PAGE ONE ECONOMICS NEWSLETTER
the back story on front page economics

March ■ 2012

Gini in a Bottle: Some Facts on Income Inequality

David A. Lopez, *Research Associate*

"Equality of economic opportunity appeals to our sense of fairness…it also strengthens our economy."
—Federal Reserve Chairman Ben S. Bernanke, February 6, 2007

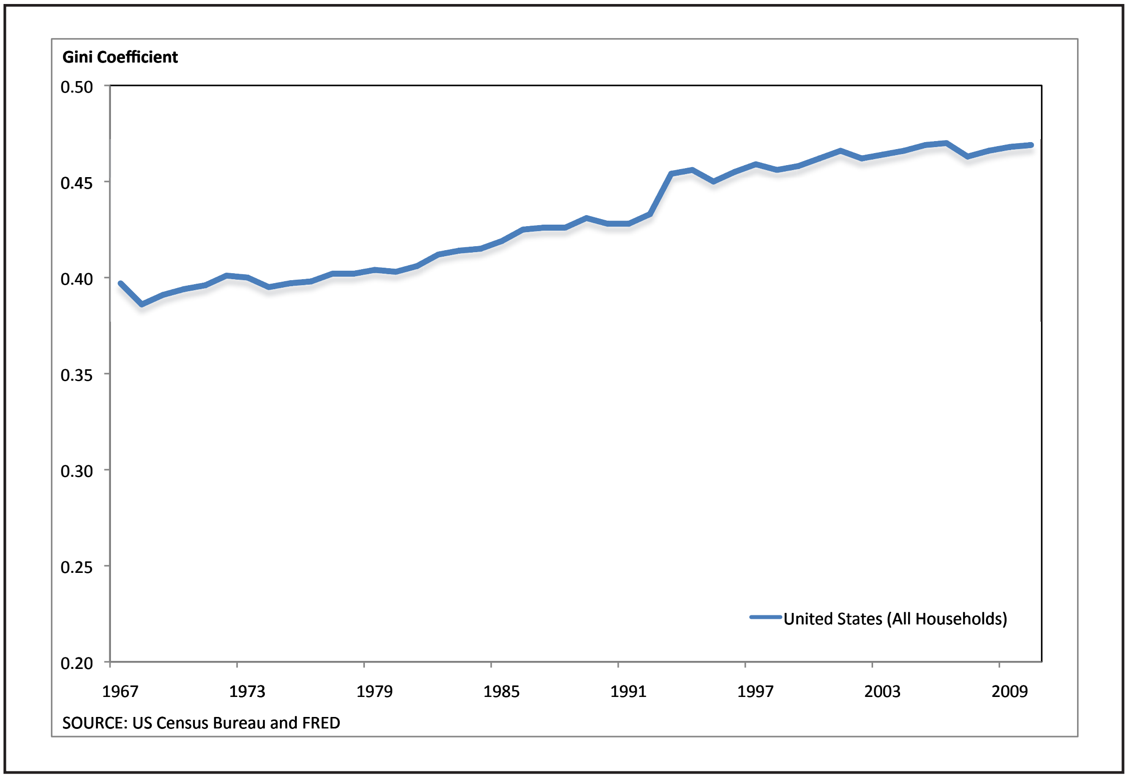
Income inequality has been rising in the United States. The recent recession may partially explain this phenomenon because higher unemployment and reduced working hours affect the incomes earned by many people during a downturn and weaker-than-expected recovery. Longer-term historical trends in income growth account for another part of it. The Congressional Budget Office (CBO) estimates that real (or inflation-adjusted) after-tax incomes[1] for the wealthiest 1 percent of Americans grew by 275 percent between 1979 and 2007 compared with 62 percent for the average household. Similarly, on a global level, income inequality rose in 17 of 22 developed countries (members of the Organisation for Economic Co-operation and Development) between the mid-1980s and the mid-2000s.

Understanding the concept of income inequality and its underlying causes is necessary before discussing policy options. A society with perfect income equality would be one where *every* individual earns the same amount of income. Inequality occurs when a greater portion of a society's income is earned by a certain share of the population.

Income inequality can be gauged in several ways.[2] The most common indicator, the Gini coefficient, provides numerical values between 0 and 1 to measure the disparity within an income distribution for a country. Higher values of the coefficient correspond to higher levels of inequality in a nation, and vice versa. For example, recent Gini coefficients were as low as 0.2 in traditionally egalitarian countries such as Sweden and Denmark; countries with historically greater levels of inequality (e.g., Chile and Mexico) had values closer to 0.5. The Gini coefficient in the United States is currently above 0.4 and rose by 18 percent from 1967 to 2010, as shown in the chart.

Economic theory suggests that some level of income inequality will always exist in society because people are paid according to their level of knowledge or skills. Essentially, this implies that a society's highest-paid individuals are generally its most productive.[3] From an efficiency standpoint, this is an ideal scenario for two reasons. First, such an economy would use its labor resources to full capacity. Second, differences in incomes would encourage less-productive individuals to increase their skills to achieve higher earnings.

