



Insights from Disaggregating the Human Capital **INDEX**



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the Human
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Acknowledgments

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1 Disaggregating the Human Capital Index for **POLICY INSIGHTS**



At the 2018 Annual Meetings, the World Bank Group launched the Human Capital Project, an unprecedented global effort to support human capital development as a core element of the overall strategies of countries to increase productivity and growth. The main objective of the HCP is rapid progress toward a world in which all children can achieve their full potential. For that to happen, children need to reach school well-nourished and ready to learn, attain real learning in the classroom, and enter the job market as healthy, skilled, and productive adults.

Central to this effort has been the Human Capital Index (HCI), a cross-country metric measuring the human capital that a child born today can expect to attain by her 18th birthday, given the risks of poor health and poor education prevailing in her country.¹ The HCI brings together measures of different dimensions of human capital: health (child survival, stunting, and adult survival rates) and the quantity and quality of schooling (expected years of school and international test scores). Using estimates of the economic returns to education and health, these components are combined into an index that captures the expected productivity of a child born today as a future worker, relative to a benchmark of complete education and full health.

The index ranges from zero to one, so that an HCI value of, for instance, 0.57—the global average—implies that a child born today will only be 57 percent as productive as a future worker as she would be if she enjoyed complete education and full health (box 1.1). By benchmarking shortfalls

in future worker productivity deriving from gaps in human capital across countries, the HCI underscores the urgency of improving human capital outcomes. This is particularly pressing in the context of the rapidly changing nature of work, which is associated with an increasing demand for higher-order skills.²

The global HCI is calculated for 157 countries using national averages of the component data. While the cross-country comparison of human capital outcomes is important, national averages mask significant differences along dimensions such as gender, ethnicity, socioeconomic status, and geographic location, which are likely associated with gaps in productivity.

This report quantifies some of these human capital inequalities, with a special focus on socioeconomic and subnational spatial differences. The socioeconomic analysis covers 50 low- and middle-income countries where the data permit comparable disaggregation. The spatial analysis covers 11 low- and middle-income countries where the global HCI release sparked demand for analysis at the subnational level. As a result, rather than describing comprehensive trends, this booklet highlights the potential of detailed disaggregation for the design of well-targeted policies.

Disaggregation of the HCI complements poverty and other metrics to inform evidence-based reforms.

1. The HCI was introduced in World Bank (2018a, 2018b), and the methodology of the HCI is detailed in Kraay (2019).
2. World Bank (2019a).

The association between a household's socioeconomic status and investments in children is well-documented, especially for high- and middle-income countries.³ This literature indicates that skills formed early in life matter significantly and explain a substantial part of lifetime inequalities. For example, evidence shows that half the inequality in lifetime earnings in the United States is established by age 18. In a process where *skills beget skills*, closing human capital differences early in life is one of the most cost-effective strategies to reduce income gaps.⁴

Disaggregating the HCI by different socioeconomic levels can help countries quantify these early inequalities and identify policy priorities for the most disadvantaged. The disaggregation of the HCI components can also provide useful insights because the benefits and costs of different types of human capital investments vary by socioeconomic status. For instance, in contexts where differences in malnutrition between the rich and the poor are limited, while differences in learning outcomes are large, early childhood interventions might prioritize cognitive and socioemotional stimulation over nutrition.

Job polarization is also linked to inequality, contributing to the widening earnings gap between high- and low-skilled individuals. Urbanization has possibly exacerbated this inequality. Highly skilled workers tend to concentrate in densely populated urban areas. Young and educated women and men prefer to be surrounded by peers with similar characteristics and many firms, especially the most innovative ones, locate where young and skilled workers are. This sorting process fuels further

economic divergences between urban communities, with high levels of human capital and vibrant labor markets, and rural areas with low levels of human capital and stagnating economies.⁵

Low-skilled individuals who grow up in rural areas have limited opportunities to improve their prospects, even if they decide to migrate. Again, the evidence shows that investing early has the greatest results. Children born in disadvantaged households can reduce the gap with more affluent in terms of both future education and labor market outcomes if their families move to areas with high quality schools and health facilities.⁶ In the United States, it is estimated that moving early in life to a high-opportunity area reduces the persistence of income across generations by 25 percent.⁷

Improving the quality of human capital in disadvantaged regions can have potentially long-lasting effects.⁸ Yet, identifying areas where the returns to human capital investment are higher is not always simple because measures of current monetary poverty might not fully signal these returns. Disaggregating the HCI spatially can help governments prioritize social sector spending, complementing not only poverty maps but also spending data and measures of the quality of services, such as those collected by the Service Delivery Indicators initiative.⁹ It might also improve the efficiency of other types of government spending. For instance, regions where levels of human capital are low might not be the most suitable to receive incentives for research and development because people in these regions are not properly prepared to maximize the potential of these opportunities.

3. See for example Cunha and Heckman (2009) and Schady et al. (2015).

4. Cunha and Heckman (2006); Cunha and Heckman (2007); Cunha and Heckman (2009).

5. Ferreyra and Roberts (2018); Moretti (2013).

6. Bergman et al. (2019); Chetty and Hendren (2018).

7. Bergman et al. (2019).

8. Valencia Caicedo (2018).

9. See SDI (Service Delivery Indicators) (database), World Bank, Washington, DC, <https://www.sdindicators.org/>.

BOX 1.1 The Human Capital Index

The Human Capital Index (HCI) measures the *amount of human capital that a child born today can expect to attain by age 18, given the risks of poor health and poor education that prevail in the country where she lives*. The HCI consists of three components:

- **Component 1: Child Survival.** This component reflects the fact that not all children born today will survive until age 5, when the process of human capital accumulation through formal education begins.
- **Component 2: Expected Learning-Adjusted Years of School.** This component combines information on the quantity and quality of education. The quantity of education is measured as the number of years of school that a child can expect to obtain by age 18. The quality of education draws on work at the World Bank to harmonize test scores from major international student achievement testing programs into a common yardstick of learning.
- **Component 3: Health.** Two proxies for the overall health environment are used to inform this component: (i) adult survival rates, defined as the fraction of 15-year-olds that survive until age 60 and (ii) the rate of stunting for children under age 5. Adult survival rates can also be interpreted as a proxy for the range of non-fatal health outcomes that a child born today would experience as an adult. Children are defined as stunted if their height-for-age is more than two standard deviations below the World Health Organization Child Growth Standards median. Stunting is broadly accepted as a proxy for the prenatal, infant, and early childhood health environment.

The HCI formulation has theoretical underpinnings in the development accounting literature. Specifically, it uses micro-econometric estimates of the returns to education and health to measure the contributions of these components to the productivity of a child born today as a future worker.

The index ranges between 0 and 1, where the index takes the value 1 only if the average worker in the country will achieve both full health (defined as the absence of stunting and an adult survival rate of 100 percent) and full education potential (14 years of high-quality school by age 18). Therefore, if a country scores 0.70 in the HCI, this indicates that the productivity of the average worker is 30 percent below what she could have achieved with complete education and full health.

Thanks to its structure, the index can be directly linked to scenarios for future income. If a country has a score of 0.50, then gross domestic product (GDP) per worker could be twice as high if the country reached the benchmark of complete education and full health. This is because human capital leads workers to become more productive and earn more, and in turn save more, providing the economy with more physical capital.

The global HCI reports country averages as well as country scores disaggregated by gender (box 1.2). This booklet presents analytical work to disaggregate the index by socioeconomic group and at the subnational level for selected countries where the required data are available.

Source: Kraay 2019; World Bank 2018a, 2018b.

BOX 1.2 Unlocking the Potential of Human Capital Investments through Gender Equality

Achieving gender equality is essential for countries to realize their economic and social potential and meet the challenges of the changing nature of work. Losses from gender inequality because of differences in lifetime labor earnings are large.^a

Human capital provides opportunities and underpins economic empowerment; gender equity is a prerequisite for this. However, countries also need to become galvanized into removing barriers faced by women and girls in utilizing their human capital to capture productivity gains fully.

Much progress has been made in closing gender gaps at the global and regional levels, but some challenges remain. Sex disaggregation—available for 126 out of the 157 countries in the global HCI—shows that scores are slightly higher among girls than boys in most countries with available data. Indeed, an emerging trend shows that girls are not merely catching up to but outperforming boys in expected years of school and learning outcomes in some regions. In Tunisia, girls are expected to complete one additional year of schooling compared with boys. In Saudi Arabia, the average learning outcomes for girls is 57 points higher than for boys.

Yet, in 40 percent of low-income countries with sex-disaggregated data, boys outperform girls in expected years of schooling. Within countries, disaggregation of outcomes shows further nuance. In Romania, girls have higher expected years of school in 35 of 41 counties and the average advantage for girls is considerably larger than the average advantage for boys. Conversely, in Angola, scores for girls and students in rural areas are lower on average in almost all provinces.

Even if the HCI overall shows that girls do as well or slightly better than boys, girls continue to face unique challenges in accumulating human capital that are not captured in the HCI, such as child marriage, early childbearing, and gender-based violence—not only in general but also in school specifically. Often, these are exacerbated by additional challenges within the countries. In Vietnam, for example, roughly three times as many adolescent girls in ethnic minorities are married compared with the national average, and almost five times as many have children before they reach age 19 as in the Kinh ethnic majority.^b

These observations come with two important caveats. First, gender gaps can only be observed if the relevant data are available. One in five countries in the 2018 global HCI ranking are missing sex-disaggregated HCI data. This is driven by gaps in the data on expected years of school and learning outcomes. Second, while gender gaps in human capital are closing in terms of the *flow* (youth), the gaps are quite wide in the *stock* (adults). Globally, males born between 1961 and 1970 were on average 9.4 percentage points more likely to be literate than the corresponding females. This gap drops to 3.1 percentage points among cohorts born between 1991 and 2000.^c

Despite improvement in the human capital of girls, women continue to face unique barriers in converting their human capital into economic opportunities. Adult labor force participation worldwide is 27 percentage points lower among women than men. Globally, only one

firm in five has women top managers.^d Women are paid less, more likely to work in the informal sector, and less likely to move up the career ladder.

Turning human capital investments into economic potential means addressing the barriers to women's economic empowerment, such as occupational sex-segregation, disadvantageous social norms on household and market roles, lack of childcare, inadequate parental leave policies, sexual harassment, unsafe transportation, differential constraints in access to finance and markets, and legal and regulatory barriers to work and to start and grow firms.

- 
- a. Wodon and de la Brière (2018).
 - b. Mbuya, Atwood and Huynh (2019).
 - c. Statistics calculated from data of DataBank, World Bank, Washington, DC, <http://databank.worldbank.org/data>.
 - d. Statistics calculated from data of Gender Data Portal (database), World Bank, Washington, DC, <https://datatopics.worldbank.org/gender/>.

2

Socioeconomic

DISAGGREGATION



A large body of evidence, especially from high- and middle-income countries, shows that children in poor households have worse human capital outcomes compared with children in rich households.¹⁰

Several factors, which often reinforce one another, can contribute to these rich-poor gaps in human capital. The lack of monetary resources, combined with the reduced ability to borrow, prevents the poor from accessing health and education services.¹¹ In the absence of insurance, external shocks, such as those caused by weather, may force children in poor households to drop out of school or adversely impact their learning outcomes. Evidence from Uganda shows that girls are likely to be the most affected.¹² Households may lack information about the returns to human capital or face significant opportunity costs in acquiring human capital.¹³ And social norms about women's roles, which can be harder for the poor to challenge, shape many critical decisions related to human capital such as fertility, breastfeeding, or schooling.¹⁴

These early inequalities in human capital are amplified over the life cycle and investments to remediate them become costlier the older children get. Moreover, their effects are often inherited by subsequent generations.¹⁵ Even in well-off

and progressive Sweden, one additional year of education of a great-grand-parent is associated with 0.15 years more education of the grandchild.¹⁶

The size of the human capital gap between rich and poor households varies considerably across countries, and underlying drivers can also differ depending on the context. In many upper-middle-income countries, children in different socioeconomic groups display differences in cognitive abilities but not in nutritional outcomes. This is not the case in low-income countries where socioeconomic differences are often dramatic for both health and education outcomes.¹⁷

Governments have a vital role to play in building human capital— directly financing and delivering or regulating the private delivery of social services while ensuring equitable access to opportunities. A socioeconomic disaggregation of the HCI can shed light on inequalities within countries and allow policy makers to formulate and target interventions more effectively for the most disadvantaged.

While the global HCI cannot readily be disaggregated by socioeconomic group, comparable data from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) allow the measurement of child survival, school enrollment, and stunting rates at the individual

10 This section is largely based on D'Souza, Gatti, and Kraay (2019).

11 Barrera-Osorio, Linden and Urquiola (2007).

12 Björkman-Nyqvist (2013).

13 Dupas (2011); Jensen (2010).

14 Jayachandran and Kuziemko (2011); Kahn and Ginther (2017); La Ferrara, Chong, and Duryea (2012).

15 Chetty et al. (2018).

16 Lindahl et al. (2015).

17 Wagstaff, Bredenkamp and Buisman (2014).

and household levels, as well as by socioeconomic quintile. The harmonized student test scores underlying the global HCI can also be organized by socioeconomic quintile (box 2.1).¹⁸ Using the HCI methodology to translate these data into their

contribution to productivity, a socioeconomically disaggregated HCI (SES-HCI) can be constructed for a set of 50 mostly low- and middle-income countries, slightly under one-third of the 157 countries covered by the global HCI.¹⁹

BOX 2.1 Constructing a Socioeconomically Disaggregated HCI (SES-HCI)

The SES-HCI sheds light on inequalities in human capital accumulation across socioeconomic groups. It is computed using the same methodology as the calculation of the global HCI, described in Kraay (2019), but relies on different data sources to allow for a disaggregation by socioeconomic status (SES). Mortality and stunting rates among children under age 5 and school enrollment rates for ages 6 to 17 come from nationally representative DHS and MICS. These are drawn from two existing compilations of SES-disaggregated DHS-MICS data—the Health Equity and Financial Protection Indicators (HEFPI) database, described in Wagstaff et al. (2019), and the household wealth and educational attainment dataset, first described in Filmer and Pritchett (1999). SES-disaggregated harmonized test scores are obtained from Abdul-Hamid and Iqbal (2019), who in turn draw on the same database of student-level harmonized test scores used in the 2018 HCI, as described in Patrinos and Angrist (2018).

The DHS and MICS contain information on household characteristics and asset ownership that can be used to create a wealth index. Similarly, Abdul-Hamid and Iqbal (2019) develop proxies for the SES of the households in which each student resides based on data collected by the testing program on the home possessions of students, as well as parental education and occupation. In the DHS-MICS context, these indexes are usually referred to as wealth or asset indexes. International testing program databases construct conceptually similar indexes, but use terms such as economic, social, and cultural status. For terminological convenience, all these measures are referred to here as SES indexes.

To create the sample of countries for the SES-HCI, data from DHS-MICS surveys are aligned with test score data to account for the fact that the positions of students in the SES distribution in the test score data cover only the households of children who are attending school (because the harmonized test scores are measured using school-based tests), while the DHS-MICS data cover all households, including those in which children do not attend school. Consider, for example, a country where the test scores are taken from the Programme for International Student Assessment (PISA), which is administered to 15-year-olds. Enrollment rates for 15-year-olds by SES quintile in the DHS-MICS are used to calculate the fraction of students attending school associated with each SES quintile in the DHS-MICS. For instance, if students in the bottom SES quintile are more likely to drop out of school, then students in the bottom quintile might, for example, represent only 15 percent of test takers even

18. Data sources for the SES-HCI are detailed in appendix 2.

19. The SES-HCI has a more limited country coverage than the global HCI (50 vs 157 countries) because it requires a DHS or MICS to be available, as well as student-level data on harmonized learning outcomes taken from a test carried out reasonably close in time to the DHS or MICS.

though they account for 20 percent of households. In this case, the average harmonized test score for the poorest 15 percent of test-takers (according to the SES-HCI in the test score data) is assigned to the households in the poorest quintile in the DHS-MICS. A similar approach is applied for each quintile to arrive at average harmonized test scores for each DHS-MICS quintile. This process creates a single cross-section of 50 countries, using the most recent-available DHS-MICS and testing data.

Although the SES-HCI uses the same methodology as the global HCI, it differs in several key respects. First, the SES-HCI uses household survey-based measures of school attendance, which can differ considerably from the administrative data used in the global index. Second, because of data limitations, the SES-HCI measures expected years of school between ages 6 and 17, while the global HCI relies on administrative data covering the 4 to 17 age range. Third, because household survey data do not provide estimates of adult mortality, the health component of the SES-HCI is based only on stunting rates, unlike the global HCI, which uses stunting rates and adult survival rates. Taken together, these differences imply that the SES-HCI data at the quintile level and averaged to the national level are not fully comparable or consistent with the global HCI, and country scores and relative positions can differ between the SES-HCI and the global index. However, the SES-HCI can still prove informative about gaps in human capital outcomes across quintiles. (Appendix 1 provides a more detailed description of these differences).

Source: D'Souza, Gatti, and Kraay 2019.

UNDERSTANDING SOCIOECONOMIC GAPS IN HUMAN CAPITAL

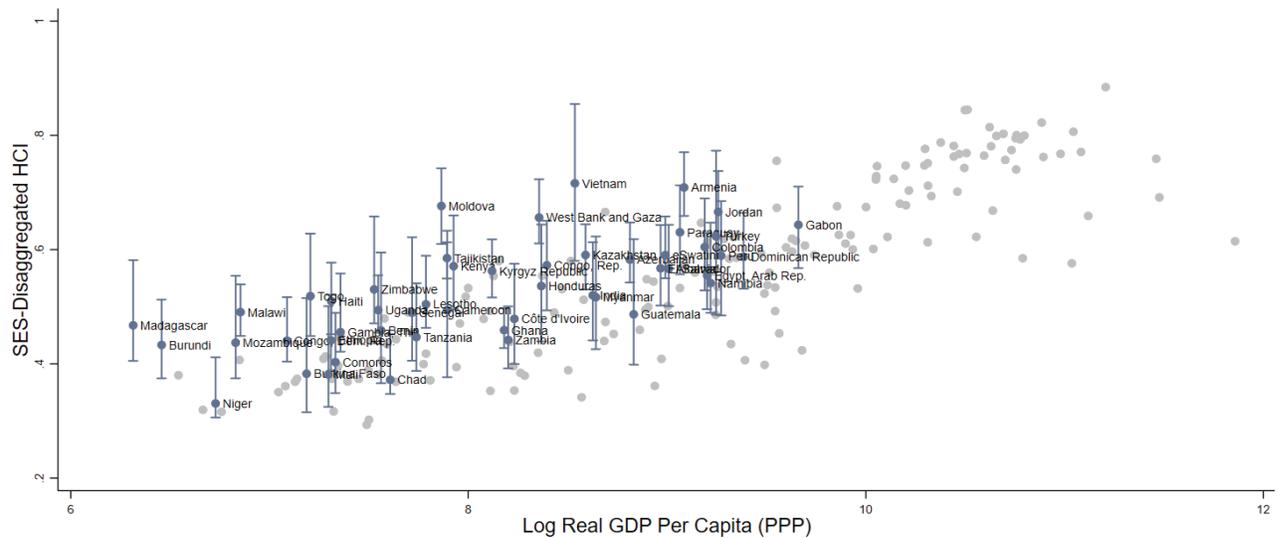
The SES-HCI varies considerably, ranging between 0.3 to 0.4 in the least well-performing countries, such as Chad, Mali, and Niger, to around 0.7 in the top-performing countries, such as Armenia and Vietnam.

