

INCOME INEQUALITY

The Stanford Center on Poverty and Inequality

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KEY FINDINGS

- When disposable-income inequality is measured across 20–35 years of survey data, the consistent result is that the U.S. has the highest level of disposable-income inequality among rich countries.
- The U.S. has the largest “social distance” gap between households at the 90th percentile and households at the 10th percentile in the income distribution. The U.S. has the highest 90th percentile point, meaning our rich are indeed better off than those in other countries, as almost everyone expects. But our poorest, at the 10th percentile, are also lower in real terms than are the poor in all other comparison countries save Italy.
- Some countries have experienced periods of falling, as well as rising, inequality over the last three decades. The simple, but important, conclusion to draw is that rising income inequality is not inevitable. Policy and markets can both make a difference.

The explosion of research on income inequality in the United States has uncovered key facts about the sources and patterns behind the takeoff. We know, for example, that the long-term trend in income inequality has been driven by two main factors: a surge at the top end in income and wealth; and, at the bottom end, a combination of reduced wealth and slower income growth during good times and a fall in income during bad times. We likewise know a lot about the role of education, technology, deunionization, and globalization in bringing about the takeoff in income inequality in the U.S.

Although there has also been much cross-national comparative research on income inequality, this line of research is somewhat less well-known and will therefore be the focus of our article. The comparative approach works well to expose the distinctiveness of the U.S. We live, of course, in a famously exceptional country, but nowhere is the U.S. more exceptional than in its level of economic inequality.¹

By examining cross-nationally comparable measures of income inequality, we can move beyond the often parochial debates about U.S. inequality and come to appreciate how our distinctive institutions create distinctive outcomes. Also, by comparing recent trends in inequality across several nations, we can better understand what U.S. policy has and has not achieved and, more importantly, how it might be made more effective. We can also better understand the effects of extreme inequality on mobility, economic

growth, and other outcomes we value.

Measurement

We measure income inequality in terms of disposable cash income (DPI), which is adjusted for household size and (a) includes all types of money income, (b) subtracts out direct income and payroll taxes, and (c) reflects all cash and near cash transfers, such as food stamps, cash housing allowances, and refundable tax credits (e.g., the Earned Income Tax Credit [EITC]).² We measure inequality in DPI with the Gini coefficient and the ratio of the 90th to the 10th percentiles in the distribution. The Gini coefficient measures inequality on a scale from 0 to 1, with higher numbers representing greater inequality. We also measure redistribution by comparing the Gini for pre-tax and transfer “market income” (MI) to that of DPI. By calculating the Gini for market income, we are able to “take out” the direct role of the government, via taxes and transfers, in influencing inequality.

Our analyses are based on 10 rich nations with well-established welfare states: the U.S.; the Anglo-Saxon nations of Australia, Canada, the United Kingdom, and Ireland; France, Italy, and Germany; and two Scandinavian countries, Norway and Sweden. We employ data from the LIS data set (formerly the Luxembourg Income Study) and the OECD Income Distribution Database (IDD).³ In an online appendix table, we expand the analyses of MI and DPI inequality to 33 nations, including several middle-income countries (Online Appendix Figure A1).

Cross-National Differences in Absolute and Relative Inequality

We begin by comparing the level of inequality across our 10 countries for the latest year that is available in the LIS. We do so for both market income and disposable personal income.

The countries in Figure 1 are ranked from low to high by the Gini coefficient for disposable income. In all countries, the Gini coefficient for disposable income exhibits less inequality than the Gini coefficient for market income, as taxes and transfers redistribute income to lower-income households. The difference between the Gini coefficients for market income and disposable income, is in this sense, a measure of the level of redistribution in each country. We find that the U.S. and Canada have the least redistribution, but the disposable-income Gini for Canada is substantially below that for the U.S. because Canadian market-income inequality is much lower. As compared to other countries in Figure 1, we see that the U.S. has very high market-income inequality, although Ireland has yet higher market-income inequality and Italy, the United Kingdom, France, and Germany have roughly the same level of market-income inequality as the U.S. The U.S. nonetheless ends up with the highest disposable-income inequality because it engages in relatively little redistribution. Although

Ireland has considerably more market-income inequality than the U.S., it engages in substantially more redistribution and thus ends up with substantially less disposable-income inequality.

