
HUMAN CAPITAL

Q and the QUALITY OF GROWTH

BY NANCY BIRDSALL

Truly, the most distinctive feature of our economic system is the growth in human capital. Without it, there would be only hard, manual work and poverty except for those who have income from property.

—Theodore W. Schultz, referring to the U.S. economy in his 1960 Presidential Address to the American Economic Association

T.W. SCHULTZ was ahead of his time, at least among economists. The earliest postwar models of development emphasized accumulation of physical capital, and saw spending on health and education as a drain on the accumulation of “productive” assets. But eventually, the newer classical growth models incorporated formally Schultz’s insight, and related work on accounting for growth by Hollis Chenery and colleagues at the World Bank pointed to the contribution of more skilled workers with more human capital to increased productivity and growth. The more recent endogenous growth models are even more emphatic. Sustainable growth in these models is the result in part of positive externalities generated by education, an important form of human capital. In these models, the new ideas and new technologies that are critical to high sustained growth rely fundamentally on high levels of human capital.

The newer growth models thus provide a compelling justification for human capital investments as efficient and growth-enhancing. But unfortunately, in their simplest form they are poor guides to policy choices. They add little to our understanding of why some countries (and

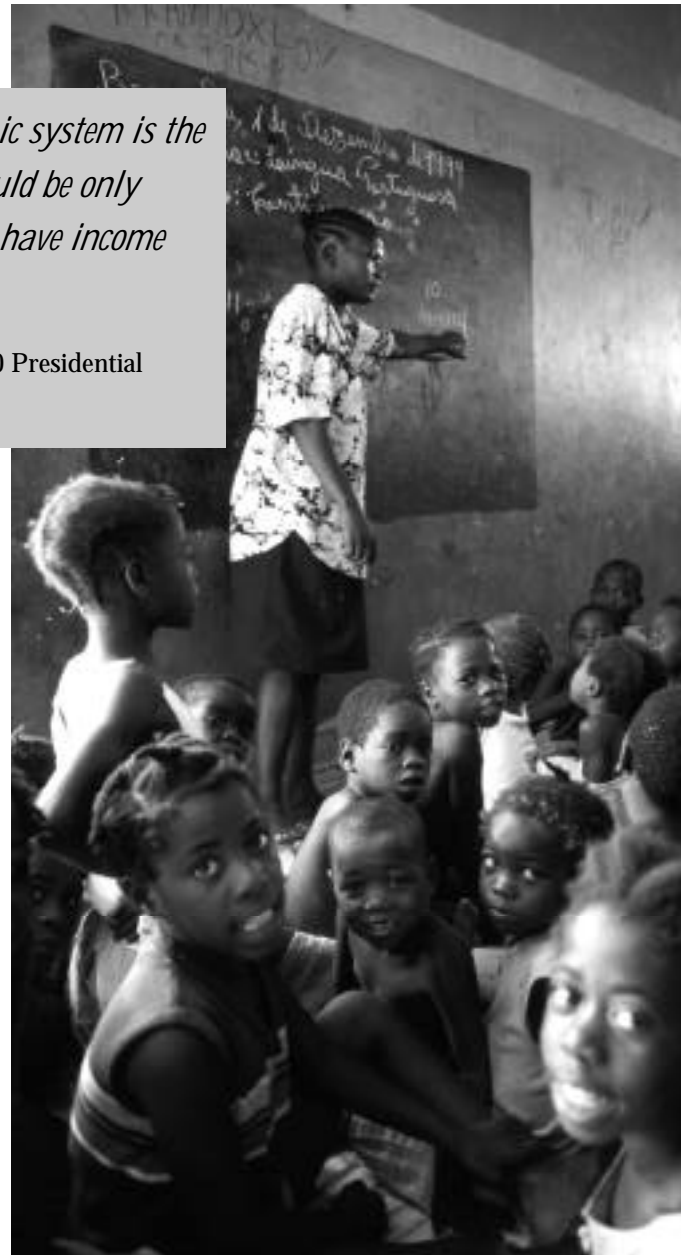
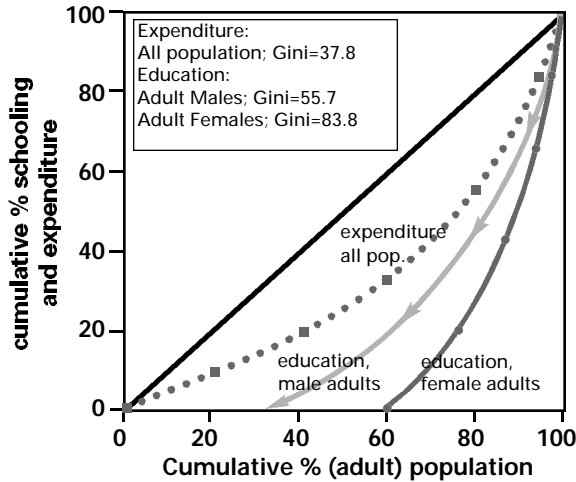


Chart 1: Education and Expenditure Inequality in India, 2000



Sources for Charts 1 and 2: calculations using data from WDI (2000), WIDER inequality databases, and Barro & Lee (2000). Expenditure Ginis in Chart 2 are adjusted to be comparable to income Ginis.

regions within countries) succeed and others fail at generating and sustaining high levels of human capital.

