

# Fact sheet: What do we know about economic inequality and growth?

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## Overview: Why this matters for policymakers

Recently available research looks across developing and advanced countries and within the United States to examine the effects of economic inequality on economic growth, wellbeing, and stability.

Research is beginning to find that economic inequality harms economic growth over the long term and that countries with less income and wealth disparities and a larger middle class boast stronger and more stable economic growth. Yes some studies also suggest that in the short run, greater economic inequality may spur growth before hindering it over the longer term. Overall, however, there is growing evidence that more equitable societies are associated with higher rates of long-run growth.

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## Evidence from across states within the United States

Studies that look at the relationship between inequality and growth in the United States mirror those of international studies—less inequality is associated with long-term growth and is particularly associated with lower income growth for those at the top of the income ladder. But the international results also indicate that in the short run economic growth may not be harmed by inequality even in the United States. Here are some key findings:

- Ugo Panizza of the U.N. Conference on Trade and Development finds a negative relationship between inequality and growth across U.S. states. A larger share of income accruing to the middle class is associated with higher growth rates, while higher inequality leads to lower growth rates.<sup>1</sup>
- Using data for 48 states from 1960 to 2000, Mark Partridge of Ohio State University finds that in the short run inequality is positively related to growth while in the long run the income share of the middle class is positively associated with more robust growth.<sup>2</sup>
- Economists Mark Frank and Donald Freeman of Sam Houston State University, using methods focusing on longer run trends, find a strong, negative relationship between

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inequality and growth.<sup>3</sup> Though, Mark Frank released a subsequent study using new state-level inequality and growth data from 1945 to 2004 that found higher income concentration increased short-run growth. This second paper by Frank highlights some of the nuances of the relationship between inequality and growth.<sup>4</sup>

- In a recent book, “Just Growth: Inclusion and Prosperity in America’s Metropolitan Regions,” Chris Benner, associate professor of community and regional development at University of California-Davis, and Manuel Pastor, professor of American studies and ethnicity at University of Southern California, show that less economic inequality within regional economies is linked to regional prosperity.<sup>5</sup>
- In a 2014 paper by Roy van der Weide of the World Bank and Branko Milanovic of the City University of New York looks at income growth instead of gross domestic product for inequality measures at different points along the income distribution, using state-level data in the United States. They find that high levels of economic inequality decrease income growth for those at the bottom of the income distribution.<sup>6</sup>
- Milanovic and van der Weide also find that high levels of inequality at the bottom of the income ladder is associated with slightly faster income growth at the top of the ladder.<sup>7</sup>
- Milanovic and van der Weide’s research is consistent with earlier work by then University of Massachusetts-Amherst economist Jeffrey Thompson (now at the Federal Reserve Board in Washington, DC) and Congressional Budget Office analyst Elias Leight, who look at the effects of inequality on incomes across households. They found that increases in the incomes of those at the top of the income ladder, measured by either the top 10 or 1 percent, are associated with declines in incomes of low and middle-income households.<sup>8</sup>

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## International comparisons

In the most recent literature of international comparisons, a new, somewhat nuanced theme is emerging that high inequality is bad for economic growth over long time horizons and that high inequality is particularly bad for those on the bottom of the income spectrum. But in the short run, most of the research agrees that high inequality can be associated with faster economic growth, but the benefits tend to flow to the top for that short period of time. Some of the key findings in this research arena include:

- In May 2015, the Organisation for Economic Co-operation and Development (comprised of developed and leading developing nations) issued its most recent findings in its report “In it together: Why Less Inequality Benefits Us All.” The OECD found that between 1990 and 2010, gross domestic product per person in 19 core OECD countries grew by a total of 28 percent, but would have grown by 33 percent over the same

period if inequality had not increased after 1985. The report concludes that “income inequality has a sizeable and statistically significant *negative* impact on growth.”<sup>9</sup>

- To better understand the time dimension of these trends, International Monetary Fund economists Andrew G. Berg and Jonathan D. Ostry looked at periods of growth instead of duration. They find that “countries with more equal income distributions tend to have significantly longer growth spells.” They also found that inequality was a stronger determinant of the quality of economic growth than many other commonly studied factors such as external demand and price shocks, the initial income of the country (did it start out wealthy or very poor?), the institutional makeup of the country, its openness to trade, and its macroeconomic stability.<sup>10</sup>
- In a 2014 extension of this work, Ostry, Berg, and their IMF colleague Charalambos Tsangarides include an analysis of the impacts of income redistribution to ameliorate income inequality as well as market inequality. They find that economic growth is lower and periods of growth are shorter in countries that have high inequality as measured by the Gini coefficient of income after taxes and transfer. (The Gini Coefficient is a common measure of income inequality.) In the same paper, the researchers show that transfers (redistributions of income from upper to lower income individuals) do not harm economic growth—at least up to a point consistent with policies in other wealthy nations.<sup>11</sup>
- Diego Grijalva of the University of California-Irvine finds that some economic inequality (not extreme inequality though) may have some positive short- and medium-term effects on economic growth, but in the long run high levels of economic inequality tend to be detrimental to economic growth.<sup>12</sup>
- Daniel Halter and Josef Zweimuller of the University of Zurich, and Manuel Oechslin of the University of Bern find that there are methodological differences in the papers that find positive relationship between inequality and growth and those that find a negative relationship. Specifically, those papers that examine inequality’s effect on growth over time within countries tend to find a positive relationship but those that use cross-sectional comparisons find a negative relationship. They posit that the time-difference methods are detecting short-term positive effects to growth, while the cross-sectional methods pick up the long-term negative effects for growth when there is persistently high or growing inequality.<sup>13</sup>
- In 2011, Dan Andrews of the OECD, Christopher Jencks at Harvard University, and Andrew Leigh at Australian National University looked at inequality in the form of concentration of income at the top of the income spectrum (primarily the top 10 percent, but they also tested the top one percent). The results were somewhat contradictory, leading them to conclude that “inequality at the top of the distribution either benefits or harms everyone and therefore depends on long-term effects that we cannot estimate very precisely even with these data.”<sup>14</sup>