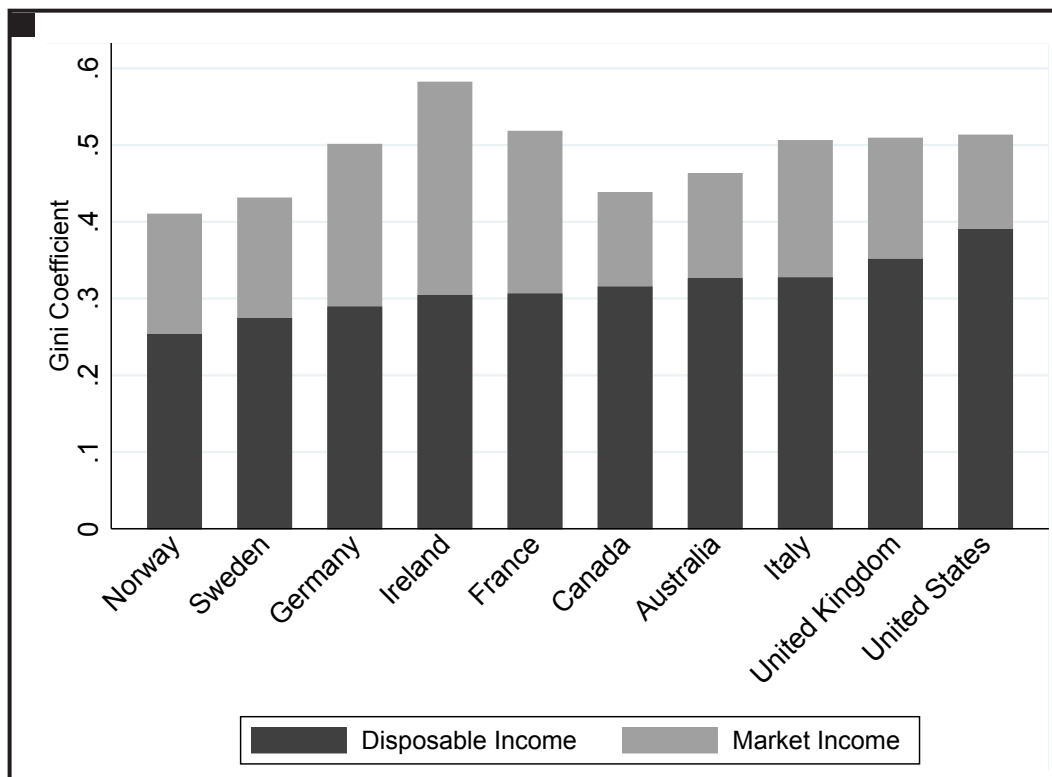
The U.S. has had the highest level of disposable-income inequality among rich countries for some time. When disposable-income inequality is measured across 35 years of LIS data or 20 years of IDD data, the consistent result is that the U.S. has the highest level of disposable-income inequality among rich countries, even when the comparison is extended to include a more expansive set of countries than those in Figure 1 (see Online Appendix Figure A1 for the expanded comparison). As shown in Figure A1, only the middle-income countries of Russia, Turkey, Mexico, and Chile have higher disposable-income inequality than the U.S. The simple conclusion: The U.S. is the world champion of disposable-income inequality among rich nations.

The foregoing measures of income inequality are not, of course, affected by cross-national differences in mean income. Critics of this relative approach to inequality often argue that absolute living standards should also be taken into account. Because the U.S. is richer than almost all other

OECD countries, those at a given percentile in the income distribution—say, the 10th percentile—may well be better off in absolute terms than those at the same percentile in other rich countries.⁴

This proposition can be assessed with LIS data by using purchasing power parities to convert all country incomes into equivalent U.S. dollars.⁵ Using purchasing power parities allows us to compare real levels of well-being at various points in the income distribution across nations. For this purpose, perhaps the most basic measure of real levels of inequality is the decile ratio, which shows the “social distance” gap between the household at the 90th percentile and the household at the 10th percentile in the income distribution.

FIGURE 1. Market and Disposable Income Inequality by Country Using the Gini Coefficient



Note: 2012 or latest year available. Disposable income is market income plus transfers and minus taxes. Source: LIS (formerly the Luxembourg Income Study) (LIS; www.lisdatacenter.org) and The Organisation for Economic Co-operation and Development's (OECD) Income Distribution Database (<http://www.oecd.org/social/income-distribution-database.htm>).