Across countries, as with the global HCI, the SES-HCI increases with per capita income. And, within countries, rich households have better outcomes than poor ones. These rich-poor gaps are apparent across the whole income spectrum. For example, in Madagascar, the SES-HCI ranges from 0.40 in the poorest quintile to 0.58 in the richest quintile, while, in much richer Vietnam, the gap ranges from 0.58 to 0.85. In the latter, the within-country difference between the top and bottom quintiles is roughly half the size of the cross-country difference between the highest and lowest

country-average SES-HCI values. These gaps are illustrated in figure 2.1, where quintiles of the SES-HCI are plotted for each country relative to per capita GDP and against the background of the global HCI (light grey dots).

Socioeconomic gaps in human capital outcomes within countries are large and account for nearly one-third of the total variation in the SES-HCI.

The differences in human capital between rich and poor people contribute substantially to overall differences in human capital around the world. Nearly one-third of the total variation in human capital consists of within-country differences across socioeconomic quintiles. Differences in child survival and test scores across quintiles within countries account for a relatively small

FIGURE 2.1 Socioeconomically Disaggregated Human Capital Index

Source: D'Souza, Gatti, and Kraay 2019.

Notes: The figure plots the HCI disaggregated by quintiles of socioeconomic status (on the vertical axis) against log real GDP per capita (on the horizontal axis) for the most recent cross-section of 50 countries in the SES-HCI dataset. A solid dot indicates the average across quintiles, and the top (bottom) end of the vertical bar indicates the value for the top (bottom) quintile. The light grey data points show the global HCI for countries for which the SES-HCI is not available.

share of the overall variation in these outcomes: 21 percent and 23 percent, respectively. Instead, within-country rich-poor gaps in expected years of schooling and stunting account for a considerably larger share of the overall variation in these outcomes, at 31 percent and 33 percent, respectively.

As countries get richer, the rich-poor gap in the SES-HCI decreases, albeit slightly. This is captured in figure 2.1 by the length of the vertical bars and in figure 2.2, which plots the difference in outcomes between the top and bottom socioeconomic quintiles against per capita GDP.

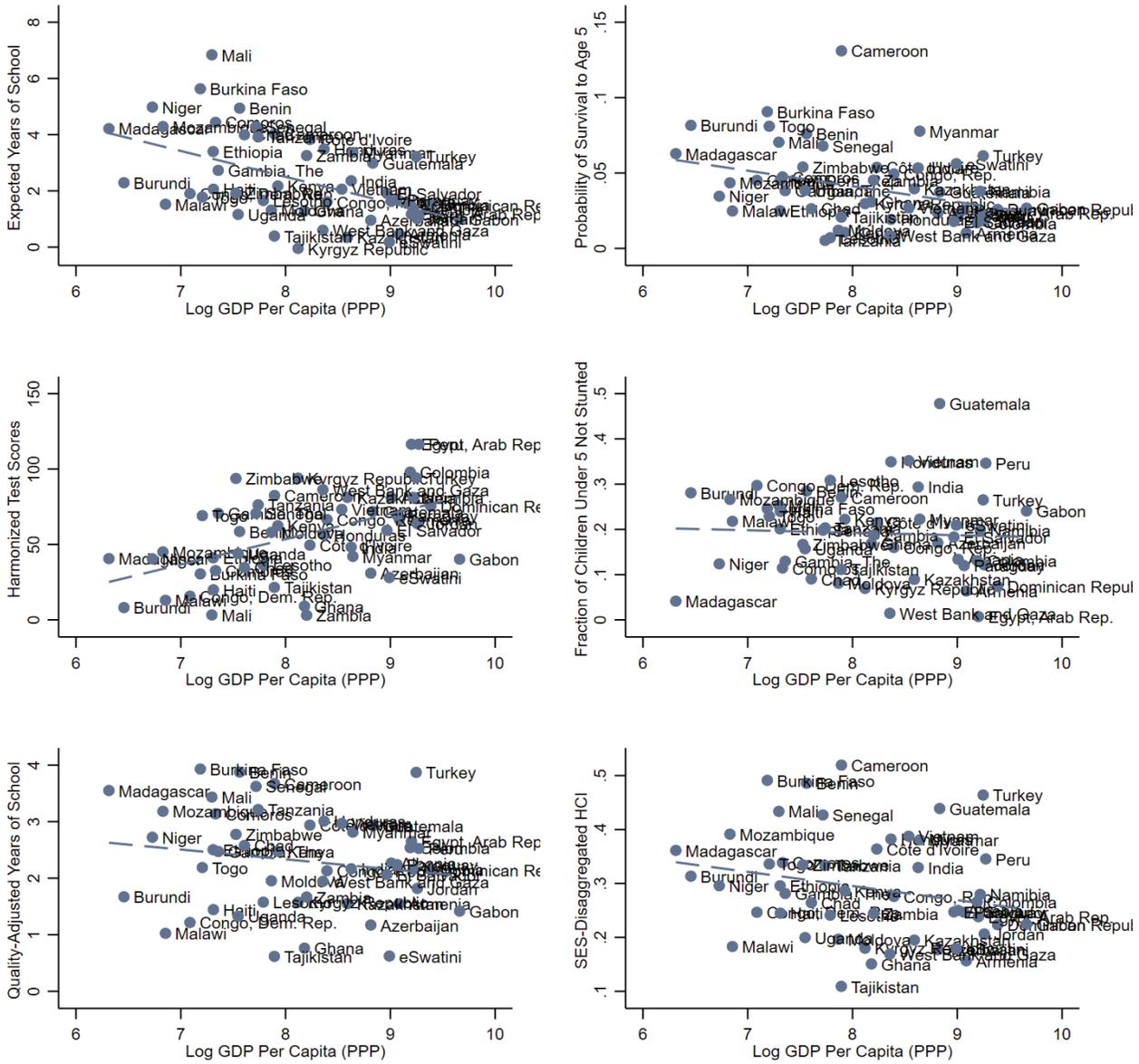
The rich-poor gap decreases as countries get richer in all but one component of the SES-HCI: learning outcomes. For child survival, the cross-country

convergence in rich-poor gaps reflects the benefits of improved access to health care for pregnant women, newborns, and young children, as well as better nutrition and sanitation. This is partly attributable to the increased coverage of several key interventions over the last two decades that have particularly benefited children from the most disadvantaged backgrounds, including antenatal care visits with skilled health personnel, facility-based labor and childbirth care, vitamin A supplementation, immunization, and safe drinking water.²⁰

Despite these gains, poor countries and poor households continue to bear a disproportionate burden of child mortality. For example, a child in the poorest households in Burundi has an 84 percent chance of surviving to age 5, compared with 92 percent in

20. Chao et al. (2018); Liu et al. (2016).

FIGURE 2.2 Rich-Poor Gaps in Human Capital across Countries



Source: D’Souza, Gatti, and Kraay 2019.

Notes: The figure plots gaps in human capital outcomes between the top and bottom quintiles (on the vertical axis) against log GDP per capita (on the horizontal axis) for the most recent cross-section of 50 countries in the SES-HCI dataset. The Q5-Q1 gaps are defined as (a) the difference between the top and bottom quintiles (for expected years of schooling, harmonized test scores, quality-adjusted years of school, and the not-stunted rate) and (b) the log-difference between the top and bottom quintiles for child survival and for the overall HCI.

the most affluent families. In contrast, in Armenia, children in both poor and rich households can hope to reach age 5 with near certainty. This is in tandem with a global trend whereby coverage of key interventions among the richest far exceeds that among the poor. Infectious diseases, such as pneumonia and diarrhea, affect children in poor households more compared with their rich counterparts as they continue to lack access to effective treatments, appropriate nutrition, safe water, and sanitation facilities. Likewise, the burden of newborn deaths, a key contributor to poor child survival, is disproportionately high among the poor. Moreover, the poor in poorer countries continue to fare worse than the poor in richer countries.

In countries with the largest socioeconomic gaps, young children in the poorest households still face a significant risk of not making it to their 5th birthday.

Nevertheless, countries such as Malawi, Tanzania, and Uganda have succeeded in improving child survival significantly, while narrowing the differences between the rich and the poor. These examples indicate that supporting the improved coverage and quality of key reproductive, maternal, newborn, and child health interventions, with a focused attention on socioeconomically disadvantaged groups, is critical in addressing these disparities.²¹

The benefits brought about by higher income are also evident in other markers of child well-being. Globally, stunting rates decline with increasing per capita income and stunting prevalence fell from 40 percent to 22 percent between 1990 and 2017.²²

However, this progress materialized in an uneven way across and within countries. Consider Guatemala and Madagascar. Notwithstanding a significant difference in per capita income, both countries have among the highest stunting rates in the world; nearly half of all children are stunted. In Madagascar, stunting is uniformly high across all socioeconomic groups, while in Guatemala, a child in the bottom socioeconomic group is more than three times as likely to be stunted than a child in the top quintile.

Unlike other HCI components, stunting does not necessarily decrease among wealthier households

Moreover, in many countries, stunting does not decrease in lock step with income.²³ Figure 2.3 reports the fraction of children not stunted for a selection of countries in which the gap between the poorest households (the 1st quintile) and the 4th quintile is smaller than the gap between the 4th quintile and the richest households (the 5th quintile). This likely reflects the complexity of the basic and underlying determinants of undernutrition, including environmental, economic, and cultural factors. The need to respond through multi-sectoral programs that simultaneously address these multiple drivers has been recognized internationally.²⁴

Over the last 50 years, schooling has expanded dramatically in most low- and middle-income countries. In some countries, this expansion has been at historically unprecedented rates, both in primary and secondary education.²⁵ Unfortunately, children in marginalized groups continue

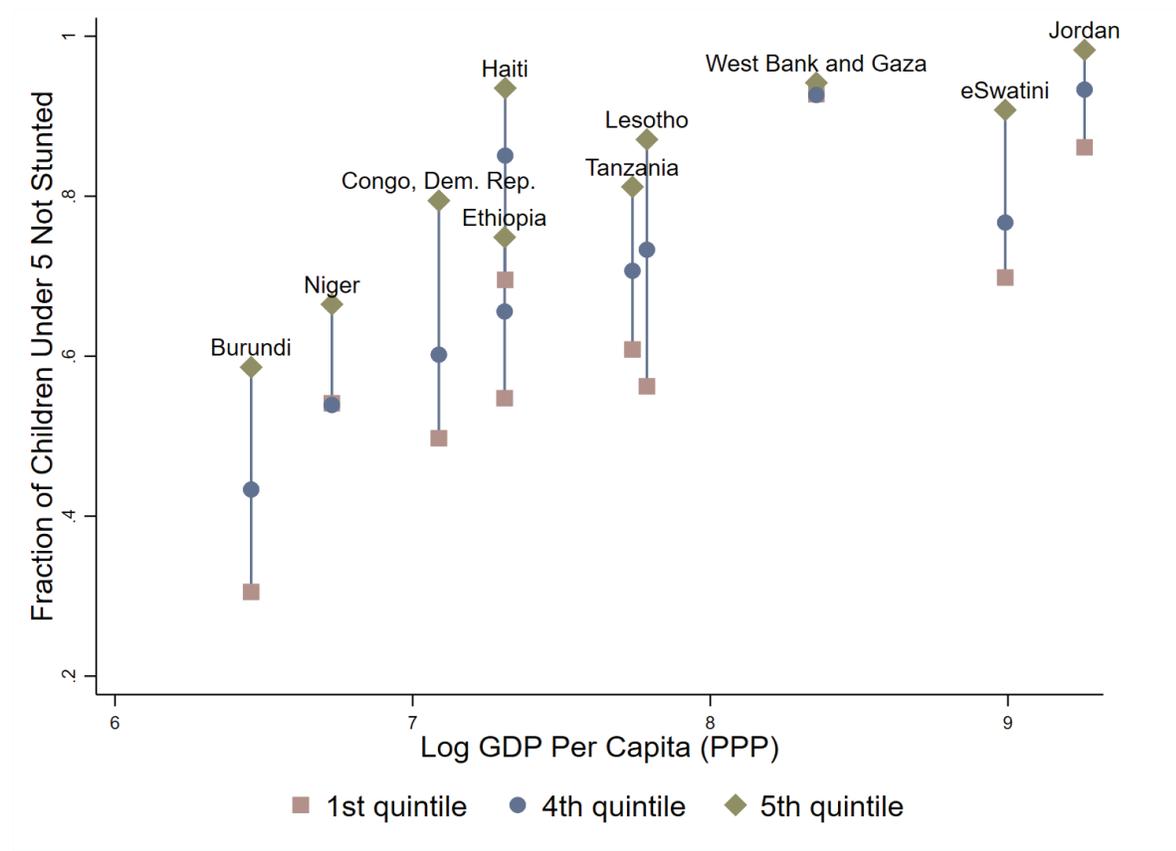
21. Requejo et al. (2015).

22. de Onis and Branca (2016) for 1990 data; Galasso and Wagstaff (2017); WDI (World Development Indicators) (database), World Bank, Washington, DC, <https://datacatalog.worldbank.org/dataset/world-development-indicators> for 2017 data.

23. de Onis and Branca (2016).

24. World Bank (2018a).

25. World Bank (2018c).

FIGURE 2.3 Socioeconomic Gradient in Nonstunting Rates by Income Level

Source: World Bank calculations based on DHS-MICS data as reported in Wagstaff et al. 2019.

to face significant barriers in accessing and completing primary education and in transitioning to higher grades, all of which translates into a persistent association between schooling and socioeconomic status.

Figure 2.4, which is drawn from the World Bank educational attainment database, depicts these patterns and their heterogeneity.²⁶ It details grade survival trajectories by socioeconomic

quintiles—here captured by an estimate of wealth²⁷—across a selection of countries. The y-axis shows the proportion of the population ages 10–19 that has succeeded (that is, survived) to each grade (grades 1–9).²⁸ There are striking differences in the grade survival patterns across and within countries comparing children in the richest quintile (represented by the red continuous line in the panels) to those in the poorest quintile (represented by the blue continuous line).

26. See Educational Attainment (database), World Bank, Washington, DC, <http://iresearch.worldbank.org/edattain/>.

27. Wealth status is captured by a proxy based on the assets owned by members of the household.

28. To accommodate the fact that the full school trajectory until grade 9 is not observed among younger children, the probability of completing future grades is estimated using a hazard function.

Especially in the poorest countries and for poorer households, a large portion of children never start school or fail to stay in school as they get older.

In Chad—the country that scored the lowest in the global HCI—as of 2015, only 60 percent of children ages 10–19 from the bottom four socioeconomic groups had completed grade 1, and barely 30 percent had completed grade 9. This is in sharp contrast with the 80 percent of 10- to 19-year-olds in the top quintile who had completed grade 1 and were significantly more likely to stay in school until grade 9.

In Pakistan, moving from a lower to a higher socioeconomic quintile is associated with a progressive improvement in both access to school and grade survival. In 2012, only 44 percent of children from the lowest wealth quintile were enrolled in grade 1, and only 20 percent of these children graduated to grade 9. In other countries, gaps emerge only later in the school system, for example, in Thailand, where the wealth gap becomes evident only in grades 6 and 7.

Furthermore, being in school does not necessarily translate into learning. International and national student assessments have been instrumental in

benchmarking progress and quantifying learning gaps across socioeconomic groups.²⁹ The evidence shows that better learning continues to be associated with higher socioeconomic status across and within countries, signaling differences in access to quality education.³⁰

In the SES-HCI sample of low- and middle-income countries, learning inequality increases as countries get richer. This can be due to many factors, and more research is needed to disentangle them fully.³¹ Yet, emerging evidence suggests that this pattern disappears above a certain income level. This is consistent with the experience in high-income countries, such as Germany and Poland, that have been able to increase their overall performance in student assessments by improving learning among children at low levels of achievement, often those with more marginalized backgrounds.³² For example, following the unexpectedly poor results in the 2000 Programme for International Student Assessment (PISA), the German government implemented a series of reforms, including reduced tracking and segregation, standardization of curricula, expansion and strengthening of the educational content of pre-primary schools, that effectively reduced the gap between children with advantaged and disadvantaged educational backgrounds and improved the country's overall performance in subsequent PISA assessments.³³

29. Crouch and Gustafsson (2018).

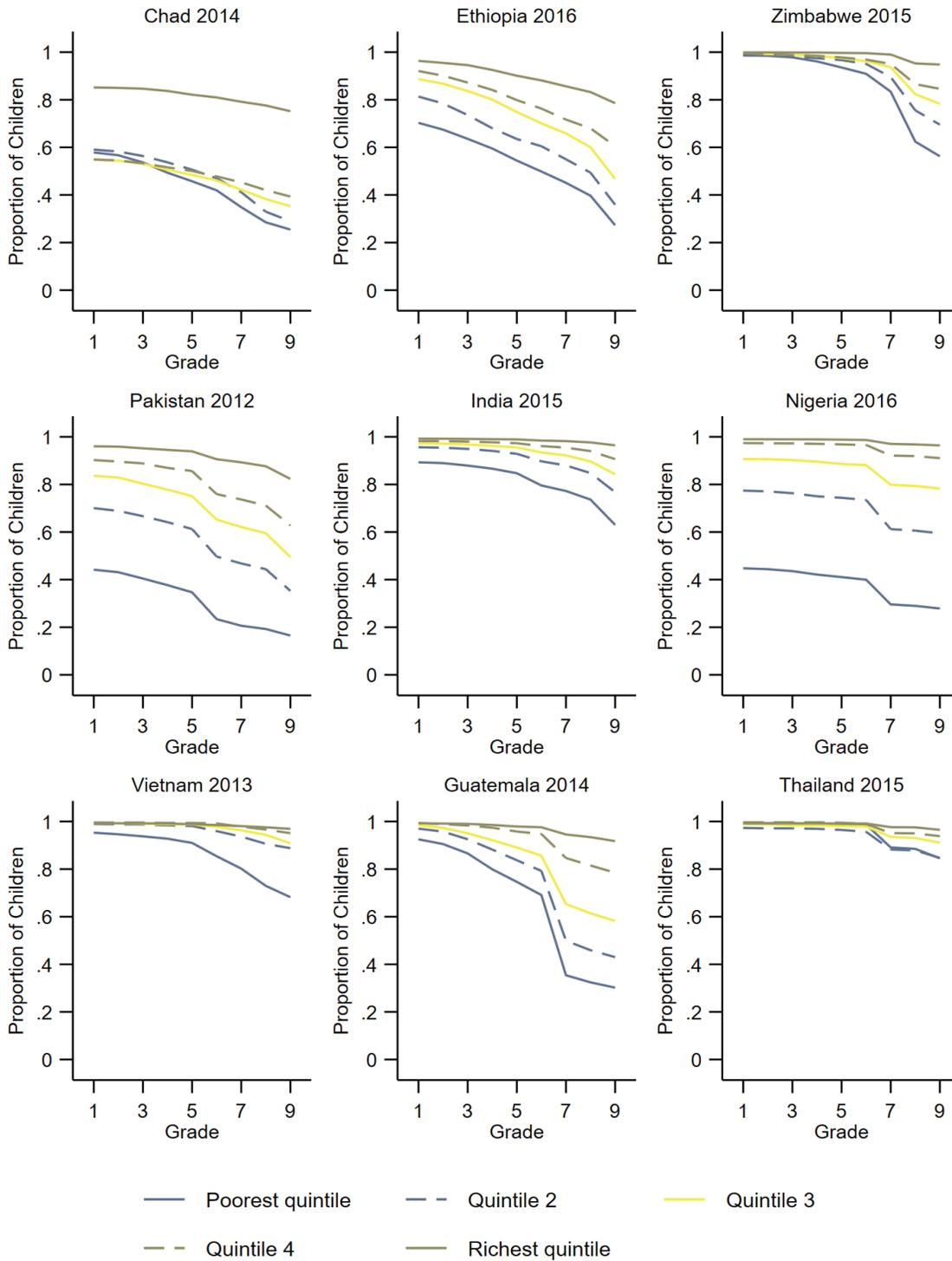
30. Martins and Veiga (2010).