The insights in the book, *The Quality of Growth*, take us much further. They start us down a new more promising path for policy guidance: treatment of human capital as a productive asset – one that, like land and physical and financial capital, can generate income as well as other economic, political and social benefits for its owners, but also like other assets cannot simply be delivered top-down by government, no matter how effective and well-intentioned government may be. Like other assets, human capital is an outcome of as well as an input to the “quality of growth.” It has to be accumulated and maintained by its owners, may well be distributed unequally, and has value that may not be realized in the absence of appropriate markets and institutions.

Consider three issues raised by the explicit view of human capital as a productive asset — issues on which traditional models of growth are silent.

The distribution issue

Traditional growth models ignore the distribution of human capital across individuals, and thus the distribution of opportunities on which growth ultimately depends.

Their implicit assumption is that the accumulation of human capital will “trickle down” and benefit everyone. Yet it is wrong to assume that more education (and more of other forms of human capital) will be distributed equally. It is well known that girls have not shared equally everywhere in the benefits of education (see chart 1). In the last decade clear evidence has come that in some countries children from poor families benefit little from public spending on schooling. In Brazil and Mexico, for example, less than 10 percent of young adults (aged 20-25) in the poorest 10 percent of households have completed secondary school (compared to more than 70 percent in the richest 10 percent of households). In countries like India, where there are still large numbers of adults (largely adult women) without any education at all, edu-

cation (among adults) is less equally distributed than expenditure per capita (across households) (see chart 2). Other evidence shows that an unequal distribution of human capital slows growth, and particularly slows income growth of the poor. So in the short run India, Brazil, and Mexico face a lower growth path (other things equal) than Sri Lanka, Malaysia and Costa Rica, where the current distribution of education is already more equal.

Happily, data on the distribution of education over time show inequality falling in all regions of the world; as aver-

Chart 2: Inequality of Education and Income

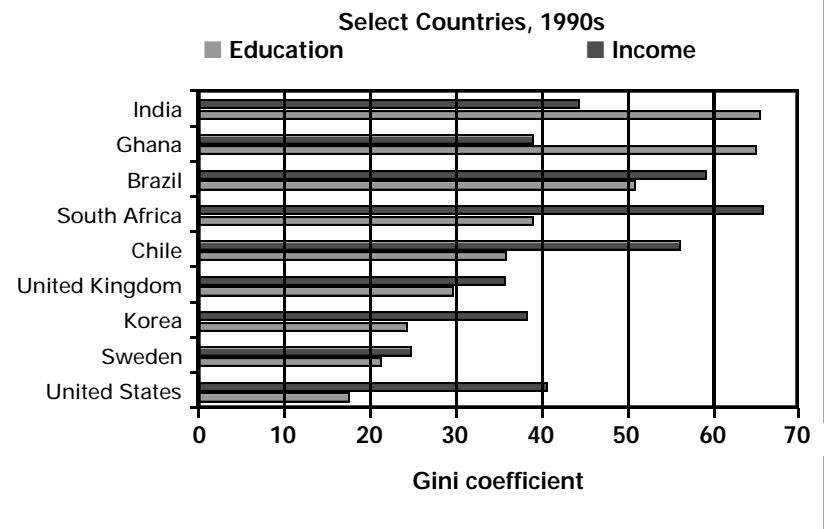


Table 1: Absolute Income Shares of Lowest Quintile of Households, Malaysia and Brazil (in US dollar terms)

Country	GNP per capita (PPP-adjusted)	Income Share of bottom 20 %	Per capita income of bottom 20 %
Malaysia, 1989	4,674	4.6	1,075
Brazil, 1989	4,271	2.4	513

Source: Birdsall, Ross, and Sabot, (1995).

age education levels rise, inequality declines. Still, in some countries, current inequality in the distribution of education means most children of the currently poor are not acquiring enough human capital to exploit the new opportunities that market reforms and the arrival of an information age in their countries are creating.

The demand issue

Traditional growth models also ignore the demand side. Human capital accumulation is treated as exogenous. Like manna from heaven, it's a good thing that arrives seemingly independent of private and collective decisions, and thus independent of such realities as the pre-existing level and distribution of human capital! What does in fact determine how much households invest privately and societies invest collectively in their children's education and health and in other forms of human capital?

Private decisions to invest in children are made mostly by parents (including especially mothers in most cultures), in part as a function of their own education and income. Thus the initial distribution across households of adult education matters – just as tends to be the case with other assets. Parents' own income and assets matter because they shape attitudes and expectations, but also because

children. As shown in the table, Brazil and Malaysia had similar average levels of per capita income in 1989 (table 1). But the poorest quintile in Brazil had only one-half the absolute income of the poorest quintile in Malaysia. Given an income elasticity of demand for secondary education of 0.50, if the distribution of income had been as equal in Brazil as in Malaysia, secondary enrollments among poor Brazilian children would have been more than 40 percent higher — a huge increment.