When this approach is taken, we find that the U.S. has the highest decile ratio (see Figure 2). It also has the highest 90th percentile point, meaning our rich are indeed better off than those in other countries, as almost everyone expects. But our poorest, at the 10th percentile, are also lower in real terms than are the poor in all other countries save Italy.⁶ The high decile ratio in the U.S. is generated, then, not just because the rich are especially well off, but also because the poor are especially poor. The combined effect is to generate a U.S. decile ratio of more than 6, meaning the incomes of those at the 90th percentile are, on average, six times higher than are those at the 10th percentile.⁷ The next highest ratios are below 5 in Australia and Canada, while the French, Swedes, and Norwegians have decile ratios below 4. Indeed, our decile ratio is roughly twice that of Norway, whose level of GDP per person is just about the same as ours. The poor in Norway (i.e., 10th percentile) enjoy more than twice the real incomes of the poor at our 10th decile.

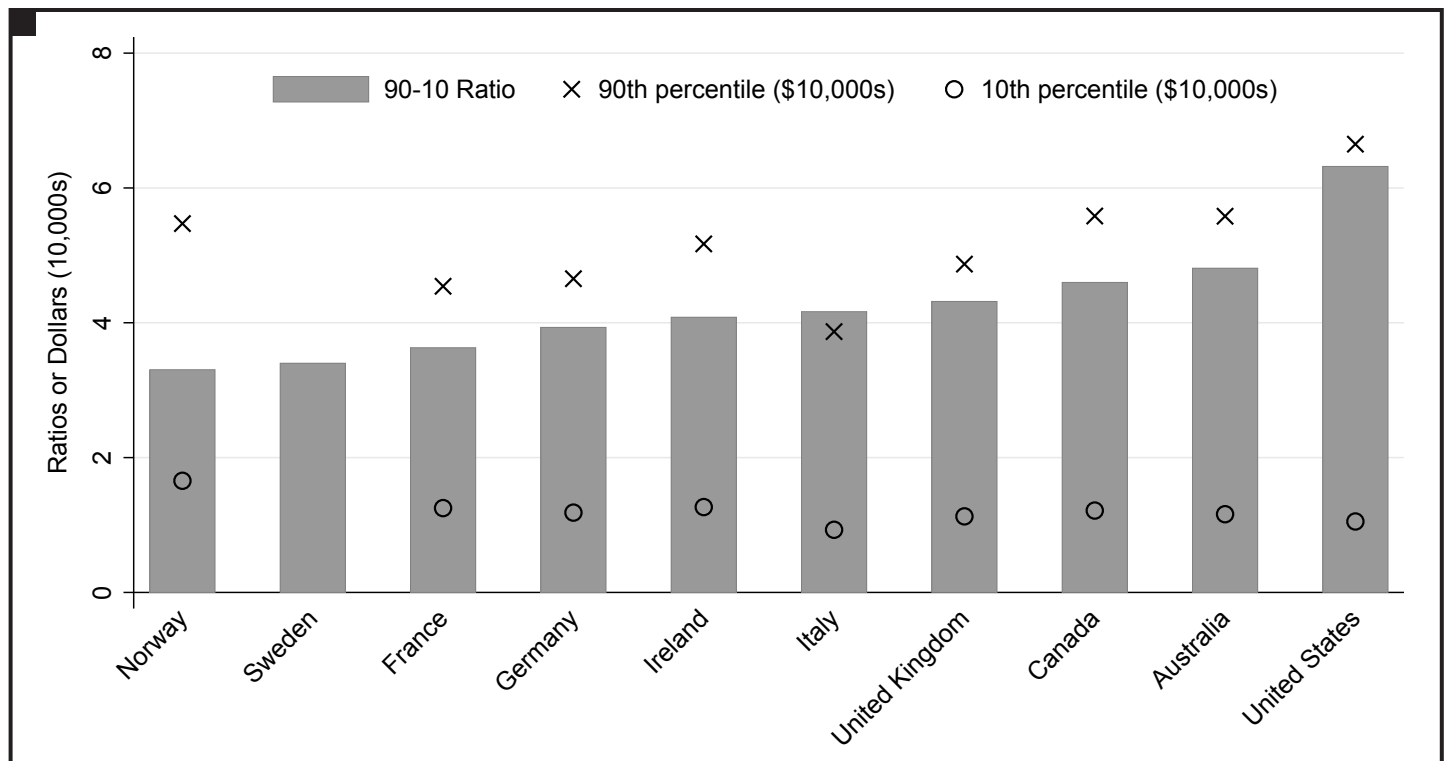
The U.S. is, therefore, the most unequal rich country on earth, a conclusion that holds equally for absolute or relative measurement. Were we always the most unequal? The next section addresses this question.