31. On the one hand, this pattern could be due to underlying factors such as the fact that tests in the poorer countries in this sample tend to focus on primary school, while tests in richer countries are more likely to cover secondary school-aged children. If individual differences in learning ability accumulate over time, this could contribute to the observed regularity of greater dispersion in test scores in rich countries. It could also reflect selection, if the children in school in poorer countries come from a more homogenous background than the children in school in richer countries. On the other hand, this pattern is also to some extent a consequence of the test score harmonization methodology. Tests are harmonized by (a) first rescaling testing data from individual testing programs to have mean 500 and standard deviation 100 across all students taking that test in all countries and (b) then developing a multiplicative exchange rate between testing programs that reflects the ratio of the average performance of students in countries participating in two testing programs. This ratio is smaller than one for the testing programs in poorer countries. For example, for Early Grade Reading Assessment test (EGRA), the scaling factor is 0.73 relative to the benchmark. This multiplicative adjustment factor reduces both the mean and the dispersion in harmonized test scores in EGRA relative to the benchmark. This contributes to the pattern of lower dispersion in harmonized test scores in the poorer countries relative to the richer countries in the sample.

32. There is ample debate on the policies that can be effective in improving education outcomes. See, for example, Glewwe and Muralidharan (2016).

33. Davoli and Entorf (2018).

FIGURE 2.4 Proportion of 10- to 19-Year-Olds Who Have Attained Each Grade, by Wealth Quintile



Source: Educational Attainment (database), World Bank, Washington, DC, <http://iresearch.worldbank.org/edattain/>; Filmer 2018.

HUMAN CAPITAL OUTCOMES AND INCOME WITHIN AND ACROSS COUNTRIES

Countries differ greatly both by the level of human capital acquired by the poorest and by how quickly human capital increases if one shifts attention from households in the bottom income quintile to those at the top. Figure 2.5 shows the relationship between SES-HCI and log income across quintiles across different regions. This human capital-income gradient is depicted as an upward sloping line for each country, while the five data points correspond to the five socioeconomic quintiles.

In countries with steeper slopes (illustrated in red), the income distribution is relatively more compressed than the distribution of human capital. In these countries, a small increase in income is associated with significant increases in human capital. Green lines highlight countries in which the distribution of human capital is relatively egalitarian, which results in flatter slopes.

For example, in the top-left panel, the fairly flat green line for Haiti shows that the country exhibits relatively small differences in human capital outcomes across socioeconomic quintiles despite quite large income differences across quintiles. Conversely, the steep red line for Guatemala highlights that country's large differences in human capital outcomes across quintiles given the level of income inequality.

These relationships reflect both the historical distribution of income within countries and the cumulative effectiveness of policies that redistributed human capital across different socioeconomic groups. Regression results show that, on

average, the rate at which human capital improves with income *within* countries is similar to the rate at which human capital improves with income *between* countries.³⁴ This suggests that, on average, governments have not been more successful in reducing inequalities in human capital than the effect that getting richer has across countries.

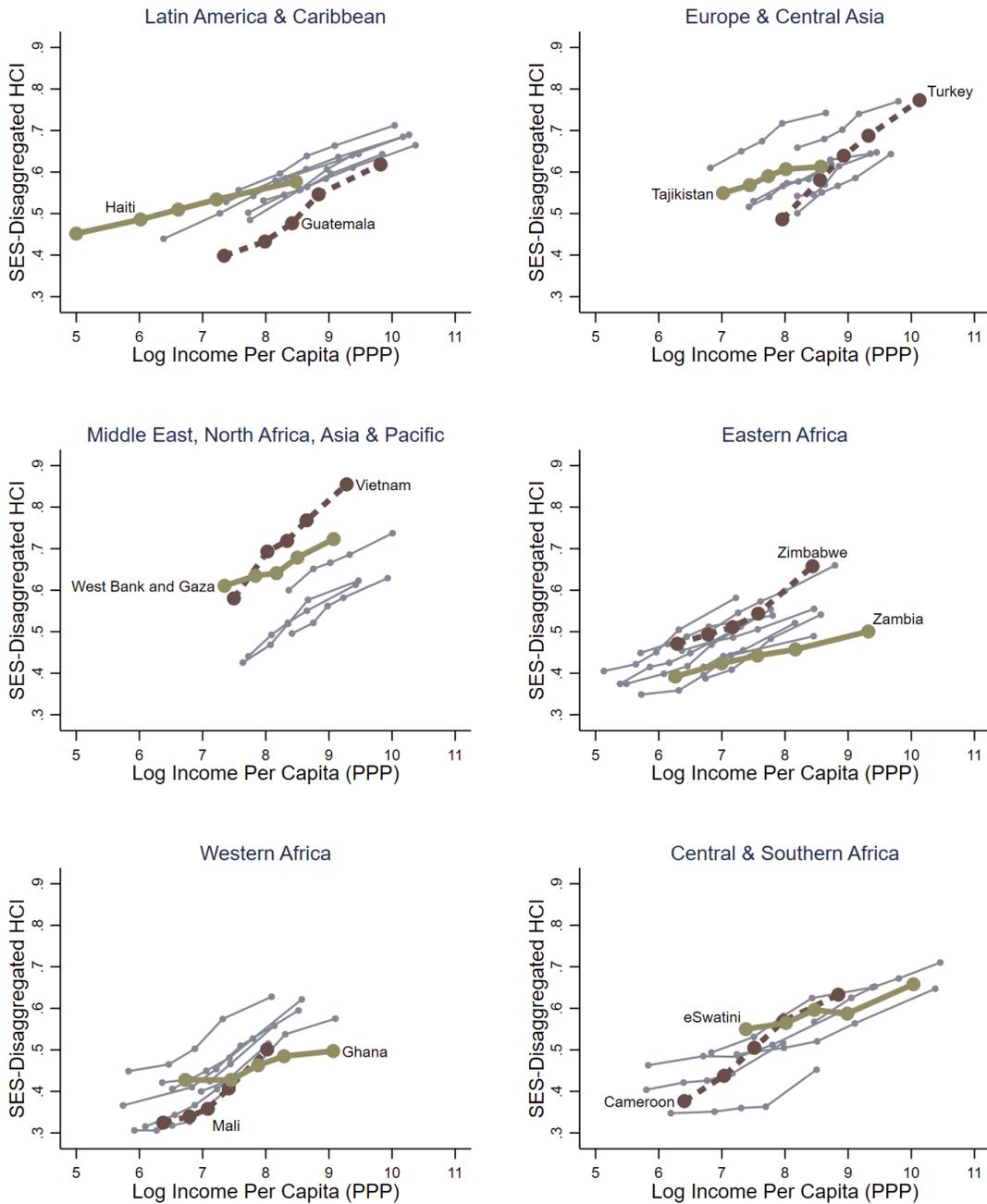
National governments have the ability and often the mandate to reduce inequalities in health and education outcomes across income groups. The analysis in this section reveals an unfinished agenda: with low average human capital outcomes and considerable gaps between the rich and the poor. The extent of these gaps varies across human capital dimensions and country income.

On the whole, rich-poor gaps in the SES-HCI tend to decrease slightly as countries get richer, and government redistributive policies do not seem to do a better job of reducing human capital inequality than the effect of increased national income. At the same time, the heterogeneity of the slopes in figure 2.5 indicates that individual countries have different degrees of success in decoupling human capital outcomes among children from the income differences among their households.

Addressing these rich-poor gaps in human capital must remain a priority for governments because, in many cases, the returns to investment in the human capital of disadvantaged groups, especially early in life, are the highest.

34. Pooling the quintile level data on the SES-HCI and log income per capita for all countries allows a between and a within regression of the former on the latter to be estimated and thus answer the question, how the within-country relationships between human capital outcomes and income levels compare with the corresponding pattern across countries. Both for the SES-HCI and for all but one of its components, the slope of the relationship between countries is similar to the within-country slope. The one exception to this pattern is child survival rates, where the within-country gradient with income is consistently smaller than the between-country gradient with income. The results are described in detail in D'Souza, Gatti and Kraay (2019).

FIGURE 2.5 Human Capital: Income Gradients within Countries



Source: D’Souza, Gatti, and Kraay 2019.

Notes: The figure reports the within-country relationship across quintiles between the SES-HCI and log per capita income. Per capita income in each quintile is approximated using the quintile share in income or consumption as reported in the PovcalNet tool for the survey nearest to the SES-HCI data, together with GDP per capita as the mean. The upward sloping lines in each panel trace the five quintile values for each country. The heavy solid green line (heavy dashed red line) shows the country in each group with the flattest (steepest) within-country gradient between the SES-HCI and log income per capita. See PovcalNet (online analysis tool), World Bank, Washington, DC, <http://iresearch.worldbank.org/PovcalNet/>.

3

Spatial

DISAGGREGATION



While inequality between countries has decreased in the past decades, increased inequality within countries and especially the urban-rural disconnect are growing concerns for many.³⁵ This phenomenon reflects important and interrelated global trends such as urbanization and technological change.

Across countries, a 1 percentage point increase in the share of the urban population is associated with a 3.8 percent increase in GDP per capita.³⁶ This exemplifies a trend that is common to many countries around the world: urban regions are growing much more quickly than rural ones.

Spatial inequalities are increasing, reflecting urbanization and the skill-biased nature of technological change.

Technological change and automation exacerbate this rural-urban divide. Skill-based technological change—innovation that is complementary to higher-order skills—has contributed to the increase in monetary and non-monetary returns for highly skilled individuals who opt to live in urban areas relative to those who are less well educated or live in rural areas. Moreover, because of agglomeration externalities, well-educated workers become more productive and attract the most dynamic and innovative firms if they are surrounded by peers with similar characteristics. As a result, disparities between urban and rural areas

reflect differences in human capital now more than ever. However, migration from rural to urban areas does not always level the playing field among unskilled workers. Evidence from the United States shows that non-college educated workers who live in urban areas are employed in occupations that require lower skills and pay lower real wages than in the past.³⁷ Irrespective of a country's income level, these trends are likely to increase the importance of the quality of the schools and health facilities in the places where individuals grow up.

There is growing consensus among economists that place-based policies should be tailored around the skills of the people who live in the places. For example, the benefits that a community obtains from major infrastructure relative to a targeted welfare program or research and development incentives depend on the skills of the residents.³⁸ Geographically disaggregated measures of human capital can provide a useful lens to identify areas where governments can target their resources most effectively to invest in the human capital of the young.

SUBNATIONAL INEQUALITY IS SUBSTANTIAL

The HCI offers a natural starting point to help policy makers identify policies that can reduce within-country disparities. The evidence that follows reflects the ongoing work of country teams at the World Bank and showcases findings from 11 countries: Angola, Burkina Faso, Chad, Indonesia, Mali,

35. World Bank (2016).

36. Ferreyra and Roberts (2018).

37. Autor (2019).

38. Austin, Glaeser and Summers (2018); Hendrickson, Muro and Galston (2018).

BOX 3.1 Spatial Disaggregation Conducted by World Bank Country Teams

The 11 disaggregations of the HCI (GEO-HCI) featured in this section were computed by World Bank country teams. The level of disaggregation varies by country: the GEO-HCI for Angola, Burkina Faso, Indonesia, Sierra Leone, and Sri Lanka is disaggregated by region; for Chad, Mali, Niger, and Peru by province; and for Romania at the county-level. In addition, data for Vietnam are disaggregated by ethnic group. The GEO-HCI illustrates disparities in human capital outcomes within countries. The differences in levels of disaggregation preclude cross-country comparisons of these gaps. For example, the range between best and worst performers is likely to be larger in countries that disaggregate at a lower subnational unit.

Like the SES-HCI, the GEO-HCI is based on the same methodology as the global HCI but uses different data sources in the calculation of disaggregated HCI scores at the subnational level. Some country teams also modify the complete education benchmark of 14 years used in the global HCI to reflect more closely the standard duration of the country's education system. As a result, the GEO-HCI data at the subnational level, and averaged to the national level, are not fully comparable or consistent with the global HCI, and country scores and relative positions can differ between the GEO-HCI and the HCI. Accordingly, comparisons between the two should be made recognizing these differences.

Because the analysis of these 11 countries reflects country interest and demand in analyzing regional inequality, this is not a representative or purposefully selected sample and patterns should be interpreted with caution. This grouping, however, covers each global region and is split among low-, lower-middle-, and upper-middle-income brackets, including two fragile states according to the World Bank classification. Nonetheless, because of the sample limitations, the analysis is not conducive to generalizations and is more akin to a case study approach, which highlights the potential of the methodology.

Niger, Peru, Romania, Sierra Leone, Sri Lanka, and Vietnam (box 3.1).³⁹

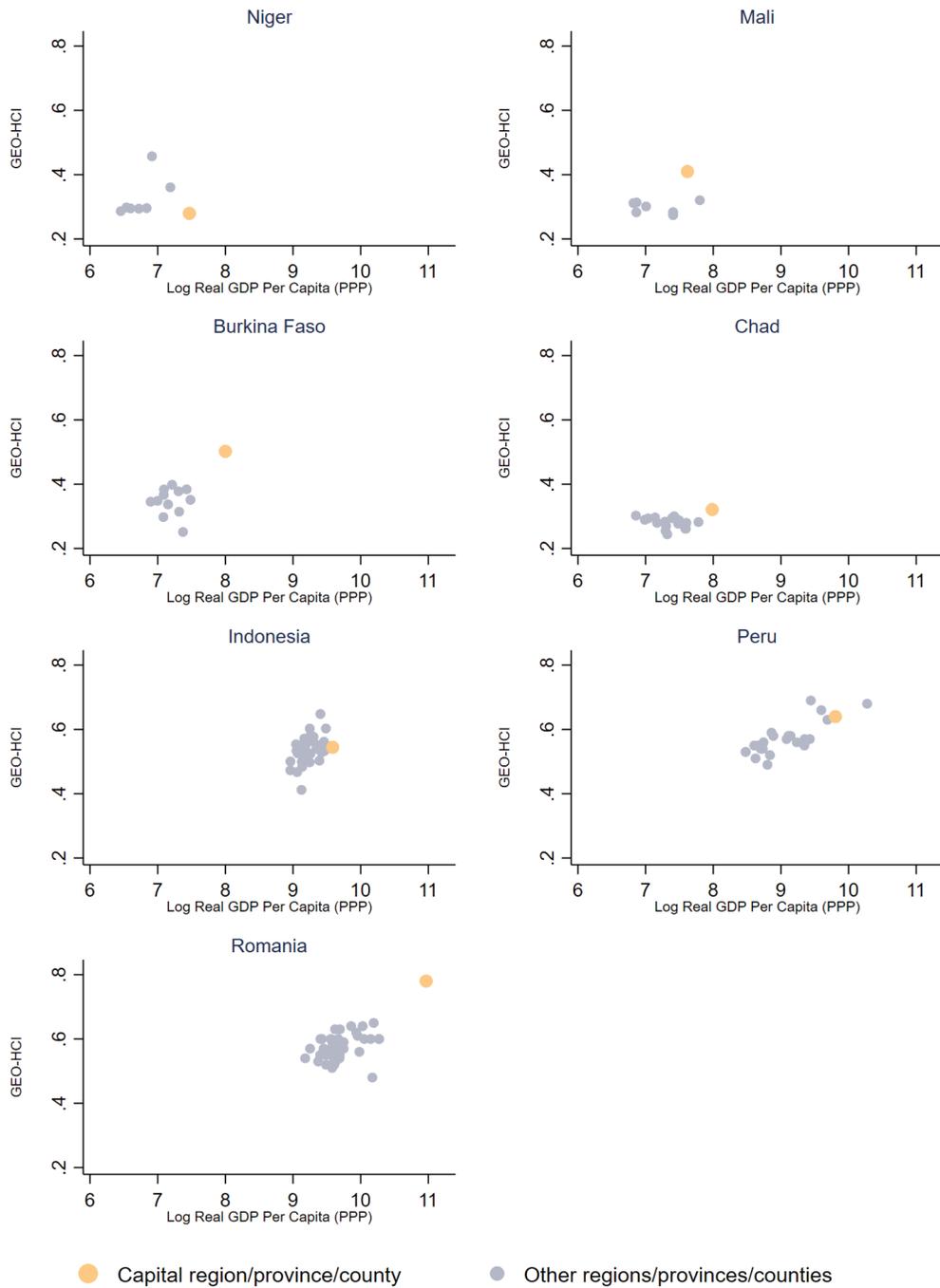
Overall, in this sample, richer regions within countries have better human capital outcomes, mirroring the pattern across countries. Figure 3.1 shows the GEO-HCI and per capita income for eight countries on which subnational GDP per capita data were available.

In the 11 countries studied here, within-country differences in the GEO-HCI between the top and

bottom-performing regions are significant, but they are especially large in middle-income countries, such as Indonesia and Peru. Capital regions are typically the top performers (see figure 3.1), a trend that is particularly pronounced in the low-income countries. However, the relationship between the GEO-HCI and per capita income is not always linear. For example, in Sri Lanka, the best and worst performers are neither the richest region nor the poorest and most conflict affected region, respectively.

