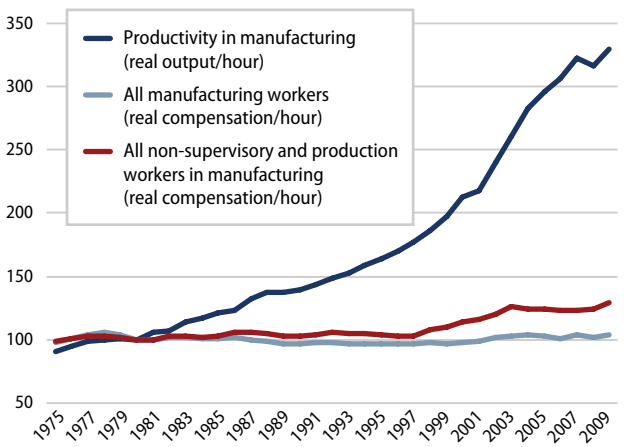
> *All around the world, the true cost of lost economic freedom isn't just slower economic growth but poorer performance on social indicators such as health, education, poverty reduction and environmental protection. Freer economies are better able to achieve such progressive social goals than are economies that rely more on government regulation and centralized control.*[98]

If the ultimate yardstick is the sustainable well-being of a country's people, a country's economic performance must depend, at the very least, on how output growth translates into growth in typical—median—household disposable income. In this regard, how has the United States performed under the laissez-faire experiment? Lawrence Mishel, president of the Economic Policy Institute, has shown that median hourly compensation of production and other nonsupervisory workers in the private economy increased in tandem with economy-wide productivity growth from 1947 to 1973, but a gap between the two developed in the late 1970s and increased progressively through 2011.[99] According to Mishel, between 1947 and 2010, cumulative productivity had increased by 254 percent, while median compensation had risen by just 113 percent. Nearly all of the latter occurred prior to the early 1980s.[100]

To compare U.S. performance on the sharing of productivity gains with other rich countries, data limitations make it necessary to limit the focus to manufacturing. Indexed to 1980, Figure 15 plots the cumulative growth of manufacturing productivity, real average compensa-

FIGURE 15

Productivity and worker compensation growth in U.S. manufacturing, 1975–2009



Source: Author's calculations based on U.S. Bureau of Labor Statistics, "International Comparisons of Hourly Compensation Costs in Manufacturing, 1975–2009," Production Workers Time Series Tables. Hourly compensation costs include total hourly direct pay, employer social insurance expenditures, and labor-related taxes.

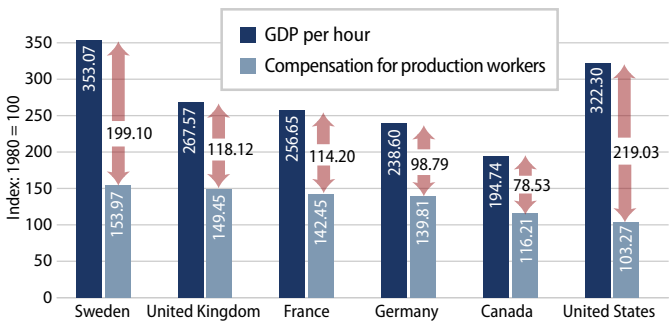
tion per hour for all manufacturing workers, and real average compensation for the narrower category of production and nonsupervisory workers between 1975 and 2009. Despite the use of average compensation, which should grow faster than the median in a period of rising inequality, this figure for manufacturing looks strikingly similar to Mishel's figure for the entire economy, with productivity and average compensation tracking each other in the 1970s but opening into a gigantic gap by the 2000s. While productivity increased by 229 percent between 1980 and 2009, the cumulative growth in average compensation was just 29 percent, and production/nonsupervisory compensation growth was just 4 percent.[101]

Interestingly, the other five countries in the comparison group also show large productivity-compensation gaps taking off after 1980. The explanation for the timing of this pattern of decoupling between productivity and worker compensation deserves much future study but is likely to be explained in part by the same worsening of what economists call "terms of trade" faced by American workers: Prices of the products that make up most of households' costs of living—food and energy, for example—are rising faster than overall output, which includes declining prices for information technology and many manufactured goods.