Trends in Income Inequality

Table 1 and Figure 3 present changes in disposable income inequality from the 1980s through 2010, the earliest and latest comparable information we have on these countries. We find that the U.S., while starting from a very high level of inequality, has also experienced one of the largest increases in inequality since 1979 (18%). The United Kingdom has seen a similar rise (21%), and Australia (17%) and Germany (17%) are close behind the U.S. (Table 1). But Sweden, for which data are first available in 1981, has had the fastest increase in both absolute and relative inequality, though from a very low base. We also see that France, Germany, and Sweden ended up with roughly the same level of inequality in 2010, despite their very different pathways since 1980 in achieving that level (Figure 3). Indeed, France has experienced an 11 percent *decrease* in inequality (since 1978), while Germany and Sweden have experienced an increase during that period. The U.S. data suggest a return to rising income inequality after a recession-induced pause, whereas post-2010 data for other nations are not yet available for comparison.⁸

One lesson from Figure 3, also shown in Table 1, is that some countries—in particular, Sweden, the United Kingdom, Ire-

FIGURE 2. Income Inequality by Country Using the 90th and 10th Percentiles in U.S. Dollars



Note: Data are from 2010 or latest year available. Income definition is disposable household income from LIS. Income is in equivalent dollars using the square root of family size as the equivalence scale. Data for all countries except Sweden come from LIS. The data for Sweden come from OECD, but the OECD does not report the levels for the 90th and 10th percentiles, just the ratio. Figures are adjusted for purchasing power parity (PPP) differences using OECD PPP numbers. Source: LIS; OECD.

land, and France—have experienced periods of falling, as well as rising, inequality over the last three decades. The simple, but important, conclusion to draw is that rising income inequality is not inevitable. Policy and markets can both make a difference.

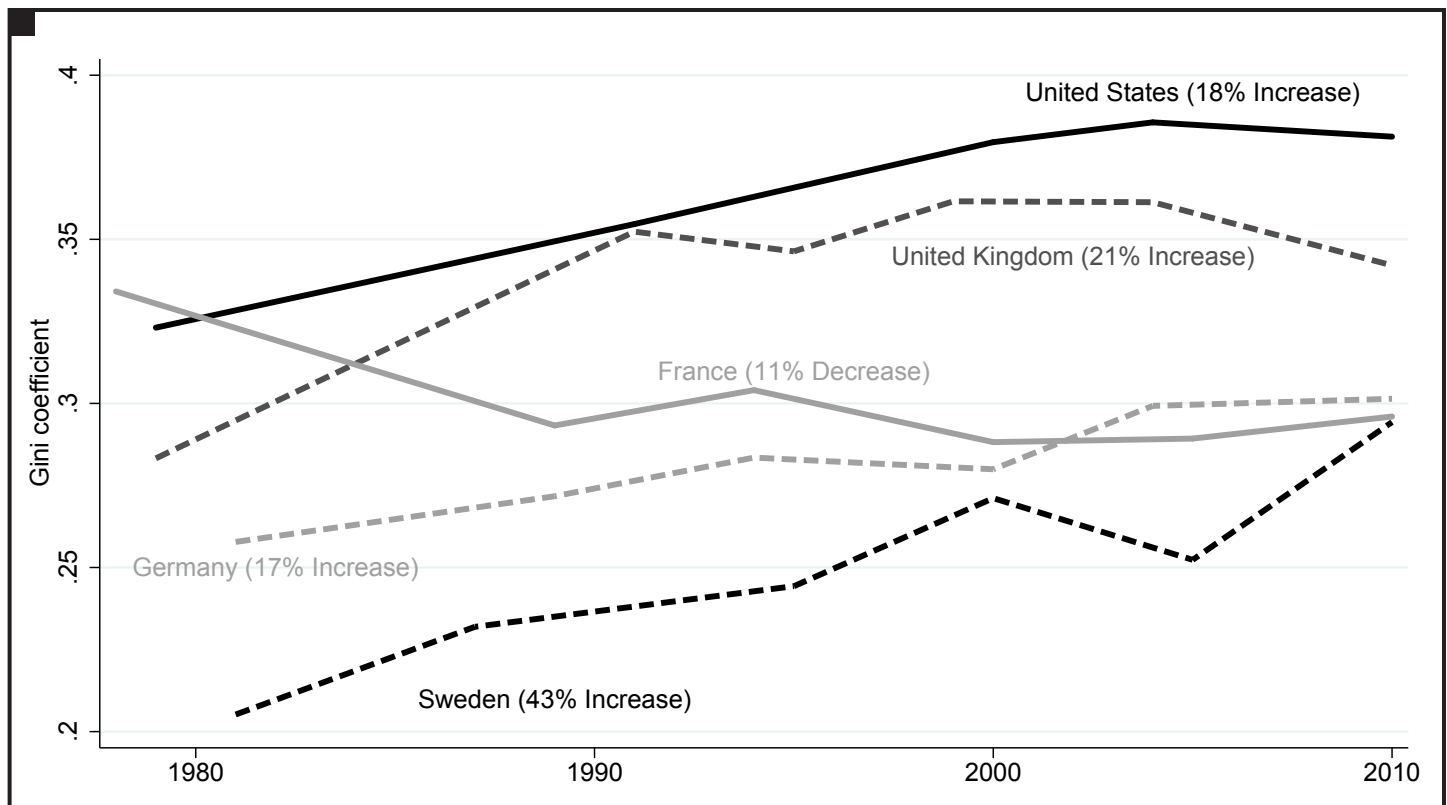
But the dominant result is, of course, one of rising inequality. The descriptive source of this trend is twofold: at the top end, there has been a surge in high incomes; and at the bottom end, there has been much slower income growth during good times and, in some cases, a fall in income in bad times. Further, changes in labor and capital markets since 2000 have combined to narrow and shrink the middle class in the U.S. and in other nations.⁹ In OECD countries, taxes and benefits have historically been effective in reducing inequality, especially in the decade prior to the Great Recession. In the midst of the Great Recession, benefits for the unemployed and other redistribution measures managed to at least partially stem the rise in inequality generated by the market. But now, as we finally emerge from the Great Recession, the fear is that the effect of taxes and benefits has become weaker, accelerating the overall upward trend in disposable-income inequality. This pattern is visible in some, but not all, rich countries.¹⁰