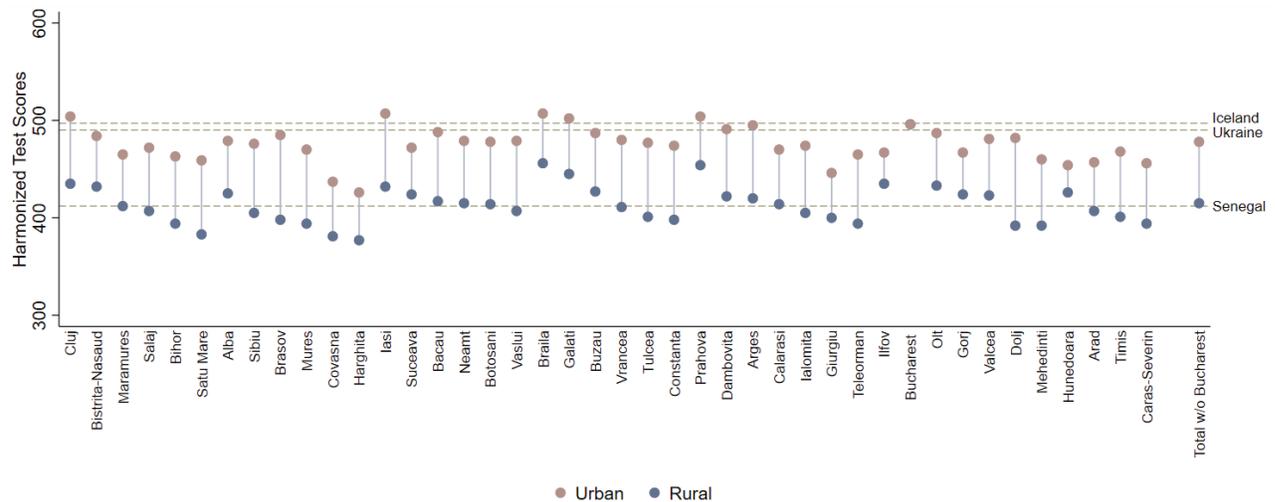
39. Data sources for the GEO-HCI are detailed in Appendix 3.

FIGURE 3.1 The Relationship between Income and the GEO-HCI Varies with Country income



Source: World Bank calculations based on GEO-HCI and GDP data provided by World Bank country teams. See appendix 3 for details.

Notes: Prices adjusted at 2011 purchasing power parity. To calculate subnational GDP per capita for Burkina Faso, Chad, Indonesia, Mali, and Niger, national GDP per capita is multiplied by the ratio of subnational per capita consumption to mean per capita consumption.

FIGURE 3.2 The Spatial Gaps in Harmonized Test Scores Are Large in Romania

Source: Lucchetti, Badiani-Magnusson, and Ianovici 2019.

No matter the income level of the country, human capital within regions can differ along many dimensions, such as rural-urban status and ethnicity. For example, the urban-rural divide in learning outcomes in Romania is significant. In Vaslui County, there are urban areas that score as high as Ukraine, while there are rural areas that rank at par with Senegal (figure 3.2).

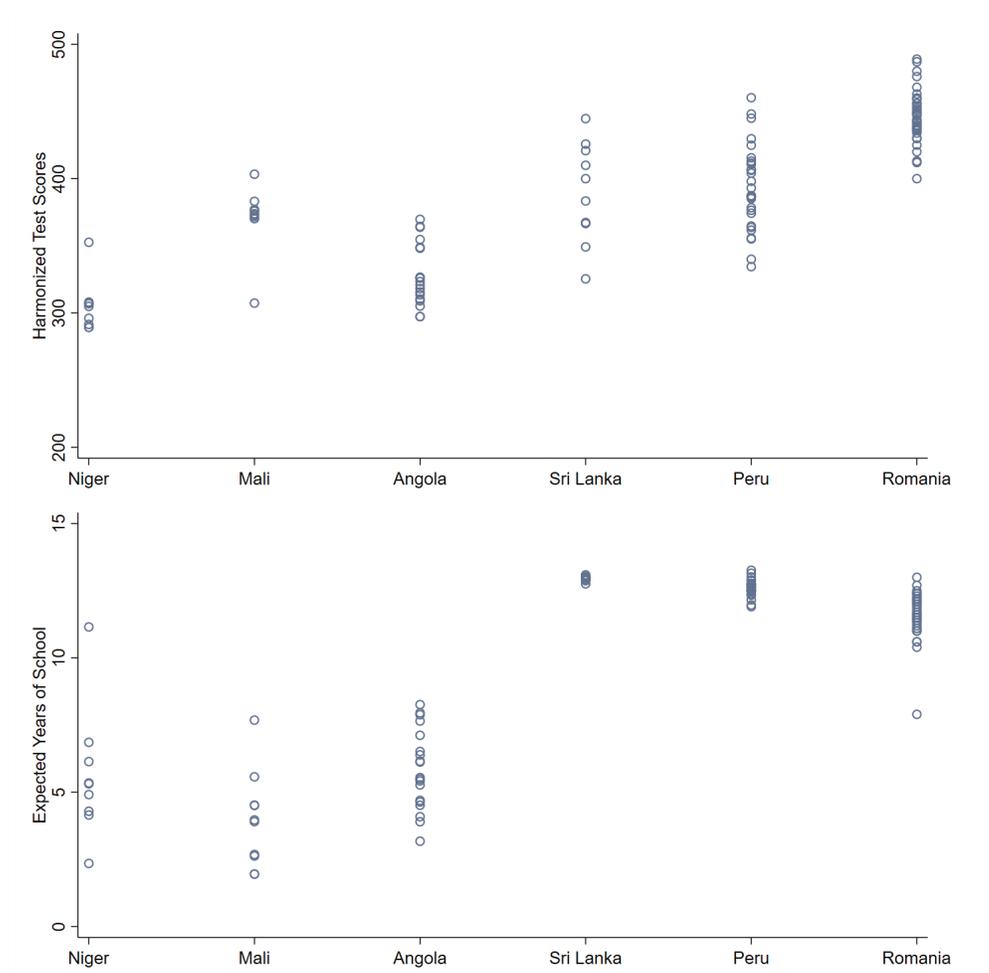
Within regions, minority group status also correlates with differences in human capital outcomes. In the global HCI, Vietnam ranks close to the high-income country average and well above the average among lower middle-income countries (its own income group). However, disaggregation of 2014 data shows that ethnic minorities score 0.62 in the GEO-HCI, compared with 0.75 for the ethnic-majority Kinh. At 32 percent, stunting rates are two times larger among ethnic minorities than among the Kinh majority. School enrollment also lags among ethnic minorities relative to their Kinh peers by 30 percentage points. In Peru, indigenous populations underperform

relative to their peers, whether in rural or in urban areas. The stunting rate among children under-5-year-olds is three times higher among urban indigenous children than among urban non-indigenous children, and 10 points higher between rural indigenous and rural non-indigenous.⁴⁰

WHAT DIMENSIONS OF HUMAN CAPITAL DRIVE THESE INEQUALITIES?

Like the global HCI, where both the quality and the quantity of schooling constitute an important driver of the variation across countries, education outcomes are clear drivers of regional inequality in the GEO-HCI. Romania, Peru, and Sri Lanka—middle-income countries with relatively higher HCI scores—show large variations in learning outcomes, but little differences in expected years of school. Conversely, countries with lower overall HCI scores show little variations in learning outcomes, but relatively large variations in expected years of school.

40. Marini and Rokx (2017).

FIGURE 3.3 Spatial Disaggregation of Learning Outcomes and Years of Schooling, Select Countries

Source: World Bank calculations based on GEO-HCI data provided by World Bank country teams.

Notes: Countries are ordered from the poorest to the richest.

Within the small group of countries analyzed here, the variation in learning outcomes versus years of schooling seems to suggest that access to schooling does not necessarily translate into realized learning (figure 3.3). In middle-income countries, the systematic improvements in enrollment and completion rates, especially in regions that started from low levels, may have led to an inflow of students with different levels of school readiness. This is likely to account, in part, for the large

variation in learning observed in these countries despite high enrollment. In low-income countries, with more limited access to school, it is possible that the group of test-takers is more homogenous in terms of school readiness, although at lower levels. This may explain why Angola, Mali, and Niger display relatively high within-country variation in expected years of school and little differentiation in terms of learning outcomes.⁴¹

41. As discussed in section 2, some of the differences in the patterns of learning dispersion between rich and poor countries are related to the statistical process of the harmonization of various test scores from different student assessments.

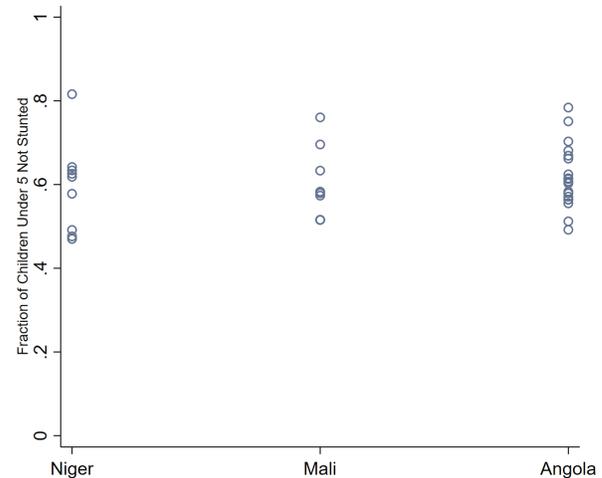
In countries with less human capital, regional differences in stunting are large and play a key role in explaining within-country variations in the overall rate. For example, figure 3.4 shows that, in Niger, stunting ranges from 18 percent to 43 percent across regions. Similarly, in Angola, the stunting rate is more than two times higher in some regions than in others, ranging from less than 25 percent to roughly 50 percent. In Mali, the spread is also substantial, 24 percent to 41 percent.

Some of these outcomes are stubbornly difficult to modify, particularly in the case of typically marginalized groups. Although the rate of stunting was reduced in Peru by more than half between 2008 and 2016, stunting remains high, at nearly 26 percent, in rural areas. By contrast, even with high levels of poverty in large cities such as Lima, the urban stunting rate is only 8 percent.⁴² In Vietnam, the prevalence of stunting among ethnic minority groups compared with the majority Kinh is widening. Between 2010 and 2015, stunting among ethnic minorities dropped by 5 percent, to 31 percent, affecting nearly one-third of all minority children. By contrast, the rate of stunting among Kinh children was only 15 percent and dropped by 7 percent over the same period.⁴³

LOOKING WITHIN THE HCI

Resource-constrained countries may need to relevant efforts not only across different regions, but also across different types of interventions. The degree of regional variation of the health and education components of the HCI can provide guidance for policy action. Reducing class sizes in education might be less urgent than nutrition interventions in those areas where there are high rates of stunting, especially because addressing nutrition is likely to have important repercussions on school readiness. This might be the case in a

FIGURE 3.4 Range of Stunting Outcomes, by Region, Select Low-Income Countries



Source: World Bank calculations based on GEO-HCI data provided by World Bank country teams.

country such as Chad, which, with a score of .29, ranks at the bottom of the global HCI. The GEO-HCI shows minimal variation within the country. However, within regions, index components vary quite substantially and, in some cases, in ways that are negatively correlated to each other. For example, regions with more schooling have relatively lower learning outcomes. Understanding how different factors drive poor human capital outcomes in different regions of a country can help determine priority areas for intervention.

Information on region-specific HCI outcomes can help in tailoring locally relevant policies.

42. Section 4 discusses the current reforms in Peru.

43. Mbuya, Atwood, and Huynh (2019).

HOW ARE THESE FINDINGS INFORMING ACTION?

In the absence of adequate policy responses, high rates of poverty, when combined with low levels of human capital, can compromise the hopes of many generations. The challenges of poverty, the urban-rural disconnect, and poor human capital outcomes can be mutually—and negatively—reinforcing.

Measuring different outcomes—both in the HCI overall and its component parts—across regions can help target those most in need.

Emerging evidence shows that targeting based on multiple methodologies, such as poverty, geographical, and community approaches, appears to be most effective in reaching the vulnerable and typically marginalized.⁴⁴ Combining the GEO-HCI with measures of monetary poverty can also help governments achieve the better equity-efficiency trade-offs implied by various alternative policy options. For instance, in two equally poor regions, the government might differentiate the types of firms that receive tax benefits and grants according to the average level of human capital in the regions. Disaggregation on additional dimensions highlights the need for nuance. For example, the evidence in Romania shows that rural populations, even within one region, are disadvantaged compared with urban ones. In Vietnam, the HCI disaggregation shows that ethnic minorities fare worse than the Kinh majority even in the same areas.

The GEO-HCI also complements other available data and, through triangulation, can deepen the picture of the constraints on human capital accumulation. Vietnam's interest in further disaggregation of outcomes among ethnic minorities has prompted a change in methodology in national surveys. The Peruvian government uses different human capital indicators at the subnational level to monitor policy implementation and inform results-based budgeting.

Matching GEO-HCI data with information of the Service Delivery Indicators Initiative, which tracks the variation in skills and the efforts of providers within health and education systems, can provide insights into capacity delivery. In Angola, regions found through the initiative to have higher rates of teacher absenteeism and fewer textbooks in schools also have worse human capital outcomes in the GEO-HCI data. Moreover, as in the GEO-HCI, urban-rural divides in initiative data reveal significant differences in the diagnostic accuracy and adherence to clinic guidelines among health providers. For example, health providers in Sierra Leone were significantly more likely to be absent in urban facilities.

The GEO-HCI helps build an evidence base that governments can use to design, target, and monitor better responses to address the needs of those falling farthest behind.

44. World Bank (2016).

4

REALIZING CHANGE:

A Whole-of-Government
Approach



Because of the large shortfalls in human capital and the persistent inequality, empowering disadvantaged populations is an urgent priority. The experiences of countries such as Bangladesh, India, and Peru show that it is possible to bring about change through concerted government action to deliver not only marked improvement in national outcomes linked to human capital but also convergence in terms of equity.

The success stories in this section span a wide array of critical issues. The rate of stunting was halved in Peru in less than a decade, and progress was more rapid among the poorest households. At the beginning of the 20th century, universal primary education became a goal in India and, in 2015, 99 percent gross net enrollment was achieved, including a focus on gender parity and access among typically marginalized groups. Since independence, Bangladesh has seen one of the most dramatic reductions in fertility globally, from nearly seven births per woman to approximately two.

A common theme across these country examples is a whole-of-government approach that combines sustained political commitment, coordination across sectors, and the use of evidence-based policies.⁴⁵

STAYING THE COURSE: LONG-TERM COMMITMENT TO EQUITY

Building human capital requires sustained commitment. Countries that have seen the most dramatic

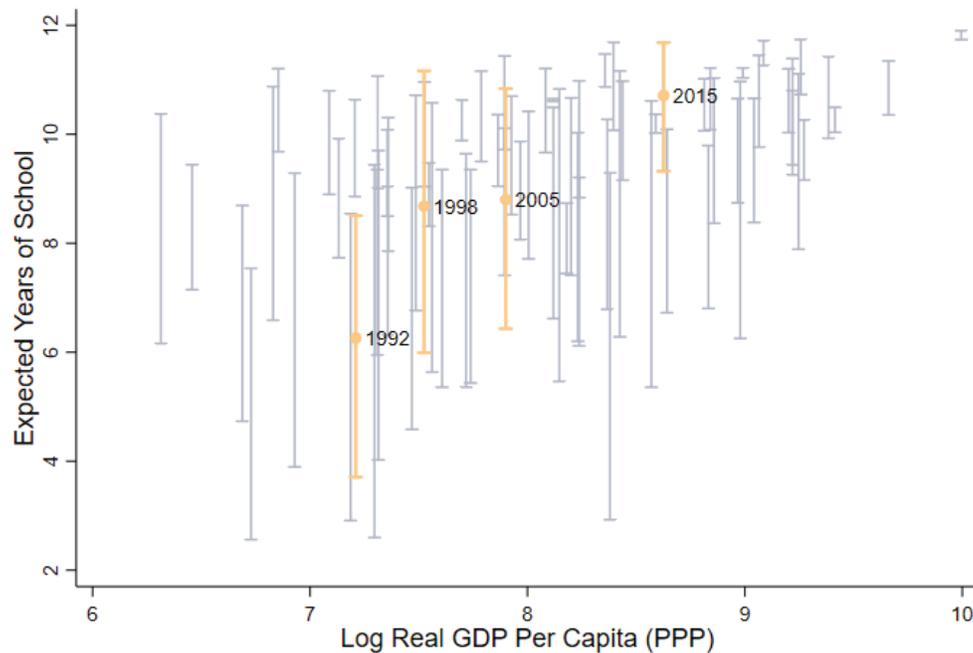
Countries that have seen the most dramatic gains have achieved continuity of reforms across political cycles.

gains have achieved continuity in reforms across political cycles. Improving outcomes among the poor and reducing inequality in outcomes requires a similarly enduring effort.

In India, the government's drive for universal primary education began with a flagship program, Sarva Shiksha Abhiyan (education for all movement), which was launched in 2001 and codified into law in 2009 and which has remained a priority. The program has sought to universalize quality education for children ages 6–14. By 2007, the number of out-of-school children had fallen from 32.0 million to 13.5 million, with significantly better access among girls and typically marginalized groups. Recognizing the need for ongoing attention to this critical area, the government continued to prioritize funding for the flagship program and signaled its commitment to universal primary education by adopting the 2009 Right to Free and Compulsory Education Act, which became effective in April 2010. In 2015, the gross enrollment rate reached 99 percent. As a result of the government's commitment to equality in outcomes, in the 2016/17 school year, the shares of girls, scheduled caste, scheduled tribe, and Muslim children enrolled in primary school was greater than the respective shares in the overall population.⁴⁶ The progress in access and in the eventual reduction in inequality in years of school is represented in figure 4.1.

45. The whole-of-government concept is explored in a series of briefs published by the World Bank. For instance, see World Bank (2019b); see also "Human Capital Project," World Bank, Washington, DC, <https://www.worldbank.org/en/publication/human-capital>.

46. World Bank (2018d).

FIGURE 4.1 Progress in School Access in India

Source: World Bank calculations based on DHS-MICS data reported in Filmer and Pritchett 1999 and subsequent updates.

Notes: The figure plots expected years of school disaggregated by quintiles of socioeconomic status (on the vertical axis) against log real GDP per capita (on the horizontal axis) for the most recent cross-section of 50 countries in the SES-HCI dataset. A solid dot indicates the average across quintiles, and the top (bottom) end of the vertical bar indicates the value for the top (bottom) quintile. Orange bars show the spread of expected years of school in India over time, and grey bars show the spread by income across countries on which data are available.