But for the purposes of this report, there are two notable findings from this international comparison. Figure 16 shows that U.S. manufacturing production worker-compensation growth between 1980 and 2007, at slightly more than 3 percent, was a small fraction of the 54 percent growth workers enjoyed in Sweden, the 49 percent growth in the United Kingdom, the 42 percent growth in France, and the 40 percent growth in Germany. Even Canadian workers had a cumulative growth in compensation—16 percent—that was more than twice that of U.S. workers. This poor showing on real compensation growth in America is particularly striking since, as Figure 16 shows, manufacturing productivity growth was by far the highest in the United States.

FIGURE 16*

Cumulative manufacturing productivity growth and real manufacturing compensation growth in six high-income countries, 1980–2007



Source: Author's calculations based on U.S. Bureau of Labor Statistics, "International Comparisons of Hourly Compensation Costs in Manufacturing, 1975–2009," Production Workers Time Series Tables.

In short, the payoff to productivity growth in compensation growth for U.S. manufacturing workers, and, by extension, U.S. middle-class households, has been negligible. This was a dramatically different experience from the productivity sharing that took place in the pre-1973 economic Golden Age in the United States and is equally distinct from the post-1980 experience of rich European countries.

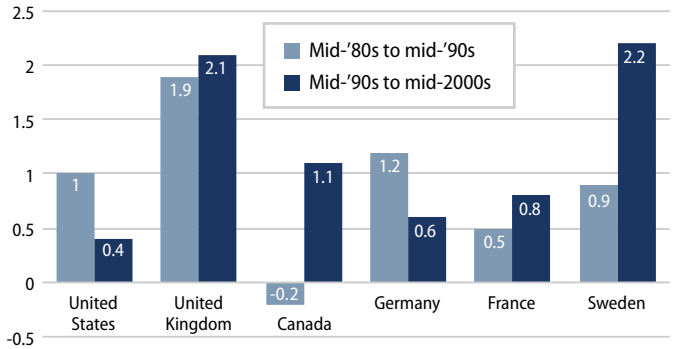
It is worth concluding with evidence on two additional dimensions of U.S. economic performance in the post-1980 Age of Inequality. At the household level, the payoff to productivity growth can be decomposed into two parts: the change in real household incomes and the number of hours that household members must work to attain this income. This report has focused on inequality and its change over time, but standards of living depend mainly on levels of household income and their changes over time.

Figure 17 presents the change in real median household income for the United States with the same five other rich countries that appeared in previous figures, with the results shown for the first and second parts of the period—the mid-1980s to the mid-1990s and the mid-1990s to the mid-2000s. The 1980s and early 1990s were characterized by slow median income growth for most countries, and the figure shows that apart from the United Kingdom, with median income growth of 1.9 percent, only Germany, with growth of 1.2 percent, did better than the United States, which experienced just a 1 percent annual increase in real median household income growth. But despite the much-improved U.S. productivity performance after the mid-1990s, this figure shows that the typical U.S. household saw income growth of just 0.4 percent, far below that of Sweden (2.2 percent), the United Kingdom (2.1 percent), Canada (1.1 percent), France (0.8 percent), and Germany (0.6 percent).

How hard did households have to work to get this meager 0.7 percent average increase—the average of 1 percent and 0.4 percent—in real household incomes between the early 1980s and mid-2000s compared to other rich countries? A rough idea is provided by Figure 18, which shows the average hours of working-age adults in these six countries in 1980 and 2002. The answer is that U.S. workers increased their work hours dramatically, while every other country except Canada cut theirs. By 2002, the

FIGURE 17

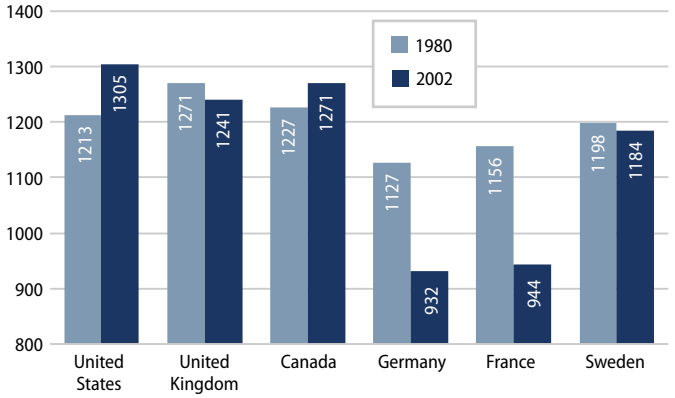
Trends in real median household income for six high-income countries, mid-1980s to the mid-2000s



Source: Organisation for Economic Co-operation and Development, "Growing Unequal" (2008).