TABLE 1. Trends in Gini Inequality Since 1978

	First Year	Last Year	Absolute Change	Percent Change
United States	1979	2010	0.058	18.0%
Australia	1981	2010	0.050	16.7%
Canada	1981	2010	0.031	10.3%
France	1978	2010	-0.038	-11.4%
Germany	1981	2010	0.044	16.9%
Ireland	1987	2010	-0.026	-7.8%
Italy	1989	2010	0.007	2.3%
Norway	1979	2010	0.022	8.7%
Sweden	1981	2005	0.089	43.4%
United Kingdom	1979	2010	0.059	20.8%

Note: Income definition is disposable household income. Income is in equivalent dollars using the square root of family size as the equivalence scale. Source: LIS; OECD.

FIGURE 3. Trends in the Gini Coefficient Using Disposable Income



Note: Income definition is disposable household income. Income is in equivalent dollars using the square root of family size as the equivalence scale. Source: LIS; OECD.

Income and Wealth

We have concluded to this point that the U.S. is the “most unequal rich country on earth.” Does this conclusion hold when the focus shifts to wealth inequality? Although Gabriel Zucman covers wealth inequality in detail in the next chapter of this report, a brief head-to-head comparison of the wealth and income results will be revealing here.¹¹ The OECD has garnered comparable wealth inequality data that allow us to examine the income and wealth shares of the top 10 percent in each of our major nations except Ireland (see Figure 4).¹²

We clearly see that the U.S. is far and away the country with the most unequal wealth distribution. The top 10 percent in the U.S. have about 80 percent of all net worth, compared to 60 percent in Germany and Sweden, and 50 percent or less in each of the other nations. It follows that the U.S. not only has the weakest safety net but that the poor also have little in the way of personal savings to cushion drops in income or to meet unexpected expenses. The top decile, by contrast, can easily self-insure against economic risks, afford its own health care and education, and opt out of public sector provision of social goods.¹³ This amassing of wealth, which has grown more unequal in recent years in the U.S., also allows