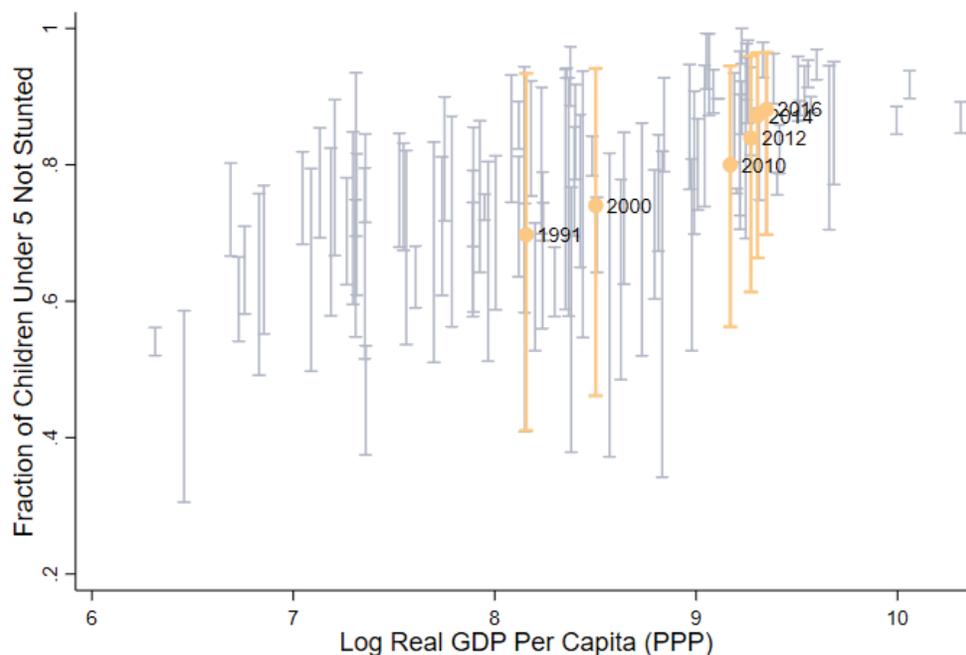
In Bangladesh, a commitment to pro-equity development policies undertaken at independence in 1971 and has been maintained into the present.⁴⁷ In successive national plans, the government identified clear priorities linked to women's empowerment, from family planning to maternal health and women's education. In Peru, stunting featured as a priority issue in all presidential election campaigns from 2006 to 2016. Four successive governments maintained the continuity of the effective public policies put in place by their predecessors, but with each administration setting its own new and ambitious targets.⁴⁸

WORKING TOGETHER: COORDINATION ACROSS AND BEYOND GOVERNMENT

Peru's national strategy for early childhood development, Crecer, created a holistic framework that helped reduce the rate of chronic malnutrition from 28 percent in 2005 to 13 percent in 2016 and saw an even pace of change among rural and urban children. As illustrated in figure 4.2, the change in stunting rates also has seen convergence in outcomes across socioeconomic status. While stunting remains correlated to household socioeconomic status, the gap between the poorest and

47 World Bank (forthcoming).

48. Marini and Rokx (2017).

FIGURE 4.2 Rates of Nonstunting, by Income, Peru


Source: World Bank calculations based on DHS-MICS data as reported in Wagstaff et al. 2019.

Notes: The figure plots nonstunting rates disaggregated by quintile of socioeconomic status (vertical axis) against log real GDP per capita (horizontal axis) for the most recent cross-section of 50 countries in the SES-HCI dataset. The solid dot indicates the average across quintiles, and the top (bottom) end of the vertical bar indicates the value for the top (bottom) quintile. Orange bars show the spread of nonstunting rates in Peru over time, and grey bars show the spread by income across countries on which data are available.

richest households nearly halved, from 48 percentage points to 26 percentage points between 2000 and 2016.

Launched in 2007, Crecer coordinated across various actors to deliver diverse services targeted at 1 million children under age 5. It focused first on the poorest areas of the country. The national strategy acknowledged that good nutrition alone could not reduce stunting and therefore involved multiple areas, such as water, sanitation, access to health services, education, and the empowerment of women in poor, remote, and rural communities. To implement this vision, Crecer allied national, regional, and municipal governments alongside the private

sector, international development agencies, and grassroots organizations. The government coordinated horizontally across ministries and public bodies as well as vertically among national, regional, and municipal authorities. Moreover, there was reliance on a strong commitment to measurement, including fielding DHS surveys on a continuous basis beginning in 2000 rather than at the typical five-year intervals.

Change requires coordination across government, as well as crowding-in the private sector, development partners, and civil society.

The government also adopted an effective conditional cash transfer program and a comprehensive public insurance scheme that increased health coverage among Peru's poor and vulnerable population from 32 percent to 75 percent in slightly less than a decade.

Similarly, following independence, the government of Bangladesh worked across a range of stakeholders to achieve a reproductive revolution and wide-ranging successes in health and education outcomes. Local and national government entities, the formal and informal private sector, private and nonprofit nongovernmental organizations, and donors engaged in improving services and the uptake of services, particularly in poor areas, which involved religious and community leaders playing a key role in supporting behavior change.

USING EVIDENCE: UNDERTAKING REFORMS AND ALLOCATING RESOURCES BASED ON DATA

Setting policies and allocating resources based on evidence of a country's human capital challenges can help drive higher returns to investment. It also can help countries identify and reach those segments of its population that are most in need.

In the early 1970s, Bangladesh had high population density, a high poverty rate, and low food production. A total fertility rate of over six children per woman only compounded these challenges, and the government set an ambitious target of reducing this number by two-thirds by 1985. While this was not achieved as quickly as hoped, the government maintained a commitment to this goal, and, in 2017, the total fertility rate was 2.1. Map 4.1 shows that, in realizing this goal, the regions that had begun with the highest rates registered the most significant progress.

As part of the comprehensive strategy, the government's Family Planning Program built on concrete evidence of how community health workers could help implement changes in household family planning and maternal and child health. Launched in 1977, the Family Planning and Maternal Child Health Program in Matlab Subdistrict began with biweekly household visits focused on contraception options and then expanded to include information on related health services. By 1982, census data showed a 15 percent decrease in fertility compared with neighboring administrative areas. Building from this evidence, the government launched the national Family Planning Program to provide multidimensional maternal and child health services at the household level. At its peak, the program employed 28,000 married women across the country as family welfare assistants.⁴⁹

Evidence can help countries identify and reach those segments of the population that are most in need.

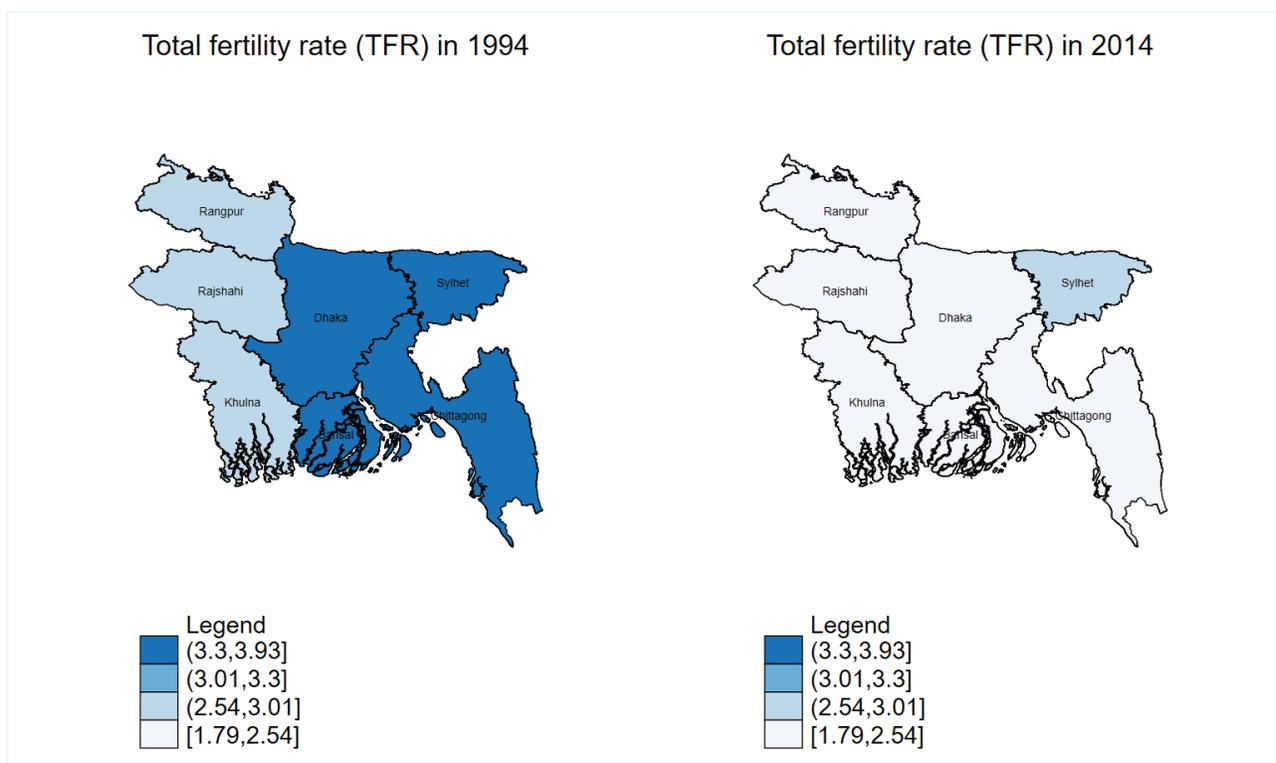
Similarly, a nongovernmental organization, the Bangladesh Association for Community Education, started the Secondary School Stipend Program in six districts in 1982 and witnessed positive outcomes. While still low overall, the pilot areas saw an increase in average female secondary-school enrollment from under 8 percent to 14 percent. In 1994, the government launched the program nationally, and, from 1999 to 2005, an average of nearly 3.5 million girls received stipends each year. This contributed to a jump in female secondary-school enrollment from 1.1 million in 1991 to 3.9 million in 2005.⁵⁰

In Peru, the adoption of results-based budgeting—tying financing allocations to needs and performance—was a watershed reform in the country's

49. Schultz and Joshi (2007) and see <https://www.dgfpbd.org/>.

50. Schurmann (2009).

MAP 4.1 The Total Fertility Rate, Bangladesh, 1994 and 2014



Source: World Bank, forthcoming.

drive to improve child health. Adopted in 2008, results-based budgeting changed the way resources were allocated to local government. Rather than determinations based on previous levels of spending, the approach determined the cost to administer a full package of immunizations to children and then calculated the budgets based on the number of children health clinics planned to vaccinate. This helped shift resources to regions with greater need. Regions could also increase their budget allocations by 50 percent if they met specified targets in related areas, such as nutrition, sanitation, and water. The government’s commitment to regular monitoring was instrumental in the success of results-based budgeting. Regular surveys that accurately measured malnutrition across the country’s departments provided timely feedback and allowed for the evidence-based allocation of resources.

WHAT’S NEXT? AN ONGOING COMMITMENT

The data are unambiguous: despite progress, much work remains to be done to improve human capital globally and ensure that the improvements benefit those most in need.

But there are important signs of commitment to transformational change. Together, Indonesia, Nigeria, and Pakistan account for nearly a 10th of the world’s population. Recognizing the challenges they face in preparing their populations to achieve full potential, they have embarked on concrete actions.

In March 2019, Pakistan launched a flagship program, Ehsaas, focused on investing in people, reducing inequality, and lifting lagging districts, with an emphasis on timely data and modern

technology to deliver results. Ehsaas involves a whole-of-government response to the challenges in four central areas: addressing elite capture and focusing the government system on establishing equality; creating safety nets for disadvantaged segments of the population; fostering jobs and livelihoods; and developing human capital.

In Indonesia, among its many programs and initiatives, the government is using fiscal policy to promote equity of outcomes in human capital. The proposed budget for 2020 highlights significant human capital expenditures, one of which is a planned increase of 3 percent and 10 percent in the 2019 education and health budgets, respectively, in real terms. Notable new policies include targeting nearly 2 million current workers or job-seekers

for vocational training, raising the size of the benefit and the number of eligible food items under a food assistance program, and doubling the number of government scholarships available for poor and talented students.

In Nigeria, the government has set an ambitious objective of reducing the under-5 mortality rate by half in a decade. To this end, it is adopting reforms aimed at improving the utilization of immunization, antimalaria, maternal, and neonatal services, initially in selected states. The program has a strong evidence-based agenda, and activities in later phases will involve the application of the lessons learned during earlier phases to states that continue to lag.



5 **USING DATA** to Design Responsive Policies



The powerful economic message of the global HCI first published in October 2018 and the response of the 65 countries that have joined the Human Capital Project as of October 2019 underscores the urgency of accelerating the progress in human capital and to provide governments with additional data and analyses to help address barriers to human capital development in countries.

Effecting change in human capital outcomes depends on the unique context of each country. In some low-income contexts, spending more and strengthening governance and institutions represent necessary first steps to improving human capital. Niger and Sierra Leone, included in the spatial analysis here, are examples of countries with limited resources and implementation capacity in the face of urgent needs.⁵¹

In other contexts, spending more does not necessarily translate into better outcomes, and the challenge centers much more on the efficiency and effectiveness of spending. For instance, research in Indonesia, where social sector expenditures are substantial, finds that an unconditional doubling in teacher salary did not improve teacher effort or learning outcomes.⁵²

For governments facing budget constraints, understanding who within a country is falling farthest behind and targeting marginalized groups represent one option for realizing efficiency gains. International Monetary Fund analysis suggests that increasing health spending by 10 percent in the least

efficient countries would only raise life expectancy by two months, but improving outcomes among the poorest performers could raise life expectancy by about five years.⁵³

With its launch, the global HCI drew attention to the scale of opportunities lost because of poor human capital outcomes. Now, the HCI disaggregation provides insights that can inform government policies and reforms in responding to the challenges ahead.

Section 2 of this report reveals substantial differences in the human capital outcomes of children in rich and poor households within the same country. The gaps can be as large as those between countries. About a third of the total variation in the SES-HCI is driven by these large within-country gaps. Governments have an important role to play in implementing redistributive policies and programs that address these large inequalities and improve the outcomes among the most disadvantaged.

The spatial disaggregation of the HCI in section 3 showcases the insights to be gained from complementing monetary measures of poverty and inequality. Lower income or wealth is associated with less human capital accumulation, but certain aspects of human capital, stunting foremost among them, are not strictly correlated with wealth. Geography, rural and urban divides, and ethnicity can also help determine human capital formation.

While revealing stark within-country inequalities, this analysis does offer a positive message.

51. World Bank (2018a).

52. de Ree et al. (2017).

53. Grigoli and Kapsoli (2013).

As governments work to improve the outcomes among the most disadvantaged, they can look to top performers, particularly better performing regions, and the systems and institutions *within* the country that contribute to higher levels of human capital. These homegrown solutions can potentially be replicated in other parts of the country.

In designing reforms to improve human capital outcomes, governments can also draw inspiration from the experiences of other countries. Bangladesh, India, and Peru have realized major progress in diverse human capital outcomes and reduced the inequality in these outcomes as a key part of national reforms. While implementing a whole-of-government approach, these countries have adopted long-term, wide-ranging, evidence-based policies. They have taken concrete steps to tailor programming to the needs of marginalized groups—the last mile of service delivery. Separate sanitation facilities for girls, gender-sensitive staffing, and household-based outreach can all promote the uptake of health and education services by groups often left behind.

Targeting populations with weak human capital outcomes is a fundamental step toward fairer distributional impacts and is essential to the progressive achievement of the universal coverage of social services. The Universal Declaration for Human Rights established in 1948 included free elementary education. It also outlined the right to an adequate standard of living in terms of health and well-being. More concretely, since the 2000s, many countries have started on a path toward universal health care. And now, universal basic income is gaining momentum in response to new and changing norms in work.

The realities of constrained government resources require strategic reforms to achieve such goals.

Efforts to realize universal health care highlight the role of progressive universalism—prioritizing poor and underperforming populations in expanding basic services and protections.⁵⁴ Not only does this respond to budget constraints, it can help capture the benefits of shared prosperity by narrowing the human capital gap in a country.

Strengthening systems while effectively targeting the most disadvantaged is a daunting task. In high-income countries, civil registries, and social insurance, databases cover nearly all people, but they cover less than half the people in low-income countries.⁵⁵ In these contexts, targeting based on imprecise measures of poverty, such as proxy-means testing, can miss those most in need. Geographical targeting provides an alternative method to identify areas for intervention, though it has limitations.

HCI disaggregation is a way for low- and middle-income countries to use existing household data to complement these other approaches to targeting. It can provide insights into poverty-associated deprivations in human capital. It can also nuance geographical targeting, particularly by highlighting uniformly poor outcomes in some low-income countries or helping identify last mile populations that perform below relatively good national averages despite living side-by-side with majority groups.

Changes in policies take time to translate into better human capital outcomes. Acting quickly to understand where human capital deficits are greatest and where returns to policy interventions are likely to be the highest will have profound implications for future income and well-being, national economic growth and competitiveness, and overall poverty reduction.