Parents' demand for human capital for themselves and their children is also a function of the benefits they expect from their investment in this capital asset, in the form of higher future incomes for themselves or their children. Expected benefits and thus demand will naturally be lower for women and for members of racial and ethnic groups facing job and wage discrimination in the labor market. Where market distortions reduce the demand for workers with the limited skills that primary education affords, the benefits of primary schooling for those who cannot expect to continue to secondary school will be lower. In developing countries where new technologies and open markets are increasing the returns to university-educated workers – but leaving behind in relative terms even those with secondary school, families struggling to

ensure secondary school for their children will be discouraged from even that goal. Low quality of public schools reduces demand since it reduces the expected benefits (such as higher income) of keeping children in school compared to the immediate costs.

In all these situations, more spending

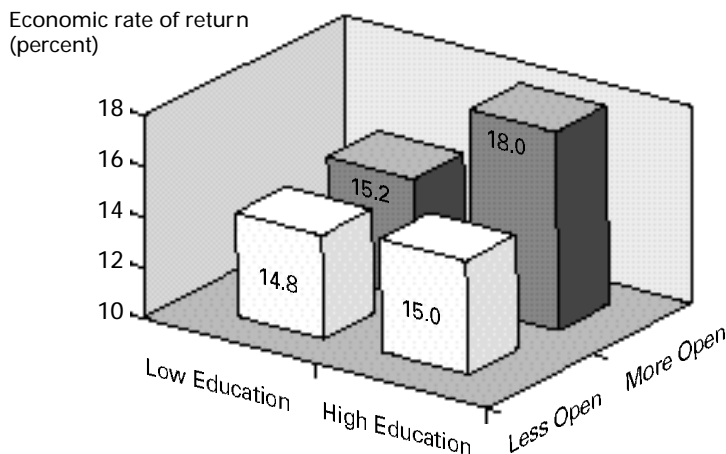
Table 2: Education and Resource Abundance

		Secondary Enrollment (%)	
		Mean	Median
1975	Resource Poor Countries	28.5	26.0
	Resource Rich Countries	25.3	19.5
	Difference	2.8	6.5
	Controlled Difference		5.7
1985	Resource Poor Countries	39.5	40.5
	Resource Rich Countries	35.7	34.0
	Difference	3.8	6.5
	Controlled Difference		7.4

Note: "Controlled Difference" takes into account the average impact on income of secondary enrollment and illiteracy by means of regression analysis. Categorization of countries taken from Auty (1997).

Source: Birdsall, Pinckney and Sabot, (2001).

Chart 3: Education, openness, and economic rates of return in 1,265 World Bank projects



Note: Economic rates of return are from the evaluation database of the World Bank's Operations Evaluation Department. Education is measured by the average level of schooling of the labor force, and openness by the logarithm of the foreign exchange parallel-market premium.

Sources: Thomas and Wang "Education, Trade and Investment Returns." Working Paper. WBI, 1997

and program reforms, for example, to raise quality of public schooling, can make private decisions to invest in human capital more affordable and more attractive — by reducing upfront costs and increasing future benefits. But other changes — outside the province of the “human capital” ministers (of education, health, social welfare and so on) are also critical: reducing discrimination, eliminating labor rules that discourage job creation, reform of banking and property regulations that discourage lending to the poor.

There is also a question of demand at the societal level. In countries rich in mineral and certain other (non-renewable) natural resources, the oft-resulting concentration of income seems to generate a political dynamic which limits human capital investment (see table 2). Where inequality of wealth and income is high, rich families are likely to successfully resist the tax burden that spending on good quality basic education for the poor majority would impose. On the positive side, in more open economies, firms that want to stay competitive in global markets are likely to press for a workforce able to adapt to constantly changing technologies and processes. And of course, where the strengthening of democracy means the poor and the middle class can participate more actively in political life, collective decision-making will generally put a high

premium on public investments in human capital.

The problem of other distortions

For all these reasons, building human capital, especially among the poor, is about much more than education and health programs. A focus on demand reminds us that, like other assets, human capital's value depends in part on its owners' ability to deploy it in a competitive market in which the rules of the game reward innovation, entrepreneurship and high productivity. The experience of the former Soviet Union suggests that relatively good stocks of human capital need not translate into growth or improved human welfare in the face of distorted markets and repressed political life. Growth, and the quality of growth depend not only on the level of human capital, but on the deployment of this asset in the economy and in social and political life. A subheading in *The Quality of Growth* says it all: Combine Human Capital with Opportunities in Open Markets (p. 78).

As chart 3 (from the book) shows, the returns to investment (in this case in World Bank-financed projects) have been higher in countries where education levels are higher — but where education really seems to pay off is in more open economies.

Growth of human capital, as Schultz suggested, provides an escape from “hard, manual work and poverty.” On the one hand, human capital is not development's magic bullet. As with other assets, its accumulation, distribution, and deployment are an outcome of choices, of policies and of institutions. On the other hand, unlike other assets, human capital does have a special property. Once acquired it cannot be sold or stolen. That gives it a special role, as the people's asset, in ensuring the “quality” of growth.

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The sources and full citations for text, tables, and charts are available with this note at www.ceip.org