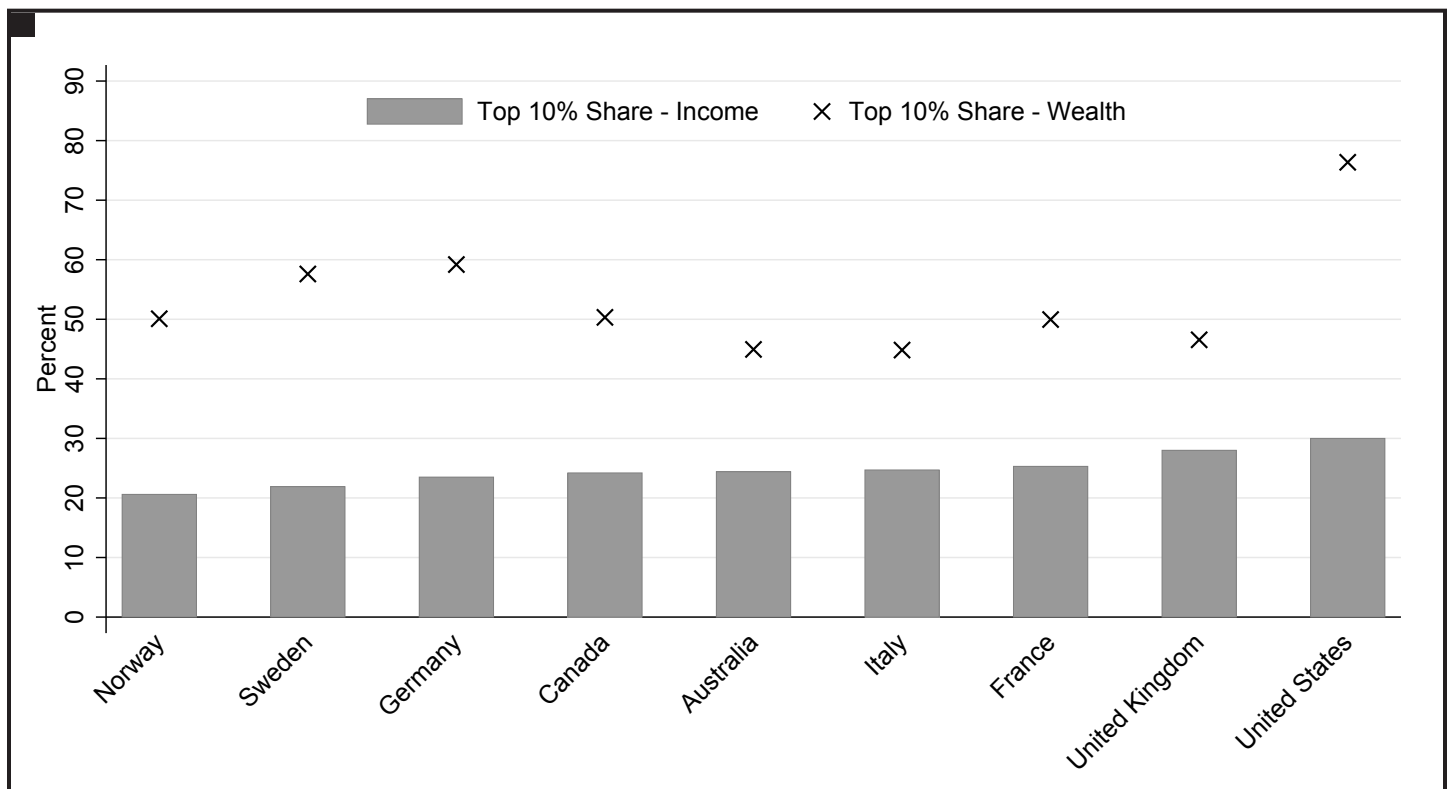
for large intergenerational transfers of wealth to assure the social position and status of one’s children.¹⁴

Why Do We See These Patterns?

The data observed here suggest that inequality is high and rising in most rich nations—especially, but not only, in the U.S. The drivers of these changes are rooted in several decades of globalization of trade, technological change, and the growth of both high- and low-end service jobs. Because labor markets have always been the heart of market income for middle class households, the foregoing changes—all of which have profound implications for the labor market—have had a major impact on earnings and incomes in the U.S. and elsewhere.¹⁵

These changes have implications for those at both the top and bottom of the labor market. At the top, the rise of high-demand business services and of winner-take-all markets dominated by the well-educated have led to substantial increases in earnings for the “winners,” thus leading to a pulling-away at the top. Meanwhile, at the other end of the labor market, wages of workers with low skills have not kept up, and manual jobs in goods production and distribution (manufacturing, assembly, and shipping) constitute a fall-

FIGURE 4. Income and Wealth Shares



Note: 2012 or latest year available.

