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THE POWER OF EDUCATION POLICY

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Education has been and can continue to be at the center of global poverty reduction

The world economy has experienced a remarkable transformation over the past four decades. Global GDP per capita doubled in real terms, driven by the rise of China and India and by significant growth elsewhere. Much of these gains accrued to the global poor. The proportion of the world's population living below the international poverty line of $2.15 a day dropped from 44 percent in 1981 to 9 percent in 2022, according to the World Bank.

What was behind these developments? Recent research points to education as one of the main drivers of inclusive growth. There has been an unparalleled expansion of access to schooling over the past 50 years, in high-income and low-income countries alike. This generated large productivity gains, especially for those living in poverty. Education accounts for fully half of total economic growth and two-thirds of real income gains among the world's poorest 20 percent since 1980, based on my findings in a recent paper (Gethin 2023).

This calls for a continued focus on expanding access to education. New technologies such as AI offer enormous opportunities for productivity growth and innovation. Yet the size

Students pursue their education at the Netaji Subhas Vidyaniketan school in Tripura, India.

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of these gains and who will benefit depend on the creation of a sufficiently large skilled labor force. Universal basic education has been at the center of education policy in many developing economies—with positive results. Now more than ever, there is a need to expand access to high-quality secondary and postsecondary education, for both equity and efficiency. Education ensures not only that countries can use global innovations efficiently but also that they share the benefits broadly.

Education diminishes poverty

Economists have long debated the importance of human capital in economic development, yet little is known about how well education has lifted poor people's standard of living. To take on this research challenge, I built a microdata base consisting of surveys conducted around 2019 by statistical institutes in 150 countries. The surveys covered labor forces and individual incomes. I combined this data with historical information on the evolution of educational attainment since 1980.

This enabled me to measure for the first time the relationship between income and education for a sample representing 95 percent of the world's population. For each country and for different levels of education, I could thus calculate how much individual incomes increased as people received more education. It also allowed me to observe how education shapes income inequality—a key to estimating the effect of education on reducing poverty.

This analysis shows that education has been a powerful driver of inclusive growth over four decades. The doubling of global income per capita between 1980 and 2019 would have been only half as large without advances in educational attainment. The research also shows that education was responsible for 60–70 percent of real income growth among the world's poorest 20 percent. In the absence of considerable efforts to expand access to schooling, the world would be a much poorer and much more unequal place.

Why has education been so successful at reducing global poverty? Unexpectedly, basic education alone does not explain these large effects. Higher education also played a major role. Expanding access to higher education allows a broader group of workers to share high-skill jobs. At the same time, it frees up job opportunities for low-skilled workers.

For example, take a country like India or any of a number of sub-Saharan African nations with a large traditional sector and a small modern sector. In such economies, many workers hold highly unproductive jobs in agriculture. As education expands, some of these workers can take on more high-skill jobs.

DATA

70%

Education is responsible for up to 70 percent of real income growth among the world's poorest 20 percent since 1980.

But the agricultural workers who stay behind also become more productive. If too many people are employed on the same plot, the marginal productivity of each individual may be quite low. When some people leave, the productivity of the remaining farmworkers rises as total output remains largely unchanged, which drives up their wages.

Workers in both categories therefore benefit from schooling—and low-skilled workers in the traditional sector may even benefit more. These effects are enormous and play a key role in shaping the distribution of economic gains from education. They should be at the center of any debate on the role of education in improving economic efficiency and equity.

This phenomenon highlights another important point. The aggregate and distributional effects of education depend on the evolution of employers' demand for skilled labor. In recent decades, large technological advances disproportionately benefited highly skilled workers. Such skill-based technological change was a major driver of rising inequality in the United States, where college attendance did not expand fast enough to keep up with growing demand for skilled workers.

This interaction between education and technology has played an important role in generating income gains for poor people worldwide. Without technological progress, education would have had significantly lower effects on economic growth. At the same time, without educational expansion, technological change would have generated little growth, and this growth would have benefited a much narrower set of skilled workers, especially in low-income countries. In a world with growing interdependence between skills and technology, education and innovation policy should go hand in hand. In other words, it is not so much that education has driven economic growth significantly more than technological change, trade globalization, or other factors. Rather, the combination of schooling and other major economic transformations has been the key to reducing extreme poverty.

Beyond basic education

International institutions and governments have put universal basic education at the center of the policy agenda for poverty reduction for two reasons. First, there is a general perception that returns to human capital are decreasing, with basic education generating the highest gains. Second, improving access to basic education disproportionately benefits low-income households, especially in less-developed economies where access to higher education is restricted to an elite few.

"Failure to expand access to education would represent an enormous missed opportunity to enhance inclusive growth."

In many countries, however, both assertions may turn out to be wrong. My research suggests that, contrary to conventional wisdom, returns per year of schooling in terms of a person's income are not greater at lower levels of education. In India, for example, a year of primary education will increase a person's earnings by 2–3 percent; a year of secondary education, by 6–8 percent over the earnings of someone with only primary education; and a year of postsecondary education, by more than 13 percent over those of a person with secondary education alone.

These are huge differences with major implications for the macroeconomic effects of different education policies. Moreover, expanding access to higher education may have significant indirect positive effects on less-educated workers, as my analysis found. Other research suggests that these spillovers are particularly large for postsecondary education because it is not easy to replace college-educated workers with other types of workers. Put differently, the high returns to postsecondary education in a country like India point to a substantial unmet demand for highly skilled labor. Meeting this demand may be the key to both enhancing economic growth and reducing inequality.

Of course, this does not necessarily imply that developing economies should redirect their resources toward expanding access to higher education. There are important trade-offs. Higher education is generally more expensive per student, and highly skilled workers are more likely to emigrate after completing their studies. The general point is that in shaping education policy, authorities should pay close attention to the dramatic differences in the returns to different levels of schooling and to the projected evolution of labor demand.

Quality versus quantity

Another debate focuses on whether to continue expanding access to education or to concentrate on improving the quality of education. Internationally comparable test scores show particularly low education quality in developing economies. This has led international institutions and economists increasingly to emphasize the need to prioritize quality to promote economic development.

However, my research shows that education quantity, not quality, was at the center of global poverty reduction. From 1980 to 2019, the share of the world's citizens with no schooling declined from 35 percent to 15 percent, while the share of adults with at least some secondary education grew from 25 percent to 60 percent. Meanwhile, education quality based on test scores stagnated.

India's District Primary Education Program, implemented in 1994, is particularly illustrative. The University of California San Diego's Gaurav Khanna found that the program significantly expanded access to primary education, with no effect on education quality (Khanna 2023). Yet it generated a 13 percent increase in earnings per year of schooling. In a world where two-thirds of global poverty reduction since 1980 was driven by expanded access to schooling, it seems unlikely that focusing on quality alone will be enough to promote further inclusive growth.

Policymakers and economists sometimes do not evaluate education policy the way they do other economic factors; they assume that education has a fixed average return of 10 percent. In the presence of technological progress, however, the returns are much larger. Failure to expand access to education would represent an enormous missed opportunity to enhance inclusive growth.

Authorities should thus look to the future when it comes to education. Given the major developments in AI and other technologies that are coming, it is likely that expanded access to education will be particularly beneficial, perhaps even more so than in the past. This also means that policymakers should actively promote policies that encourage the adoption of these technologies. There is a close interdependence between education and other dimensions of any economy. Education alone is unlikely to be particularly useful unless linked with other complementary policies. F&D

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