54. Packard et al. (2019).

55. Packard et al. (2019).



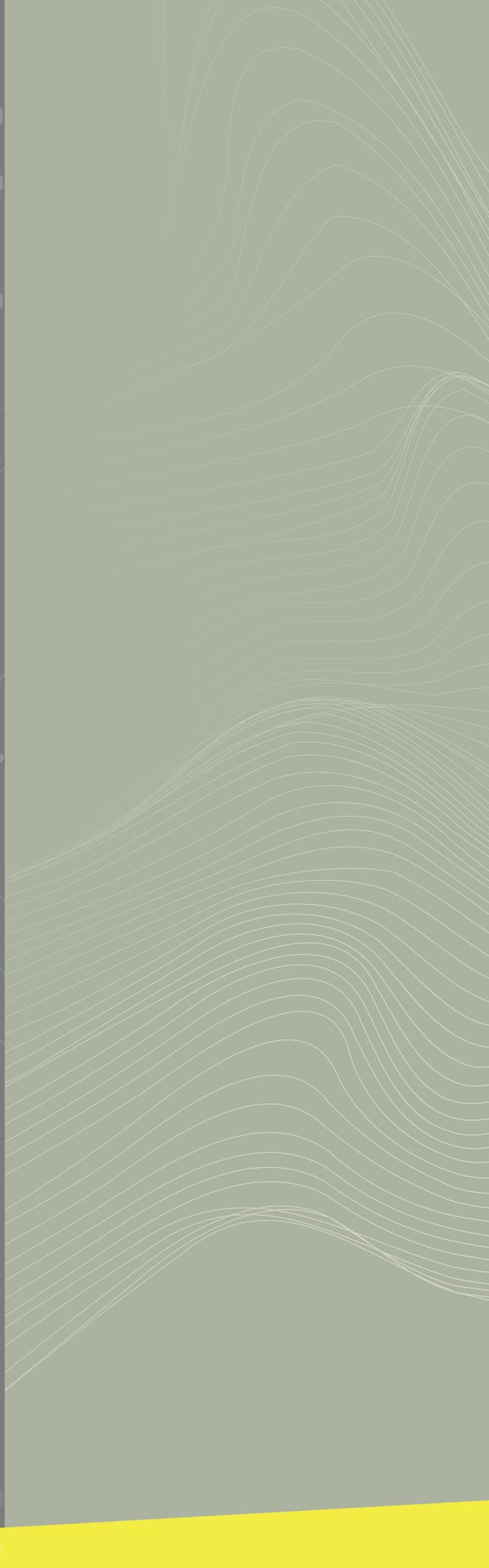
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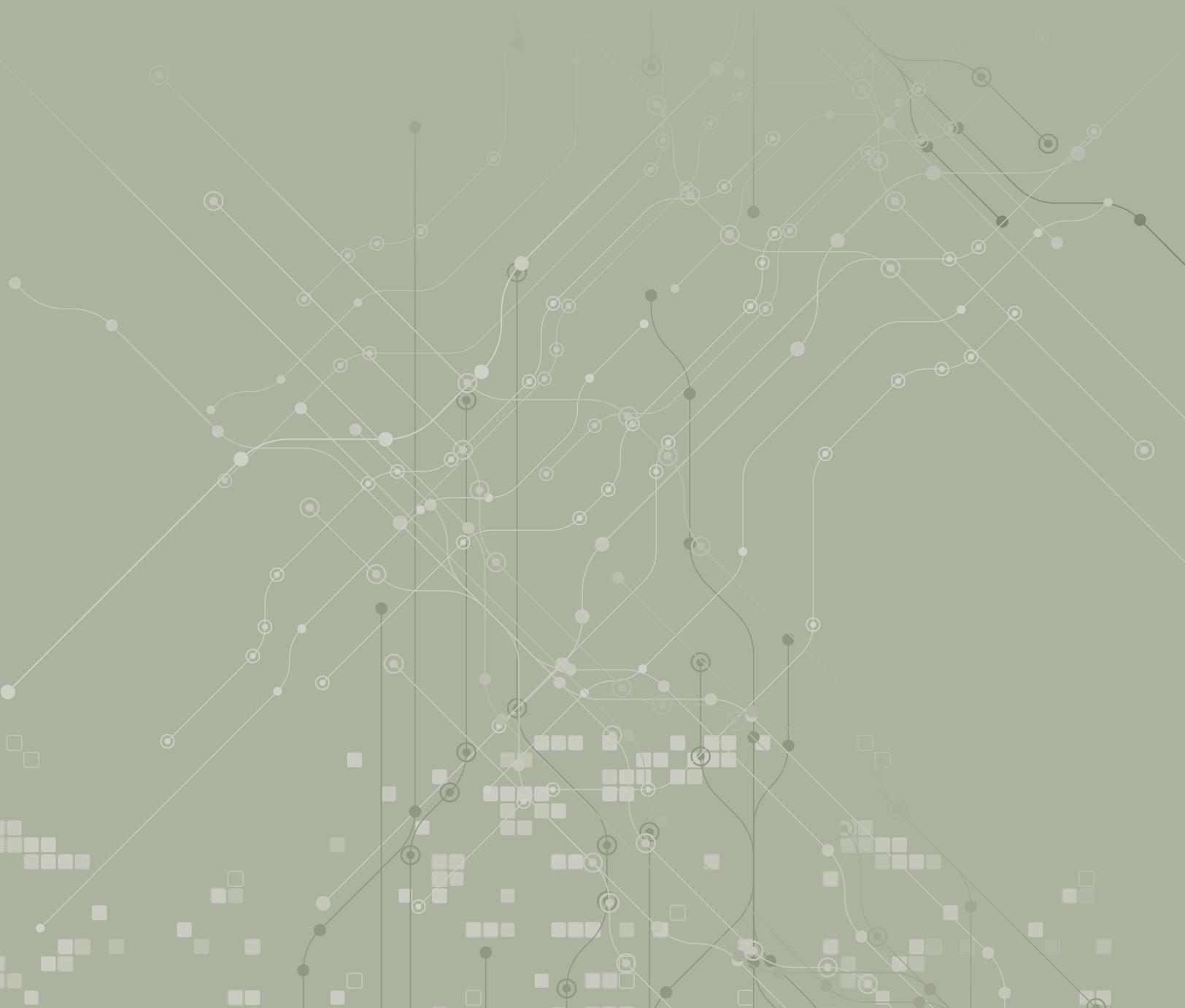


APPENDICES



APPENDIX 1

Differences between the SES-HCI and HCI



Although the SES-HCI is based on the same methodology as the global HCI, it differs in several key respects. First, the SES-HCI relies on household survey-based measures of school attendance to measure the quantity of schooling, while the global HCI primarily uses administrative data on enrollment rates. As is well known, these two measures of school participation can differ considerably.⁵⁶ Second, because of data limitations, the SES-HCI gauges expected years of schooling between ages 6 and 17, while the HCI relies on administrative data on preprimary through upper-secondary enrollment, covering the 4–17 age range. Third, the household survey data used does not provide estimates of adult mortality and therefore does not allow calculation of adult survival rates by SES quintile. This means that the health component of the SES-HCI is based only on stunting rates, unlike the global HCI, which uses stunting rates and adult survival rates. Fourth, there are minor discrepancies between the SES-HCI and HCI data on child survival, stunting, and test scores. Taken together, these differences imply that the SES-HCI data by quintile and averaged to the national level are not fully comparable or consistent with the global HCI. The scores and relative positions of countries can differ in the SES-HCI and the HCI. Accordingly, comparisons between the two should be made cautiously and recognizing these differences.

The divergences between the global HCI and national averages of the SES-HCI are briefly summarized in figure A1.1. In the figure, the national average of the SES-HCI is calculated using the national averages of the four components.⁵⁷ The national average SES-HCI is plotted (on the vertical axis) against the global HCI (on the horizontal axis). To isolate the first source of difference between the two, the global HCI on the horizontal axis is calculated using only stunting as the proxy for health, as is the case of the SES-HCI. The national averages of child survival and stunting and the test scores used in the SES-HCI are similar to their counterparts in the global HCI. This means that the differences between the SES-HCI and the global HCI displayed in figure A1.1 primarily arise because of differences in expected years of schooling as calculated from survey data (as in the SES-HCI) as opposed to administrative data (as in the global HCI).⁵⁸ These differences are manifested in two ways in figure A1.1. First, although the correlation across countries between the SES-HCI and the global HCI is high, at 0.93, it is not perfect. This reflects the less-than-perfect correlation between expected years of schooling based on survey versus administrative data. Second, because the SES-HCI calculates

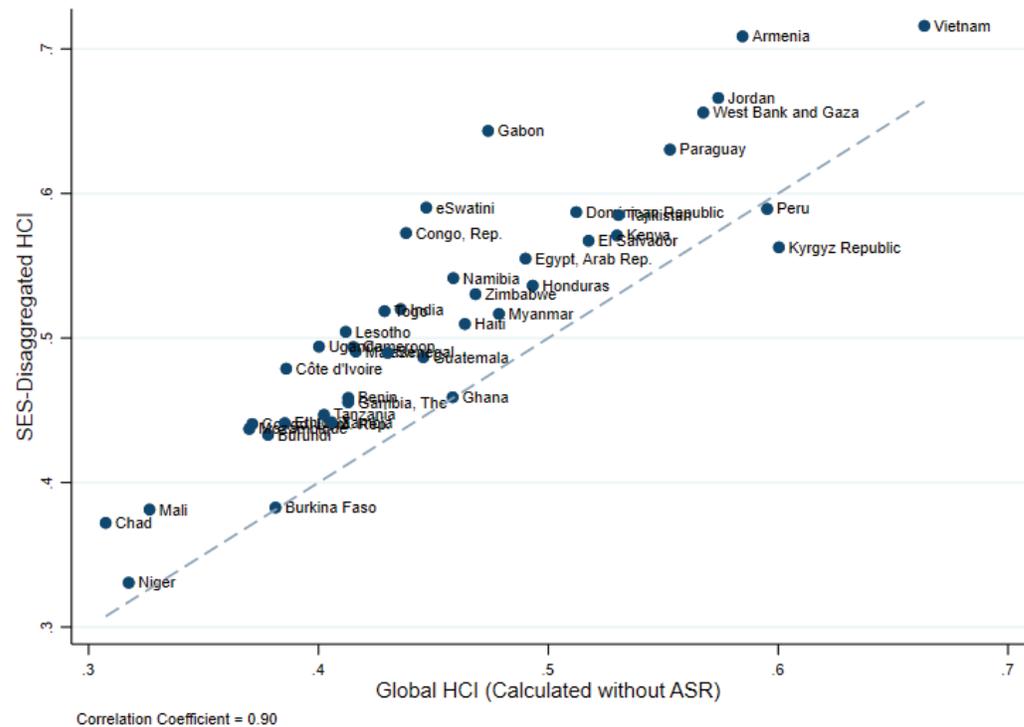
56. For example, see Urquiola and Calderón (2006).

57. The Human Capital Index is a convex function of the index components. As a result, the SES-HCI evaluated at the national averages of the component data differs slightly from the average of the SES-HCI across quintiles because of Jensen's inequality.

58. For a detailed discussion of the differences between the global HCI and the SES-HCI component data, see D'Souza, Gatti, and Kraay (2019).

expected years of schooling over a shorter 12-year age range (ages 6–17), while the HCI considers a 14-year age range (ages 4–17), the dispersion in expected years of schooling across countries is smaller in the SES-HCI because it does not capture cross-country differences in preprimary-school participation. Because the index values reflect gaps in human capital relative to the benchmarks of complete education and full health, these gaps are also smaller in the SES-HCI, in which the education benchmark is 12 learning-adjusted years of school, compared with 14 in the global HCI. This means that the average values of the SES-HCI are larger than the average values of the global HCI, as can be seen from the fact that nearly all countries are above the 45-degree line in figure A1.1.

FIGURE A1.1 Comparing the SES-HCI and the Global HCI

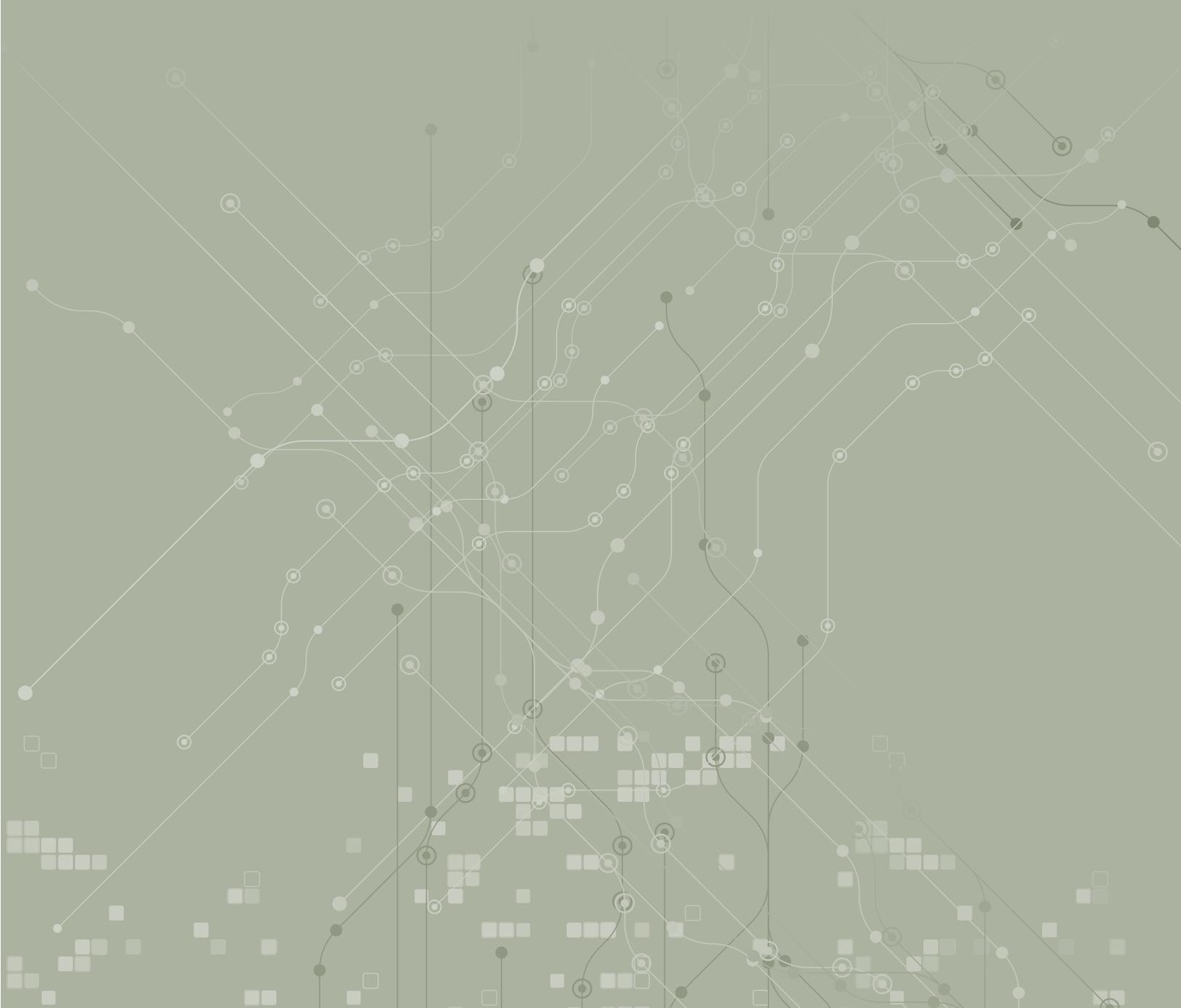


Source: D'Souza, Gatti, and Kraay 2019.

Notes: The figure compares the overall HCI disaggregated by quintile of socioeconomic status (on the vertical axis) with the global HCI (on the horizontal axis) for the 42 countries in the most recent cross-section of countries in the SES-HCI dataset for which the SES-HCI data refer to 2010 or later. The dashed line is the 45-degree line. For purposes of comparison, the global HCI is calculated excluding adult survival rates (ASRs) as a proxy for health to be more consistent with the SES-HCI, which does not include the ASR.

APPENDIX 2

Data Sources for the SES-HCI



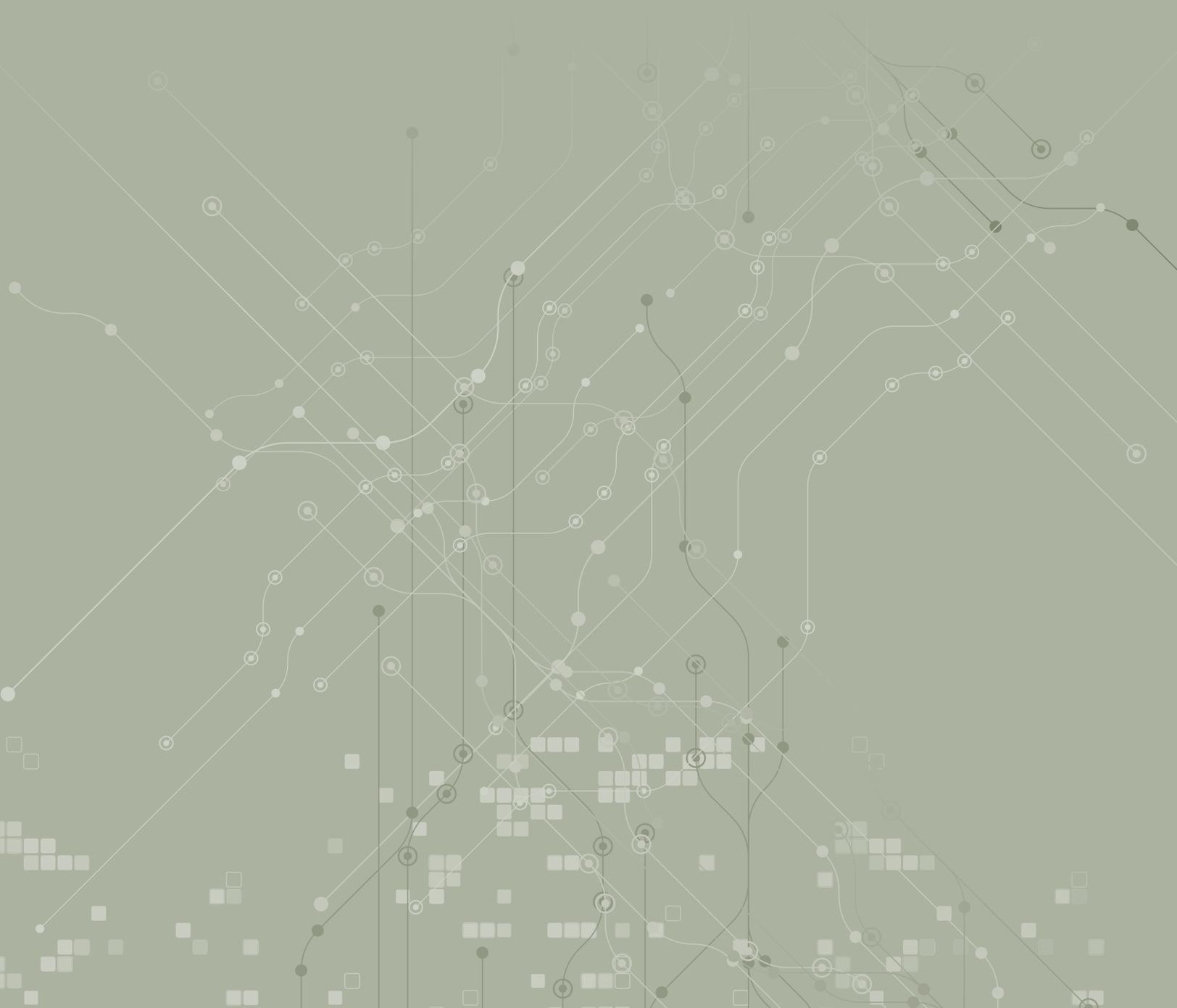
Country	Year in SES-HCI Dataset	Child Survival		Stunting		Expected Years of Schooling		Harmonized Test Scores		PovcalNet
		Year	Source	Year	Source	Year	Source	Year	Source	Year
Albania	2008	2008	DHS	2008	DHS	2005	MICS	2009	PISA	2008
Armenia	2015	2015	DHS	2015	DHS	2015	DHS	2011	TIMSS	2015
Azerbaijan	2006	2006	DHS	2006	DHS	2006	DHS	2006	PISA	2005
Benin	2014	2014	MICS	2014	MICS	2014	MICS	2014	PASEC	2015
Burkina Faso	2010	2010	DHS	2010	DHS	2010	DHS	2014	PASEC	2009
Burundi	2010	2010	DHS	2010	DHS	2010	DHS	2014	PASEC	2014
Cameroon	2014	2014	MICS	2014	MICS	2014	MICS	2014	PASEC	2014
Chad	2014	2014	DHS	2014	DHS	2014	DHS	2014	PASEC	2011
Colombia	2009	2009	DHS	2009	DHS	2010	DHS	2009	PISA	2009
Comoros	2000	1996	DHS	2000	MICS	1996	DHS	2006	PASEC	2004
Congo, Dem. Rep.	2013	2013	DHS	2013	DHS	2013	DHS	2012	EGRA	2012
Congo, Rep.	2014	2014	MICS	2014	MICS	2014	MICS	2014	PASEC	2011
Côte d'Ivoire	2016	2016	MICS	2016	MICS	2016	MICS	2014	PASEC	2015
Dominican Republic	2013	2013	DHS	2013	DHS	2013	DHS	2015	PISA	2013
Egypt, Arab Rep.	2014	2014	DHS	2014	DHS	2014	DHS	2015	TIMSS/PIRLS	2015
El Salvador	2014	2014	MICS	2014	MICS	2014	MICS	2007	TIMSS	2014
Eswatini	2014	2014	MICS	2014	MICS	2014	MICS	2007	SACMEQ	2009
Ethiopia	2016	2016	DHS	2016	DHS	2016	DHS	2010	EGRA	2016
Gabon	2012	2012	DHS	2012	DHS	2012	DHS	2006	PASEC	2017
Gambia, The	2013	2013	DHS	2013	DHS	2013	DHS	2011	EGRA	2015
Ghana	2014	2014	DHS	2014	DHS	2014	DHS	2013	EGRA	2017
Guatemala	2014	2014	DHS	2014	DHS	2014	DHS	2013	LLECE	2014
Haiti	2012	2012	DHS	2012	DHS	2012	DHS	2013	EGRA	2012
Honduras	2011	2011	DHS	2011	DHS	2011	DHS	2013	LLECE	2011
India	2015	2015	DHS	2015	DHS	2015	DHS	2009	PISA	2012
Jordan	2012	2012	DHS	2012	DHS	2012	DHS	2012	PISA	2010
Kazakhstan	1999	1999	DHS	1999	DHS	1999	DHS	2009	PISA	2001
Kenya	2014	2014	DHS	2014	DHS	2014	DHS	2007	SACMEQ	2016
Kyrgyz Republic	2014	2014	MICS	2014	MICS	2014	MICS	2009	PISA	2014
Lesotho	2014	2014	DHS	2014	DHS	2014	DHS	2007	SACMEQ	2010
Madagascar	2008	2008	DHS	2008	DHS	2008	DHS	2006	PASEC	2010
Malawi	2015	2015	DHS	2015	DHS	2015	DHS	2012	EGRA	2016
Mali	2015	2015	MICS	2015	MICS	2015	MICS	2015	EGRA	2010
Moldova	2005	2005	DHS	2005	DHS	2005	DHS	2007	PIRLS	2005
Mozambique	2011	2011	DHS	2011	DHS	2011	DHS	2007	SACMEQ	2009
Myanmar	2015	2015	DHS	2015	DHS	2015	DHS	2014	EGRA	2015