Source: OECD. 2015. *In It Together: Why Less Inequality Benefits Us All*. Paris: OECD Press; Luxembourg Wealth Study (LWS).

ing proportion of total employment. In some countries (esp. Germany), “permanent employment” labor market institutions have been able to forestall widespread unemployment in these sectors, even since the Great Recession. But even in these countries, there are rises in inequality due to changes at the high end of the earnings scale.¹⁶ Because the U.S. is built around a low-wage market, with relatively high numbers of short-term and part-time jobs, the changes at the bottom of the labor market are especially important.¹⁷

We have also seen changes in income tax systems that have reduced marginal tax rates for high earners. According to the OECD,¹⁸ taxes and benefits have tended to redistribute less in the period from the mid-1990s up to the Great Recession. It follows that rising inequality is generated not just by institutional changes in labor markets, but also by declining redistribution.

Where to Go from Here?

As long as the U.S. relies almost exclusively on the job market to generate incomes for working-age families, economic changes that reduce the earnings of less-skilled workers will inevitably have a big negative effect on inequality among children and prime-age adults, the vast majority of whom have little wealth. This means that if the U.S. wishes to reduce inequality, it can either (a) alter its labor market institutions to ensure that there are more workers and that workers are paid better, or (b) alter its redistributive institutions to reduce its reliance on the job market.

If the U.S. fails to alter its policies in either of these ways, the implications of such inaction would seem to be clear. The high direct and indirect costs of inequality are now becoming widely recognized in public debates, both nationally and cross-nationally.¹⁹ Because of high inequality, U.S. economic growth and human capital growth have been lower and far below expectations. And social mobility in the U.S. is much lower than in other rich nations (as Miles Corak discusses in his chapter).²⁰ Although many economists favor globalization and free trade because—in the aggregate—the gains from

trade exceed the losses, the key problem under this formulation is developing institutions that allow the many winners (who pay lower prices for higher quality goods) to compensate the losers (whose jobs are lost to imports). The obvious point here is that—to date—the winners have not compensated the losers.

The further worry is that a high-inequality economy reduces the amount of social mobility and opportunity. As many have argued, inequality can affect growth and upward mobility by reducing educational opportunities for children from poor and lower-middle-class families, thus lowering their future earnings and incomes. It follows that inequality reduces social mobility and overall growth because of slow skill development.²¹ In the U.S., rich parents provide a “private safety net” for their children, thus circumventing the problems arising from low levels of public support for education, health care, or other institutions. This private safety net allows rich children to exploit opportunities and thus reduces mobility and economic growth.

Up to now, the U.S. has shown its indifference to high and rising levels of inequality, although the outcry for change has recently grown louder and more insistent. This brief report has made it clear that ever-rising inequality is not inevitable, that declining mobility is not inevitable, and that rich countries have in fact made choices about their labor-market policies and their levels of redistribution. Although the high levels of inequality in the U.S. are the residue of past choices, there have of course been historic moments in U.S. history in which new pathways have been charted and new policies and institutions have been introduced. We cannot rule out that a moment of this sort is nearing in which the U.S. adopts more progressive policies that reduce inequalities and promote the general welfare. ■