In reality, the causes of inequality are more complex: Technology, less upward mobility for low-income families, rapid globalization, and institutional changes have all widened the earnings gap.[4] As the service sector has grown in developed economies, firms have increased their use of technology in the production process. A corresponding surge in demand for educated workers with specialized qualifications (e.g., in operating computers) then resulted in higher



wages for skilled labor relative to the average worker. To illustrate, Fed Chairman Ben Bernanke noted that the difference in earnings between college graduates and those with only a high school diploma rose from 38 percent in 1979 to 75 percent in 2006.

Various studies show that inequality also stems from rigid societal structures. Historically, gender and racial discrimination were some reasons for these income differences. More recently, limited intergenerational mobility—where an individual's background is strongly linked to his or her future income—has played a larger role in exacerbating the inequality gap. Statistics show that around 42 percent of American men in the lowest 20 percent of the income distribution who were born between 1957 and 1964 remained there, while only 8 percent reached the top quintile by about age 40. This trend may be explained by the fact that well-educated and high-earning parents can provide better development opportunities for their children, which then affect their future incomes.

By contrast, the effects of globalization, another possible cause of inequality, have been mixed. A rise in U.S. international trade activity over the past several decades has shifted a significant portion of low-skill jobs to other countries and reduced incomes of low-skilled workers relative to higher-skilled workers in certain industries. Globalization's impact on the overall rise in income inequality is still a subject of continued debate among economists though. In addition, certain economists have found that inequality levels did not change significantly with a greater inflow of foreign workers from more open labor markets.

Institutional changes (e.g., in job market trends and tax policy) may also play a role. A study by David Card showed that a decline in union membership since the 1980s could have accounted for a 15 to 20 percent rise in income inequality among male workers, especially those in middle-skill jobs. Other economists, such as Alan Krueger, have also echoed this observation. Meanwhile, although income tax rates remain progressive, changes in the capital gains tax rate decreased the tax burden for high-income individuals who earn a large portion of their income from stocks and dividends. All in all, these are still likely to be less important than the main factors such as differences in intellect and skill levels.

Addressing the disproportionate rise in inequality through effective policy can benefit the economy, according to the International Monetary Fund. However, care should be taken to focus on sensible measures that provide long-term economic opportunity. Public policies that broaden access to education, especially early childhood programs, can improve a student's lifetime earnings and reduce demographic income gaps. Also, research from Harvard University shows that increasing teacher quality can positively affect educational outcomes among students. In labor markets, initiatives that encourage innovation, employment growth, and improvements in worker productivity through job training could be helpful. Lastly, macro-level policies have a role to play: Proposals to streamline the tax code can increase the progressivity of the tax system.[5]

Tackling the issue of income inequality remains a priority for some policymakers. Certain levels of income inequality will always exist in society as a reflection of variations in intellect and talent. However, public policies, especially ones designed to increase the educational attainment of the least skilled, can help workers compete in an increasingly globalized economy and promote more equal opportunity. ■

NOTES

[1] The CBO defines after-tax income as "market income plus transfer income minus federal taxes paid." Other definitions of income or different measures of well-being, such as wealth, are also used in the current debate on inequality.

[2] The World Bank provides a number of statistical methods to estimate income inequality.

[3] Productivity is defined as the output per worker or output per unit of time.

[4] Higher executive compensation and the growth of the finance industry over the past two decades may also be other factors that explain this gap; see *Economist*. "Who Exactly Are the 1%?" January 21, 2012.

[5] A progressive tax system is one where "the share of income paid in taxes rises with income"; see Piketty and Saez (2007).

REFERENCES

Bernanke, Ben S. "The Level and Distribution of Economic Well-Being." Remarks before the Omaha Chamber of Commerce, Omaha, Nebraska, February 6, 2007.

Corak, Miles. "Chasing the Same Dream, Climbing Different Ladders: Economic Mobility in the United States and Canada." Washington, DC: Economic Mobility Project, Pew Charitable Trusts, January 2010.

Isaacs, Julia B. "International Comparisons of Economic Mobility." Washington, DC: Economic Mobility Project, Pew Charitable Trusts, February 2008.

Krueger, Alan B. "The Rise and Consequences of Inequality in the United States." Remarks at the Center for American Progress, Washington, DC, January 12, 2012.

Organisation for Economic Co-operation and Development. "An Overview of Growing Income Inequalities in OECD Countries: Main Findings," in *Divided We Stand: Why Inequality Keeps Rising*. Paris: OECD Publishing, 2011, pp. 21-45.

Piketty, Thomas and Saez, Emmanuel. "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective." *Journal of Economic Perspectives*, Winter 2007, *21*(1), pp. 3-24.

Rolnick, Art and Grunewald, Rob. "Early Childhood Development: Economic Development with a High Public Return." Federal Reserve Bank of Minneapolis *The Region*, December 2003, pp. 6-12.

Page One Economics Newsletter from the Federal Reserve Bank of St. Louis continues the *Liber8 Newsletter* and provides an informative, accessible economic essay written by our research analysts. A classroom edition is also available and includes a lesson plan written by our economic education specialists. The newsletter is published 9 times per year, January through May and August through November.

Please visit our website and archives http://research.stlouisfed.org/pageone-economics/ for more information and resources.