

Does Higher Education Expansion Equalize Income Distribution?

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A widely held belief about the benefits of expanding access to education is that greater access extends social mobility and income equality. In the case of higher education, as enrollments expand, bright youth from lower-income families are more likely to enter and complete universities. In theory, this should increase the chances of such individuals to move upward economically, by making them more able to compete for higher-paying jobs associated with a higher degree. Further, with rapid increases in the number of higher education graduates, their relative earnings may fall, eventually making overall income distribution more equal.

This belief runs up against a contrary reality. In many countries where the number of secondary and higher education graduates is expanding at high rates, income distribution is becoming more *unequal* and, in some cases, social mobility is at a standstill.

Recent research, by a group of international scholars, studied this phenomenon empirically, trying to understand whether educational expansion creates greater income equality. This research focused on Brazil, Russia, India, and China, known as the BRIC countries. The BRICs have 40 percent of the world's population and, in the past 15 years, have managed an enormous leap in their higher education enrollment.

MODELING EARNINGS VARIATION

Traditionally, economists have modeled earnings variation as a function of the level of schooling in the labor force, the dispersion (variance) in the number of years of schooling in the labor force, the economic payoff to a year of schooling (the rate of return to schooling), and the dispersion of rates of return to different levels of schooling. Economists have usually assumed that as levels of education in the workforce increase to fairly high levels, the payoff to schooling falls, and the dispersion in years of schooling also declines. This is quite logical, given economic theories about competitive labor markets and the fact that schooling seems to expand much more rapidly than employer demand for more schooled labor.

On the other hand, it has been observed that even as school systems expand, including the rapid expansion of university graduates for the labor force, the payoff for these graduates does not fall, and even tends to increase relative to the payoffs for secondary school graduates.

Why does this happen? There are many possible explanations. One is that higher educated labor can be substituted for lower educated labor. Thus, this tends to drive down the wages of the less educated. Even if the wages of the

higher educated stay fairly constant—as they did, for example, in the United States in the 1980s—the wages of secondary school graduates tend to fall, as that market becomes increasingly “crowded” with the less educated. A second possible explanation regards the expanding knowledge intensity of production and services, the demand for higher educated workers grows faster than the higher education system expands. A third possible explanation is that countries pursue fiscal policies that favor higher-income individuals, antiunion policies that put pressure on the earnings of lower-educated workers. Such policies would have increased income inequality.

OUR RESEARCH FINDINGS

Whatever the explanation, even as higher education expanded apace in the four studied countries, it appears that the payoff for university graduates tended to increase (not decline) in the past decade, and it tended to expand, relative to the payoff for secondary education. This also raised the dispersion in rates of return among levels of education. Together, these “payoff effects” contributed to the rising *inequality* of earnings and tended to offset whatever equalizing effect the higher level of education and the declining variance of years of schooling in the labor force.

Thus, these results for the BRICs show that in the past decade, higher education expansion and the associated change in the rates of return to education seemed to maintain or broaden income *inequality*. In Brazil, two opposite forces in education affected income distribution: the increase in the variance of the rate of return to education times the rising average level of education contributed to increased income inequality. However, countering that tendency, the falling

average payoff to education in Brazil, combined with the increased variance in years of education in the labor force, helped decrease income inequality. In China, the rate of return to education and the growth of the years of education in the labor force especially contributed to higher income inequality. In India, inequality probably rose, due to factors outside the rapid rise of education levels in the labor force. Finally, in Russia, it appears that education expansion contributed in a small way to higher income inequality, despite small changes in the rates of return to education. In Russia, as in India, the main change in income inequality probably was due to other unobserved factors.

Two other factors may be contributing to the rising income inequality in China, Russia, and India or, as in Brazil, to keeping income inequality steadier than it might have been otherwise—in the face of more general income redistribution policies. The first of these factors is the increased differentiation of spending on elite and mass higher education institutions in Brazil, China, and Russia (not evidenced in India). Over the past 5–10 years, spending has increased per pupil in elite institutions, whereas mass institution may even face decreased spending per pupil. Since higher social class students more likely dominate elite institutions, they disproportionately benefit from this differentiation.

The second factor is the distribution of overall public spending on higher education. This public spending—even in a country such as Brazil, where 75 percent of students attend private universities not subsidized by the government—is skewed heavily toward students coming from the highest 20 percent of income families. Higher-income students in Brazil, China, India, and even Russia, approaching almost universal attendance in postsecondary education, are the ones heavily subsidized by the state.

The enormous expansion of higher education in the BRICs has, therefore, not been effective in equalizing income distribution. The implication of these results is that, without powerful fiscal and social spending policies aimed directly at reducing income inequality, it will remain high and may even continue to rise.