Country	Year in SES-HCI Dataset	Child Survival		Stunting		Expected Years of Schooling		Harmonized Test Scores		PovcalNet
		Year	Source	Year	Source	Year	Source	Year	Source	Year
Namibia	2013	2013	DHS	2013	DHS	2013	DHS	2007	SACMEQ	2015
Niger	2012	2012	DHS	2012	DHS	2012	DHS	2014	PASEC	2011
Paraguay	2016	2016	MICS	2016	MICS	2016	MICS	2013	LLECE	2016
Peru	2012	2012	DHS	2012	DHS	2012	DHS	2015	PISA	2012
Senegal	2014	2014	DHS	2014	DHS	2014	DHS	2014	PASEC	2011
Tajikistan	2012	2012	DHS	2012	DHS	2012	DHS	2016	EGRA	2009
Tanzania	2015	2015	DHS	2015	DHS	2015	DHS	2013	EGRA	2012
Togo	2013	2013	DHS	2013	DHS	2013	DHS	2014	PASEC	2015
Turkey	2003	2003	DHS	2003	DHS	2003	DHS	2012	PISA	2003
Uganda	2016	2016	DHS	2016	DHS	2016	DHS	2007	SACMEQ	2017
Vietnam	2013	2013	MICS	2010	MICS	2013	MICS	2015	PISA	2014
West Bank and Gaza	2014	2014	MICS	2014	MICS	2014	MICS	2011	TIMSS	2017
Zambia	2013	2013	DHS	2013	DHS	2013	DHS	2011	EGRA	2015
Zimbabwe	2015	2015	DHS	2015	DHS	2015	DHS	2007	SACMEQ	2011

Note: The SES-HCI analysis in this booklet draws on D'Souza, Gatti, and Kraay (2019). The analysis uses a sample of 50 countries, drawing data from the latest available DHS-MICS surveys in the past two decades. Data presented in section 2 of this booklet are derived from the surveys and years detailed in this table.

APPENDIX 3

Data Sources for the GEO-HCI

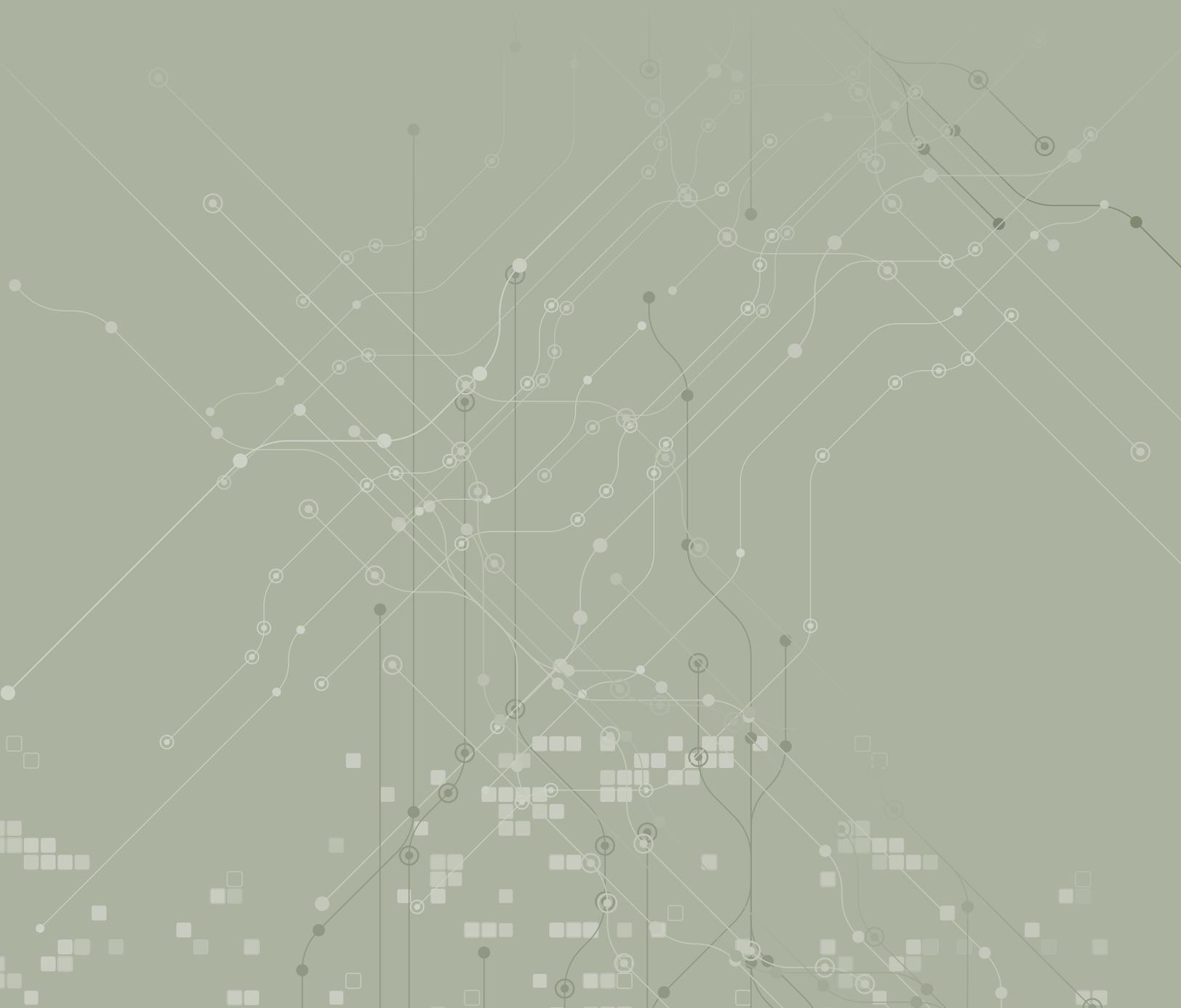


Country	Child Survival		Stunting		Adult Survival		Expected Years of Schooling		Harmonized Test Scores		GDP Data	
	Year	Source	Year	Source	Year	Source	Year	Source	Year	Source	Year	Source
Angola	2015/16	DHS	2015/16	DHS	n/a	n/a	2017/18	EMIS	2011	EGRA	n/a	n/a
Burkina Faso	2010	DHS	2010	DHS	n/a	n/a	2014	LSMS	2014	PASEC	2014	LSMS-ISA*
Chad	2014/15	DHS	2014/15	DHS	n/a	n/a	2011	LSMS	2014	PASEC	2011	Chad Household Consumption and Informal Sector Survey (ECOSIT 3)*
Indonesia	2015	Survei Penduduk Antar Sensus (SUPAS)	2013	Riskesdas (Basic Health Survey)	2015	Survei Penduduk Antar Sensus (SUPAS)	2017	Survei Sosial Ekonomi Nasional (SUSENAS)	2017	Ujian Akhir Nasional (national assessment)	2016	Indonesia Central Bureau of Statistics (BPS)*
Mali	2012	DHS	2012	DHS	n/a	n/a	2014	LSMS	2014	PASEC	2014	LSMS-ISA*
Niger	2012	DHS	2012	DHS	n/a	n/a	2014	LSMS	2014	PASEC	2014	LSMS-ISA*
Peru	2016/17	Instituto Nacional de Estadística e Informática	2018	Instituto Nacional de Estadística e Informática	n/a	n/a	2016	Estadística de la Calidad Educativa (ESCALE)	2015	PISA	2014	OECD Regional Database
Romania	2017	National Institute for Statistics (TEMPO database)	n/a	n/a	2017	National Institute for Statistics (TEMPO database)	2017	National Institute for Statistics (TEMPO database) for enrollment rates/ Integrated Education Information System (SIIR) for repetition rates	2017	Integrated Education Information System (SIIR)	2015	OECD Regional Database
Sierra Leone	2017	MICS	2017	MICS	n/a	n/a	2017	MICS	2017	MICS	n/a	n/a
Sri Lanka	2016	DHS	2016	DHS	2016	Sri Lanka Department of Census and Statistics	16	HIES	16	SL-TIMSS (National assessment linked to TIMSS)	n/a	n/a
Vietnam	2013/14	MICS	2013/14	MICS	2013/14	MICS	2013/14	MICS	2015	PISA	n/a	n/a

Note: Data sources provide per capita consumption data. To calculate GDP per capita for each subnational unit, national GDP per capita is multiplied by the ratio of subnational per capita consumption to mean per capita consumption. For some countries with large differences between household income and consumption, variations in per capita consumption may imperfectly reflect variations in income.

APPENDIX 4

SES-HCI Country Profiles



Albania

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Albania was ranked 56 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

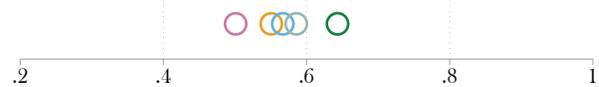
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Albania, the productivity as a future worker of a child born today in the richest 20 percent of households is **64 percent** while it is **50 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Albania, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Albania, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.7 years** of school, a gap of **1.6 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Albania score **437** while those from the poorest 20 percent score **356**, a gap of **81 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Albania, the percentage of children in the top 20 percent of households who are not stunted is **87 percent** while it is **73 percent** among the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2008



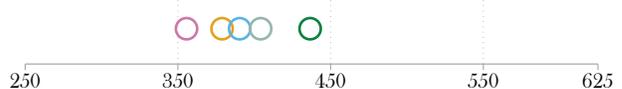
Expected Years of School

Source: Multiple Indicator Cluster Survey 2005



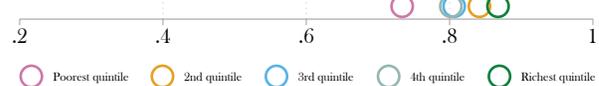
Harmonized Test Scores

Source: Programme for International Student Assessment 2009



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2008



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Armenia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Armenia was ranked 78 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Armenia, the productivity as a future worker of a child born today in the richest 20 percent of households is **77 percent** while it is **66 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Armenia, the probability of survival of a child born today in the richest 20 percent of households is **100 percent** while it is **99 percent** for a child born in the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Armenia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **11.3 years** of school, a gap of **.5 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Armenia score **483** while those from the poorest 20 percent score **417**, a gap of **67 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Armenia, the percentage of children in the top 20 percent of households who are not stunted is **94 percent** while it is **88 percent** among the poorest 20 percent, a gap of **6 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

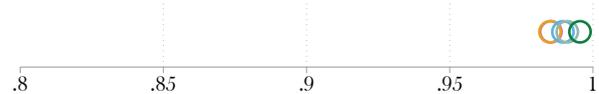
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



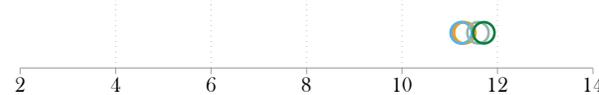
Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



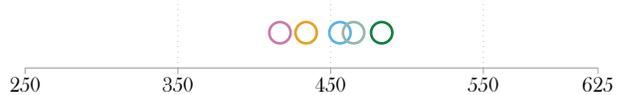
Expected Years of School

Source: Demographic and Health Survey 2015



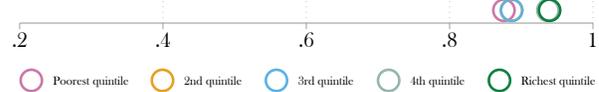
Harmonized Test Scores

Source: Trends in International Mathematics and Science Study 2011



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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Azerbaijan

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Azerbaijan was ranked 69 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

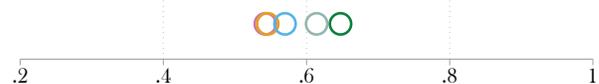
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Azerbaijan, the productivity as a future worker of a child born today in the richest 20 percent of households is **65 percent** while it is **54 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Azerbaijan, the probability of survival of a child born today in the richest 20 percent of households is **96 percent** while it is **94 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Azerbaijan, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.1 years** of school, a gap of **1 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Azerbaijan score **441** while those from the poorest 20 percent score **410**, a gap of **31 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Azerbaijan, the percentage of children in the top 20 percent of households who are not stunted is **84 percent** while it is **67 percent** among the poorest 20 percent, a gap of **17 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2006



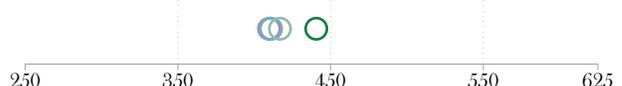
Expected Years of School

Source: Demographic and Health Survey 2006



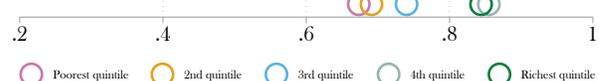
Harmonized Test Scores

Source: Programme for International Student Assessment 2006



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2006



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Benin

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Benin was ranked 127 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

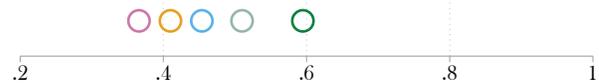
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Benin, the productivity as a future worker of a child born today in the richest 20 percent of households is **59 percent** while it is **37 percent** for a child born in the poorest 20 percent, a gap of **23 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Benin, the probability of survival of a child born today in the richest 20 percent of households is **93 percent** while it is **86 percent** for a child born in the poorest 20 percent, a gap of 7 percentage points. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Benin, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.6 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **5.6 years** of school, a gap of **4.9 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Benin score **423** while those from the poorest 20 percent score **365**, a gap of **59 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is about the same as the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Benin, the percentage of children in the top 20 percent of households who are not stunted is **82 percent** while it is **54 percent** among the poorest 20 percent, a gap of **28 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



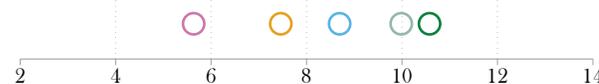
Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Burkina Faso

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Burkina Faso was ranked 144 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Burkina Faso, the productivity as a future worker of a child born today in the richest 20 percent of households is **52 percent** while it is **32 percent** for a child born in the poorest 20 percent, a gap of **20 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Burkina Faso, the probability of survival of a child born today in the richest 20 percent of households is **90 percent** while it is **83 percent** for a child born in the poorest 20 percent, a gap of **8 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Burkina Faso, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **8.5 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **2.9 years** of school, a gap of **5.6 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Burkina Faso score **421** while those from the poorest 20 percent score **390**, a gap of **30 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Burkina Faso, the percentage of children in the top 20 percent of households who are not stunted is **82 percent** while it is **58 percent** among the poorest 20 percent, a gap of **25 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

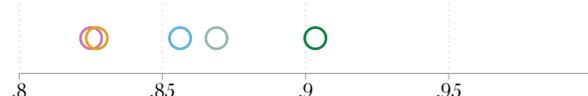
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2010



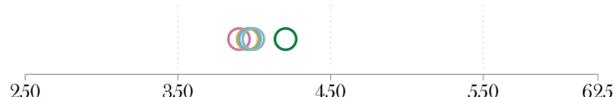
Expected Years of School

Source: Demographic and Health Survey 2010



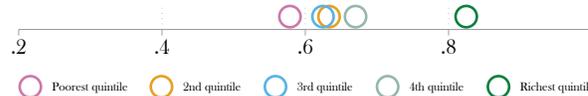
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2010



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Burundi

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Burundi was ranked 138 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

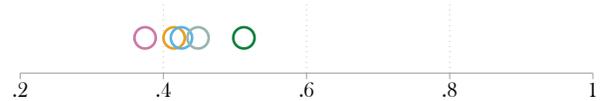
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Burundi, the productivity as a future worker of a child born today in the richest 20 percent of households is **51 percent** while it is **37 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Burundi, the probability of survival of a child born today in the richest 20 percent of households is **92 percent** while it is **85 percent** for a child born in the poorest 20 percent, a gap of **7 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Burundi, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **7.1 years** of school, a gap of **2.3 years** of school. This gap is about the same as the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Burundi score **430** while those from the poorest 20 percent score **422**, a gap of **8 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Burundi, the percentage of children in the top 20 percent of households who are not stunted is **59 percent** while it is **31 percent** among the poorest 20 percent, a gap of **28 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



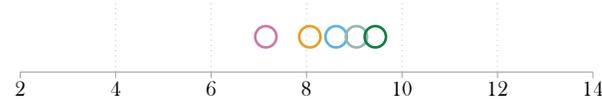
Probability of Survival to Age 5

Source: Demographic and Health Survey 2010



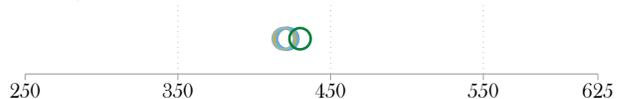
Expected Years of School

Source: Demographic and Health Survey 2010



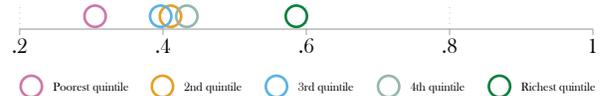
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2010