FIGURE 18

Average annual hours worked per working-age adult for six high-income countries, 1980 and 2002



Source: Richard B. Freeman and Ronald Schettkat, "Marketization of household production and the EU-US gap in work," Economic Policy 20 (41) (2005): 6-50.

average U.S. adult was working 1,305 hours per year, compared to 1,184 hours in Sweden, 944 in France, and 932 in Germany. Much of these differences are accounted for by female work patterns, but the point is that the relatively paltry increase in American household median market incomes in the post-1980 period was attained at the price of many more hours of market work by American families than in these other affluent countries.[102]

Section 8: Conclusion—back to shared growth?

This report has argued that the United States experienced a profound ideological shift from, in the late renowned economist Albert Hirschman's terms, "public action" to "private interests."[103] Beginning in the late 1970s, there were increasingly strong collective preferences for smaller government and a greater reliance on markets. By the early 1980s, there had been a considerable public policy shift in response to this ideological swing to the right. Taxes were cut, especially for those with high incomes. Product markets were deregulated, especially finance, communications, and transportation. Executive compensation in large corporations was freed from earlier constraints, as maximization of shareholder value became the mantra in corporate governance. With the disappearance of labor unions, almost no private-sector employer had to bargain collectively with its workers. And the legal minimum wage and the safety net unraveled, especially after the mid-1990s, for those without work. This was the great American laissez-faire experiment.

Not coincidentally, one of the most striking findings in this report was the break in nearly every data series around 1980—the beginning of this great experiment in market-friendly public policy. After moving in tandem with the rest of the distribution before 1980, the top income share exploded. (see Figure 1) While top incomes and productivity moved together before 1980, a yawning gap developed over the course of the next three decades. (see Figure 14) This was also the case for hourly compensation and productivity. (see Figure 15) The financial sector's share of total U.S. compensation was about average in comparison to 15 other rich countries in the 1970s, but by the late 1990s, the U.S. financial sector took a higher share of national income than did the financial sectors of any other major country in the affluent world. (see Figure 7)

This grand experiment in market-friendly public policy was motivated by the belief that market-friendly policies and institutions would ignite growth through increased effort, investment, and entrepreneurial risk taking, and the result would be a new shared growth as jobs and incomes trickled down to households throughout the income distribution.

In the aftermath of the experiment, America got extreme inequality and small government. (see Figure 9) What it did not get was a new golden age of strong growth shared with the vast majority of households. There is no evidence that the extreme inequality has produced anything but mediocre growth. (see Figures 10a, 10b, and 10c and 11a and 11b) Nor is there any compelling evidence that across rich countries, greater inequality paid off in higher growth. (see Figures 12a, 12b, and 12c) And there is certainly no evidence that the United States shared much of its wealth with the middle class (see Figures 1 and 3), or with the workers who produced it. (see Figures 15 and 16) Indeed, despite rather impressive productivity gains in manufacturing between 1980 and 2007, average inflation-adjusted production-worker hourly compensation essentially stood still, increasing by just 3 percent. Finally, while American households have seen much more modest increases in real incomes than other rich countries since the mid-1990s, they have paid for it with many more hours of market work than households in other affluent countries.

What are the prospects for greater shared growth in the near future? On the positive side, public policies since the presidential election of 2008 have edged away from the policies emblematic of the laissez-faire experiment. Several minimum-wage increases have been legislated at the federal level, and many states and municipalities have acted on their own to increase the legal minimum wage. Through its appointments, the Obama administration has attempted to make the National Labor Relations Board friendlier to labor unions. Higher tax rates for top-income households are back on the agenda, and there have been some modest but positive steps in the direction of reregulating the financial sector and reducing the risk taking of financiers and the ability of CEOs to set their own pay. Whether these will be meaningful interventions remains to be seen.

