

How does inequality affect economic growth?

The relationship between economic growth and inequality has been studied by economists for more than a century. Nonetheless, this issue is still far from resolved and, as explained in this article, the answer to the question of how unequal household income affects a country's growth is still not clear, both from a theoretical and also empirical perspective.

In general terms, a negative relationship can be observed between the level of inequality¹ and economic growth (see the first graph). But, as readers are only too well aware, the fact that a correlation exists does not necessarily mean there is a cause/effect relationship.

At a theoretical level, the prevailing view in the 1950s and 60s was that greater inequality could benefit growth, essentially through two mechanisms. The first is based on the fundamental idea that inequality benefits economic growth insofar as it generates an incentive to work and invest more. In other words, if those people with a higher level of education have higher productivity, differences in the rate of return will encourage more people to attain a higher level of education. The second mechanism through which greater inequality can lead to higher growth is through more investment, given that high-income groups tend to save and invest more.

However, several voices have subsequently warned of the negative effects of inequality on growth.

One of the main arguments states that greater inequality can reduce the professional opportunities available to the most disadvantaged groups in society and therefore decrease social mobility, limiting the economy's growth potential. In particular, a higher level of inequality can result in less investment in human capital by lower-income individuals if, for example, there is no suitable state system of education or grants. For this reason, countries with a higher degree of inequality tend to have lower levels of social mobility between generations (see the second graph).

Greater inequality can also negatively affect growth if, for example, it encourages populist policies (see the article «Inequality and populism: myths and truths» in this Dossier). Along the same lines, another source of discussion is whether an increase in inequality can lead to an excessive rise in credit, which ends up acting as a brake on growth (see the article «Can inequality cause a financial crisis?» in this Dossier).

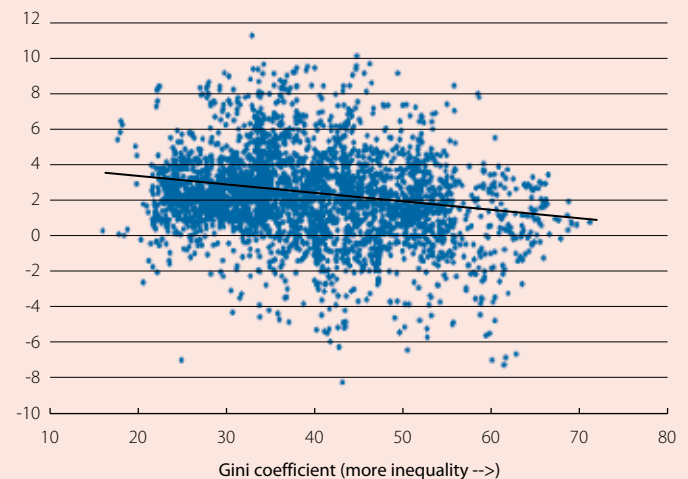
Beyond the theoretical sphere, many authors have attempted to provide empirical evidence of inequality's effects on economic growth. The findings are not always conclusive, however. This is due to the fact that it is difficult to isolate the impact of inequality on economic growth from the impact of other factors which may also be influential. In fact, this is the main criticism directed at empirical studies based on cross-country growth regressions and such studies are discussed below, so the findings need to be interpreted with due caution.²

Broadly speaking, there is no single, universal mechanism behind the relationship between inequality and growth; in fact, this relationship may not always be the same. Nevertheless, a relatively generalised pattern can be observed depending on a country's degree of development. When an economy is at an early stage of its development, the return from physical capital tends to be higher than the return provided by human capital and greater inequality can therefore trigger higher growth. However, as an economy achieves a more advanced stage of development, the return from physical capital tends to decrease while that from human capital tends to rise, so increases in inequality can negatively affect growth.³

A recent study by the IMF⁴ suggests that an increase in inequality is harmful to economic growth. By way of example, the historical relationship (1980-2012) observed between inequality and growth in the 159 countries analysed shows that, if the income share

Economic growth and inequality

Economic growth in the next 10 years (%)



Source: CaixaBank Research, based on Ostry, et al. (2014), «Redistribution, Inequality and Growth», IMF.

1. Usually measured using the Gini coefficient, see the article «Increasingly unequal? The recent trend in inequality» in this Dossier.

2. See Durlauf, S. N. (2009), «The Rise and Fall of Cross-Country Growth Regressions», History of Political Economy.

3. See Kuznets, S. (1955), «Economic Growth and Income Inequality», American Economic Review.

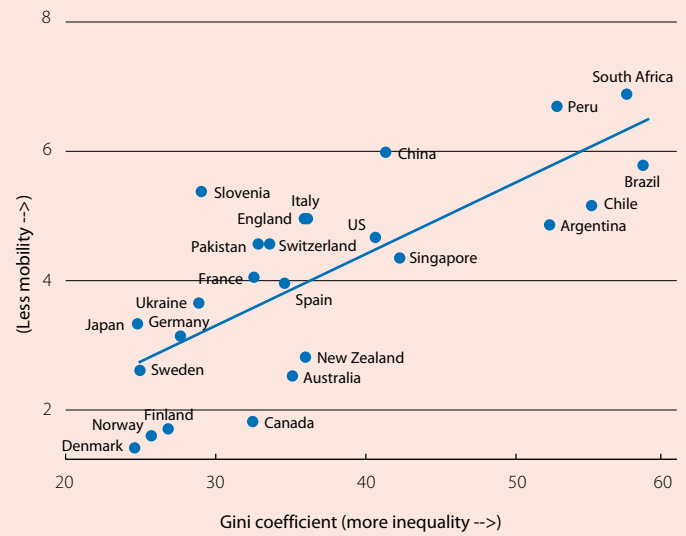
4. See Dabla-Norris, J. et al. (2015), «Causes and Consequences of Income Inequality: A Global Perspective», IMF.