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NOTES

1. On American exceptionalism, see Kenworthy, Lane. 2015. "America is Exceptional... and Ordinary." *The Good Society*. Available at <http://lanekenworthy.net/america-is-exceptional/>.
2. In-kind transfers in the form of health and education benefits are not counted, nor are indirect taxes. For an analysis of cross-national income inequality that includes these items, see Garfinkel, Irwin, Lee Rainwater, and Timothy Smeeding. 2006. "A Reexamination of the Welfare State and Inequality in Rich Nations: How In-Kind Transfers and Indirect Taxes Change the Story." *Journal of Policy Analysis and Management* 25(4), 855–919.
3. Cross-National Data Center in Luxembourg, available at <http://www.lisdatacenter.org/>; OECD Income Distribution Database (IDD): Gini, Poverty, Income, Methods and Concepts, available at <http://www.oecd.org/social/income-distribution-database.htm>.
4. For instance, see Wilkinson, Will. 2009. *Thinking Clearly about Economic Inequality*. Policy Analysis, No 640. Washington, D.C.: Cato Institute. Available at <http://object.cato.org/sites/cato.org/files/pubs/pdf/pa640.pdf>.
5. Purchasing power parities (PPP) allow comparison of incomes across countries. Thus we are able to convert all income to U.S. dollars in order to compare incomes across countries. Our PPP data come from the OECD.
6. All data in Figure 2 come from LIS, except for Sweden, which comes from the IDD. The IDD only publishes the 90-10 ratio and not the actual values at the 90th percentile and 10th percentile.
7. See also Keeley, Brian. 2015. *Income Inequality: The Gap between Rich and Poor*. OECD Insights. Paris: OECD Publishing. Available at DOI: <http://dx.doi.org/10.1787/9789264246010-en>. He finds even bigger differences by examining average incomes in the top and bottom deciles.
8. LIS key figures, available at <http://www.lisdatacenter.org/lis-ikf-webapp/app/search-ikf-figures>.
9. Organisation for Economic Co-operation and Development (OECD). 2015. *In It Together: Why Less Inequality Benefits All*. Paris: OECD Publishing. Available at DOI: <http://dx.doi.org/10.1787/9789264235120-en>; Gornick, Janet, and Branko Milanovic. 2015. *Income Inequality in the United States in Cross-National Perspective: Redistribution Revisited*. LIS Center Research Brief (1/2015). Available at https://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Centers/LIS/LIS-Center-Research-Brief-1-2015.pdf; and Pew Research Center. 2015. "The Lost Decade of the Middle Class: Fewer, Poorer, Gloomier." Washington, D.C.: Pew Research Center. Available at <http://www.pewsocialtrends.org/2012/08/22/the-lost-decade-of-the-middle-class/>.
10. OECD, 2015.
11. See Fisher, Jonathan, David Johnson, Jonathan Latner, Timothy Smeeding, and Jeffrey Thompson. 2016. "Inequality and Mobility Using Income, Consumption, and Wealth for the Same Individuals." *Russell Sage Foundation Journal of the Social Sciences*, forthcoming.
12. The reader should be aware that the top income and wealth shares are each calculated from different databases, so that the top 10 percent are different households in each database. Fisher et al. (2016), in contrast, examine wealth income and consumption in the U.S. for the same persons.
13. Osberg, Lars, Timothy Smeeding, and Jonathan Schwabish. 2004. "Income Distribution and Public Social Expenditure: Theories, Effects, and Evidence." In *Social Inequality* (K. Neckerman, Ed.). New York: Russell Sage Foundation.
14. Yellen, Janet L. 2014. "Perspectives on Inequality and Opportunity from the Survey of Consumer Finances." Presentation to the Conference on Economic Opportunity and Inequality, Federal Reserve Bank of Boston. October 17, 2014. Boston. Available at <http://federalreserve.gov/newsevents/speech/yellen20141017a.htm> (last accessed December 5, 2015); Fisher et al. (2016).
15. Autor, David. 2014. "Skills, Education, and the Rise of Earnings Inequality Among the 'Other 99 Percent'." *Science* 344(1866), 843–851.
16. Haveman, Robert, Carolyn Heinrich, and Timothy Smeeding. 2011. "Policy Responses to the Recent Poor Performance of the United States Labor Market." *Journal of Policy Analysis and Management*, 31(1), 177–186.
17. National Employment Law Project. 2012. *The Low-Wage Recovery and Growing Inequality*. Data Brief. New York: NELP. Available at <http://www.nelp.org/content/uploads/2015/03/LowWageRecovery2012.pdf>.
18. OECD, 2015.
19. OECD, 2015; Organisation for Economic Co-operation and Development (OECD). 2014. "Focus on Inequality and Growth – December 2014." Paris: OECD. Available at <http://www.oecd.org/social/Focus-Inequality-and-Growth-2014.pdf>; Kenworthy, Lane, and Timothy Smeeding. 2014. "The United States: High and Rapidly Rising Inequality." *Inequality and Its Impacts, Volume 2* (Brian Nolan and Wiemer Salverda, et al., Eds.). New York: Oxford University Press.
20. See also Corak, Miles. 2013. "Income Inequality, Equality of Opportunity, and Intergenerational Mobility." *Journal of Economic Perspectives* 27(3), 79–102.
21. Figure 1.6 in OECD, 2015.