But in addition to these and other policy and institutional changes, it needs to be stressed that growth and the sharing of it in the future requires an increasingly high-skilled workforce. While much attention has been focused on education since 2000 by the Bush and Obama administrations, a comparable increase in the resources necessary to support universal preschool education and highly paid teachers in all school districts—a necessary condition to attract the best and brightest—has not been forthcoming in recent decades.

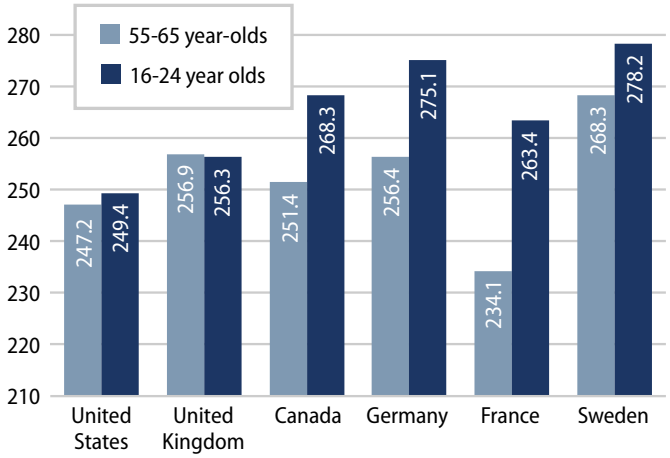
Because of the importance of shifting away from an economic culture of short-term financial risk taking to long-term investment in human and physical capital, I conclude with a final reference to data—international comparisons of adult skills by the OECD—that are truly terrifying if you believe worker skills matter greatly for the future of shared growth.

Based on results for 2012, Figure 19 reports average math, or numeracy, proficiency for those educated in the 1960s—those currently about 55 to 64 years old—with the proficiency of those educated in the 2000s—who are now roughly 16 to 24 years old—for our six affluent countries. America's performance for those educated in the 1960s is not great: In fifth place, America's score of 247 was far below that of the top performer among these countries, Sweden, which had a score of 278. But older Americans are at least within striking distance of their peers in Canada, the United Kingdom, and Germany. On the other hand, this figure shows that America's young people, those educated in the 2000s, come in dead last, with a score far below the scores of France, Germany, and Sweden. In fact, the highest-scoring countries, South Korea and Finland, are countries where the central government has a strong hand in education policy.[104] Is it a coincidence that these more highly regulated countries that shunned market-friendly and small-government policies increased their skills advantage over the laissez-faire enthusiasts, the United States and the United Kingdom?

FIGURE 19

Prospects for future growth and prosperity

Average numeracy proficiency in 2012 for those educated in the 1960s (55- to 65-year-olds) and the 2000s (16- to 24-year-olds) in six high-income countries



Source: Organisation for Economic Co-operation and Development, "OECD Skills Outlook 2013: First Results from the Survey of Adult Skills" (2013), Table A3.2(N), p. 272.

Much more is required for strong shared growth than good and improving worker skills, and among these necessary ingredients belong strong incentives for work, investment, and entrepreneurial risk taking. But with top incomes increasing decade after decade from the already high 1980 levels, in combination with three decades of stagnant hourly wages and household incomes and an increasingly disadvantaged workforce by international standards, it's hard to imagine a bright future for shared growth. The place to start is with the recognition that the market fundamentalism and extreme inequality of the laissez-faire experiment is not a recipe for 21st century shared growth and middle-class economic well-being.

About the author

David R. Howell is professor of economics and public policy at The New School and a research associate at The New School's Schwartz Center for Economic Policy Analysis and the University of Massachusetts Amherst's Political Economy Research Institute. Howell's recent published work has focused on the effects of labor-market institutions on wage and employment outcomes in North American and European economies. He directs the doctoral program in public and urban policy at The New School.

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***Correction, December 4, 2013:** Figure 16 in this report incorrectly stated the amounts for 2007, which are now updated. The report is also updated to correctly state that U.S. manufacturing production worker-compensation growth was slightly more than 3 percent between 1980 and 2007.*

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