of the richest 20% of the population increases by 1 pp (a rise in inequality), GDP growth slows down by 0.08 pps during the next five years. On the other hand, if the income share of the poorest 20% of the population increases by 1 pp (a reduction in inequality), GDP growth is 0.38 pps higher during the next five years on average.

Along the same lines, a study by the OECD⁵ estimates that an increase in the Gini coefficient of three points (which coincides with the average increase recorded in OECD countries in the last two decades) would have a negative impact on economic growth of 0.35 pps per year over 25 years, representing a cumulative loss of 8.5% of GDP. Moreover, the study shows that the most negative effect on growth is caused by the inequality affecting the lowest income individuals (those at the bottom of income distribution). For example, if the bottom inequality in the UK were changed to be like that in France, or that of the US to become like that of Japan or Australia, the average annual growth in GDP would improve by almost 0.3 pps over the next 25 years, representing a cumulative rise in GDP of more than 7%.⁶ Once again, it should be noted that these estimates are for illustrative purposes only and must not be interpreted as the actual effect a change in equality can have on growth in each country.

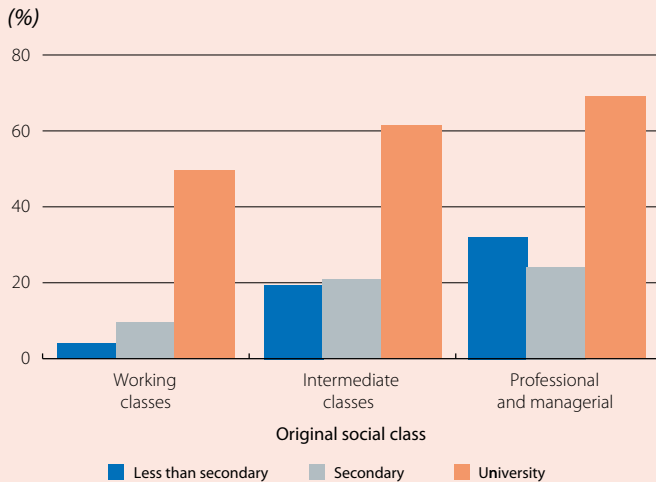
Social mobility and inequality

Intergenerational earnings elasticity (%)



Source: CaixaBank Research, based on Corak (2013) «Inequality from Generation to Generation: The United States in Comparison», in Robert Rycroft (editor), *The Economics of Inequality, Poverty and Discrimination in the 21st Century*, ABC-CLIO.

Frequency professional and managerial classes are accessed by original social class and educational attainment



Source: CaixaBank Research, based on Requena (2016), «El ascensor social, ¿hasta qué punto una mejor educación garantiza una mejor posición social?», Observatorio Social de "la Caixa".

Lastly, the report concludes that one of the key channels through which inequality acts as a brake on economic performance is by reducing the investment opportunities, primarily in education, of the poorest segments of the population. In fact, social mobility has deteriorated significantly in countries such as the US, where the percentage of children who receive a higher income than their parents has fallen from 90% for the cohort of 1940 to 50% for people born in the 1980s.⁷

In fact, less social mobility can act as an indicator of a rise in inequality. Several empirical studies have revealed a negative relationship between inequality and social mobility (see the second graph) precisely because inequality, particularly when this occurs within the lowest income groups, reduces the chances of the more disadvantaged segment of the population to invest in education, which is the main way to increase social status.⁸ Spain is no exception: university graduates from a lower social background record rates of access to professional and managerial jobs that are 14 times higher than those who do not finish secondary education (see the third graph).⁹

By way of conclusion, it should be noted that, although inequality is, to some extent, an inevitable phenomenon in modern economies, the latest empirical evidence suggests that, if inequality is reduced, particularly among the lowest income groups, this has a positive effect not only in terms of social justice but also in terms of economic growth.

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5. See OECD (2014), «Focus on Inequality and Growth».
 6. See Cingano, F. (2014), «Trends in Income Inequality and its Impact on Economic Growth», OECD.
 7. See Chetty, R. et al. (2016), «The Fading American Dream: Trends in Absolute Income Mobility since 1940», NBER Working Paper.
 8. For example, they are associated with a higher school drop-out rate. See Kearney, M. S. and Levine, P. B. (2016), «Income Inequality, Social Mobility, and the Decision to Drop Out of High School», Brookings Papers on Economic Activity.
 9. See Requena, M. (2016), «El ascensor social, ¿hasta qué punto una mejor educación garantiza una mejor posición social?», Observatorio Social de "la Caixa".