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## Conclusion

Economic theory supports conflicting narratives about the potential impact of economic inequality on economic growth. There are some ways that inequality could boost growth and other ways that it could retard growth. Furthermore, there are numerous possible mechanisms that could relate inequality to growth and many of these channels would have conflicting outcomes. Because theory cannot provide strong guidance, it is imperative to use data and analysis to understand the relationships.

Studies that look at the longer-term growth implications of economic inequality find that inequality adversely affects growth rates and the duration of periods of growth, while those that focus on short-term growth find that inequality is not harmful and may be associated with faster growth. Furthermore, studies that look at the impact of inequality on different levels of the income distribution find that inequality is particularly bad for the income growth of those not at the top.

Research on inequality and growth may be approaching a new consensus on the general implications of inequality on economic growth, but more work is needed to fully understand the specifics of how inequality affects growth. In particular, now that the United States is approaching a level of inequality that is very rare among developed economies and more closely resembles a developing economy, which mechanisms apply? These are questions that will require continued updates to the data and methods.

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## Endnotes

- 1 Ugo Panizza, "Income Inequality and Economic Growth: Evidence from American Data," *Journal of Economic Growth* 7, no. 1 (2002): 25–41.
- 2 Mark Partridge, "Does Income Distribution Affect U.S. State Economic Growth," *Journal of Regional Science* 45 (2005): 363–94.
- 3 Mark W. Frank and Donald Freeman, "Relationship of Inequality to Economic Growth: Evidence from U.S. StateLevel Data," *Pennsylvania Economic Review* 11 (2002): 24–36.
- 4 Mark W. Frank, "Inequality and Growth in the United States: Evidence from a New State-Level Panel of Income and Inequality Measures," *Economic Inquiry* 47, no. 1 (January 2009): 55–68.
- 5 Chris Benner and Manuel Pastor, *Just Growth: Inclusion and Prosperity in America's Metropolitan Regions* (New York: Routledge, 2012).
- 6 Van der Weide, Roy, and Branko Milanovic. "Inequality Is Bad for Growth of the Poor (But Not for That of the Rich)." World Bank Policy Research Working Paper 6963 (July 2014). [http://www-wds.worldbank.org/servert/WDSContentServer/WDSP/IB/2014/07/02/000158349\\_2\\_0140702092235/Rendered/PDF/WPS6963.pdf](http://www-wds.worldbank.org/servert/WDSContentServer/WDSP/IB/2014/07/02/000158349_2_0140702092235/Rendered/PDF/WPS6963.pdf).
- 7 Ibid.
- 8 Jeffrey Thompson and Elias Leight, Searching for the Supposed Benefits of Higher Inequality: Impacts of Rising Top Shares on the Standard of Living of Low and MiddleIncome Families (Amherst: Political Economy Research Institute - University of Massachusetts, Amherst, 2011), [http://www.peri.umass.edu/fileadmin/pdf/working\\_papers/working\\_papers\\_251-30](http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_251-30).
- 9 OECD, *In It Together: Why Less Inequality Benefits All* (Paris: OECD Publishing, 2015).
- 10 Andrew Berg and Jonathan Ostry, *Inequality and Unsustainable Growth* (Washington, DC: International Monetary Fund, 2011).
- 11 Jonathan D. Ostry, Andrew Berg, and Charalambos G. Tsangarides, *Redistribution, Inequality, and Growth*, Discussion Note, IMF Staff Discussion Note (Washington, D.C.: International Monetary Fund, February 2014), <http://www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf>.
- 12 Diego F. Grijalva, *Inequality and Economic Growth: Bridging the Short-Run and the Long-Run*, November 29, 2011, <http://escholarship.org/uc/item/4kf1t5pb>.
- 13 Daniel Halter, Manuel Oechslin, and Josef Zweimüller, "Inequality and Growth: The Neglected Time Dimension," *Journal of Economic Growth* 19, no. 1 (March 1, 2014): 81–104, doi:10.1007/s10887-013-9099-8.
- 14 Dan Andrews, Christopher Jencks, and Andrew Leigh, "Do Rising Top Incomes Lift All Boats?" *The BE Journal of Economic Analysis & Policy* 11, no. 1 (2011), <http://www.degruyter.com/view/j/bejeap.2011.11.issue-1/bejeap.2011.11.1.2617/bejeap.2011.11.1.2617.xml>.

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## Our Mission

Accelerate cutting-edge analysis into whether and how structural changes in the U.S. economy, particularly related to economic inequality, affect economic growth.

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