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Cameroon

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Cameroon was ranked 132 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Cameroon, the productivity as a future worker of a child born today in the richest 20 percent of households is **63 percent** while it is **38 percent** for a child born in the poorest 20 percent, a gap of **26 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Cameroon, the probability of survival of a child born today in the richest 20 percent of households is **94 percent** while it is **83 percent** for a child born in the poorest 20 percent, a gap of **12 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Cameroon, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **7.4 years** of school, a gap of **4 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Cameroon score **418** while those from the poorest 20 percent score **336**, a gap of **82 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Cameroon, the percentage of children in the top 20 percent of households who are not stunted is **86 percent** while it is **58 percent** among the poorest 20 percent, a gap of **27 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

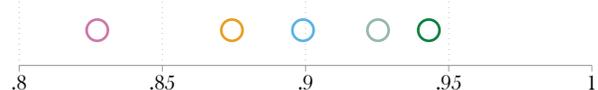
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



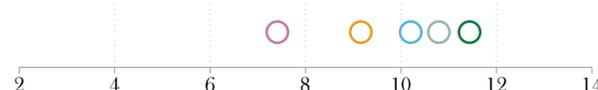
Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



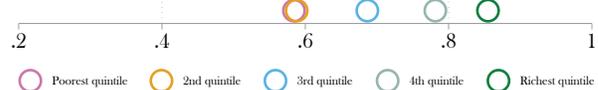
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Chad

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Chad was ranked 157 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Chad, the productivity as a future worker of a child born today in the richest 20 percent of households is **45 percent** while it is **35 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Chad, the probability of survival of a child born today in the richest 20 percent of households is **86 percent** while it is **84 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Chad, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **5.4 years** of school, a gap of **4 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Chad score **357** while those from the poorest 20 percent score **322**, a gap of **35 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Chad, the percentage of children in the top 20 percent of households who are not stunted is **68 percent** while it is **59 percent** among the poorest 20 percent, a gap of **9 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



Expected Years of School

Source: Demographic and Health Survey 2014



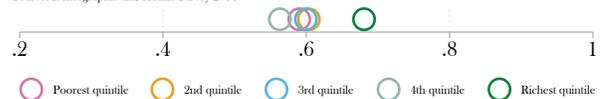
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Colombia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Colombia was ranked 70 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

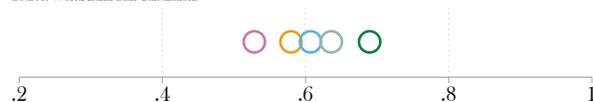
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Colombia, the productivity as a future worker of a child born today in the richest 20 percent of households is **69 percent** while it is **53 percent** for a child born in the poorest 20 percent, a gap of **16 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Colombia, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Colombia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.5 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9 years** of school, a gap of **1.5 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Colombia score **464** while those from the poorest 20 percent score **366**, a gap of **98 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Colombia, the percentage of children in the top 20 percent of households who are not stunted is **93 percent** while it is **80 percent** among the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

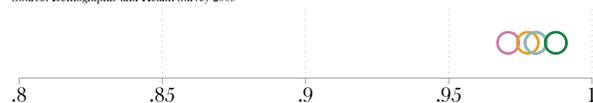
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2009



Expected Years of School

Source: Demographic and Health Survey 2010



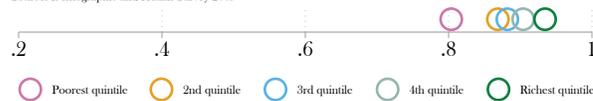
Harmonized Test Scores

Source: Programme for International Student Assessment 2009



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2009



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Comoros

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Comoros was ranked 123 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

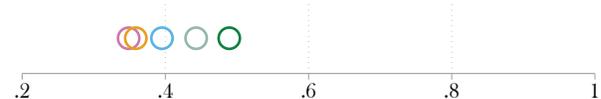
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- SES-Disaggregated Human Capital Index (SES-HCI).** In the Comoros, the productivity as a future worker of a child born today in the richest 20 percent of households is **49 percent** while it is **35 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (15 percentage points).
- Probability of Survival to Age 5.** In the Comoros, the probability of survival of a child born today in the richest 20 percent of households is **91 percent** while it is **87 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (4 percentage points).
- Expected Years of School.** In the Comoros, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **4.6 years** of school, a gap of **4.4 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- Harmonized Test Scores.** Students from the richest 20 percent of households in the Comoros score **408** while those from the poorest 20 percent score **376**, a gap of **33 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- Healthy Growth (Not Stunted Rate).** In the Comoros, the percentage of children in the top 20 percent of households who are not stunted is **61 percent** while it is **50 percent** among the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

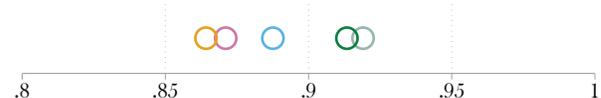
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



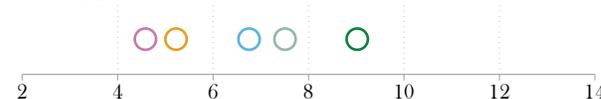
Probability of Survival to Age 5

Source: Demographic and Health Survey 1996



Expected Years of School

Source: Demographic and Health Survey 1996



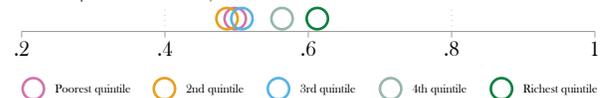
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2006



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2000



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The Democratic Republic of Congo

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. The Democratic Republic of Congo was ranked 146 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

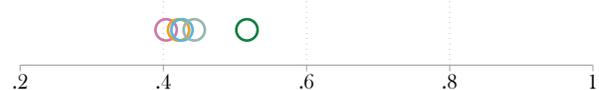
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the Democratic Republic of Congo, the productivity as a future worker of a child born today in the richest 20 percent of households is **52 percent** while it is **40 percent** for a child born in the poorest 20 percent, a gap of **12 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the Democratic Republic of Congo, the probability of survival of a child born today in the richest 20 percent of households is **92 percent** while it is **88 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the Democratic Republic of Congo, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.8 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.9 years** of school, a gap of **1.9 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the Democratic Republic of Congo score **326** while those from the poorest 20 percent score **311**, a gap of **16 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the Democratic Republic of Congo, the percentage of children in the top 20 percent of households who are not stunted is **79 percent** while it is **50 percent** among the poorest 20 percent, a gap of **30 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

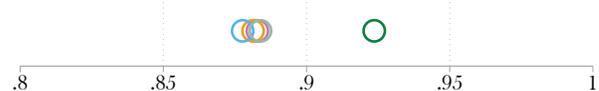
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



Expected Years of School

Source: Demographic and Health Survey 2013



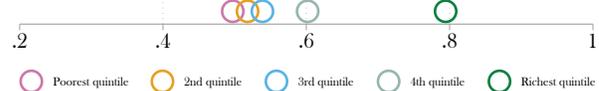
Harmonized Test Scores

Source: Early Grade Reading Assessment 2012



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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The Republic of Congo

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. The Republic of Congo was ranked 120 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

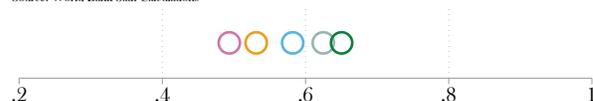
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the Republic of Congo, the productivity as a future worker of a child born today in the richest 20 percent of households is **65 percent** while it is **49 percent** for a child born in the poorest 20 percent, a gap of **16 percentage points**. This gap is about the same as the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the Republic of Congo, the probability of survival of a child born today in the richest 20 percent of households is **97 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **5 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the Republic of Congo, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.1 years** of school, a gap of **1.6 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the Republic of Congo score **410** while those from the poorest 20 percent score **343**, a gap of **67 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the Republic of Congo, the percentage of children in the top 20 percent of households who are not stunted is **86 percent** while it is **70 percent** among the poorest 20 percent, a gap of **16 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

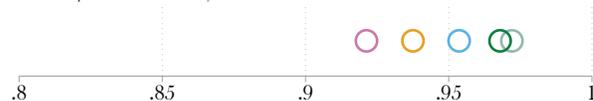
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



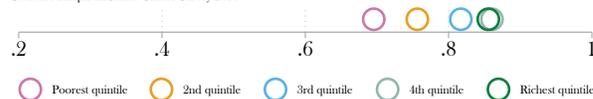
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Côte d'Ivoire

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Côte d'Ivoire was ranked 149 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Côte d'Ivoire, the productivity as a future worker of a child born today in the richest 20 percent of households is **58 percent** while it is **40 percent** for a child born in the poorest 20 percent, a gap of **18 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Côte d'Ivoire, the probability of survival of a child born today in the richest 20 percent of households is **93 percent** while it is **88 percent** for a child born in the poorest 20 percent, a gap of **5 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Côte d'Ivoire, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.2 years** of school, a gap of **3.8 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Côte d'Ivoire score **400** while those from the poorest 20 percent score **350**, a gap of **50 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Côte d'Ivoire, the percentage of children in the top 20 percent of households who are not stunted is **91 percent** while it is **70 percent** among the poorest 20 percent, a gap of **21 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

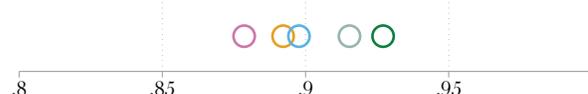
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



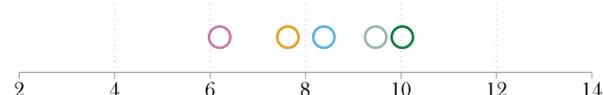
Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2016



Expected Years of School

Source: Multiple Indicator Cluster Survey 2016



Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2016



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Dominican Republic

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Dominican Republic was ranked 101 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Dominican Republic, the productivity as a future worker of a child born today in the richest 20 percent of households is **66 percent** while it is **53 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Dominican Republic, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **3 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Dominican Republic, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.9 years** of school, a gap of **1.5 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Dominican Republic score **398** while those from the poorest 20 percent score **322**, a gap of **75 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Dominican Republic, the percentage of children in the top 20 percent of households who are not stunted is **96 percent** while it is **89 percent** among the poorest 20 percent, a gap of **7 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



Expected Years of School

Source: Demographic and Health Survey 2013



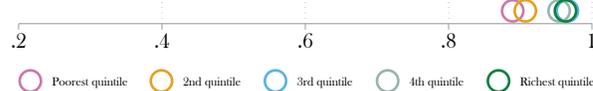
Harmonized Test Scores

Source: Programme for International Student Assessment 2015



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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The Arabic Republic of Egypt

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. The Arabic Republic of Egypt was ranked 104 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

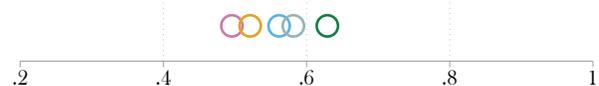
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the Arabic Republic of Egypt, the productivity as a future worker of a child born today in the richest 20 percent of households is **63 percent** while it is **50 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the Arabic Republic of Egypt, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the Arabic Republic of Egypt, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.2 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10 years** of school, a gap of **1.2 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the Arabic Republic of Egypt score **417** while those from the poorest 20 percent score **301**, a gap of **116 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the Arabic Republic of Egypt, the percentage of children in the top 20 percent of households who are not stunted is **77 percent** while it is **76 percent** among the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



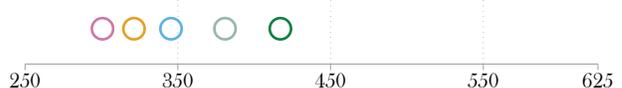
Expected Years of School

Source: Demographic and Health Survey 2014



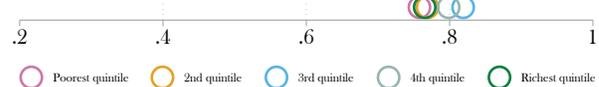
Harmonized Test Scores

Source: Trends in International Mathematics and Science Study/Progress in International Reading Literacy Study 2015



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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El Salvador

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. El Salvador was ranked 97 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

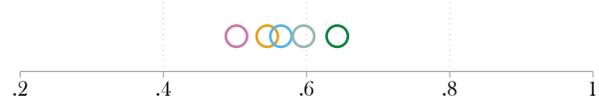
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In El Salvador, the productivity as a future worker of a child born today in the richest 20 percent of households is **64 percent** while it is **50 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In El Salvador, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In El Salvador, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.7 years** of school, a gap of **1.9 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in El Salvador score **403** while those from the poorest 20 percent score **344**, a gap of **59 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is about the same as the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In El Salvador, the percentage of children in the top 20 percent of households who are not stunted is **95 percent** while it is **76 percent** among the poorest 20 percent, a gap of **18 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

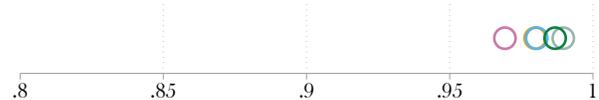
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



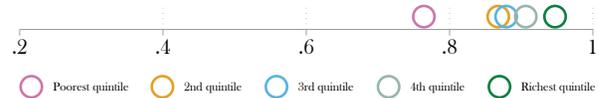
Harmonized Test Scores

Source: Trends in International Mathematics and Science Study 2007



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Eswatini

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Eswatini was ranked 124 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

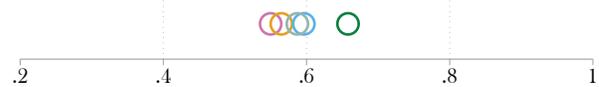
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Eswatini, the productivity as a future worker of a child born today in the richest 20 percent of households is **66 percent** while it is **55 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Eswatini, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **90 percent** for a child born in the poorest 20 percent, a gap of **5 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Eswatini, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.2 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **11 years** of school, a gap of **.2 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Eswatini score **436** while those from the poorest 20 percent score **408**, a gap of **28 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Eswatini, the percentage of children in the top 20 percent of households who are not stunted is **91 percent** while it is **70 percent** among the poorest 20 percent, a gap of **21 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

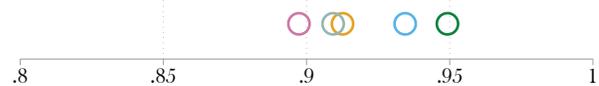
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



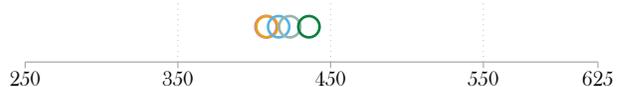
Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



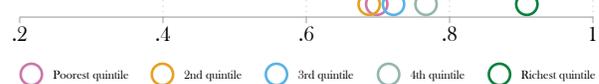
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Ethiopia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Ethiopia was ranked 135 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Ethiopia, the productivity as a future worker of a child born today in the richest 20 percent of households is **52 percent** while it is **39 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Ethiopia, the probability of survival of a child born today in the richest 20 percent of households is **93 percent** while it is **91 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Ethiopia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.3 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **5.9 years** of school, a gap of **3.4 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Ethiopia score **388** while those from the poorest 20 percent score **347**, a gap of **41 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Ethiopia, the percentage of children in the top 20 percent of households who are not stunted is **75 percent** while it is **55 percent** among the poorest 20 percent, a gap of **20 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

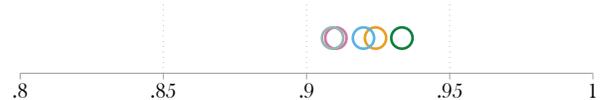
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



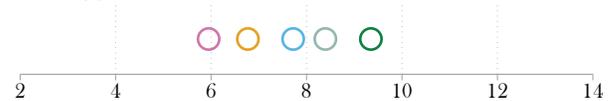
Probability of Survival to Age 5

Source: Demographic and Health Survey 2016



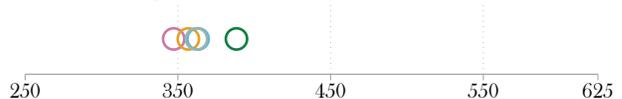
Expected Years of School

Source: Demographic and Health Survey 2016



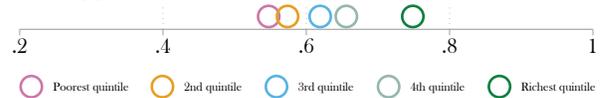
Harmonized Test Scores

Source: Early Grade Reading Assessment 2010



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2016



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Gabon

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Gabon was ranked 110 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

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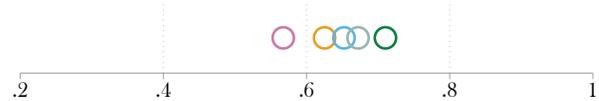
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Gabon, the productivity as a future worker of a child born today in the richest 20 percent of households is **71 percent** while it is **57 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Gabon, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **3 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Gabon, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.3 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.4 years** of school, a gap of **1 year** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Gabon score **474** while those from the poorest 20 percent score **434**, a gap of **40 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Gabon, the percentage of children in the top 20 percent of households who are not stunted is **95 percent** while it is **70 percent** among the poorest 20 percent, a gap of **24 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

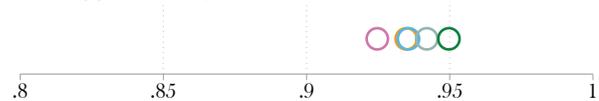
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



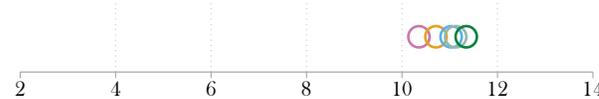
Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



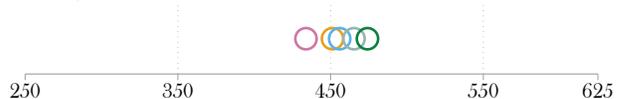
Expected Years of School

Source: Demographic and Health Survey 2012



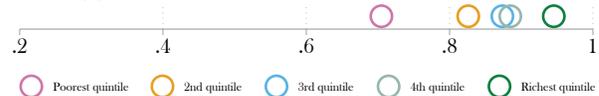
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2006



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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The Gambia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. The Gambia was ranked 130 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

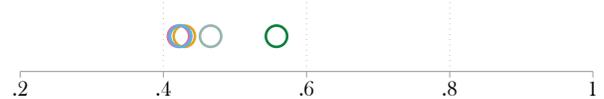
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the Gambia, the productivity as a future worker of a child born today in the richest 20 percent of households is **56 percent** while it is **42 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the Gambia, the probability of survival of a child born today in the richest 20 percent of households is **97 percent** while it is **93 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the Gambia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.3 years** of school, a gap of **2.7 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the Gambia score **402** while those from the poorest 20 percent score **332**, a gap of **71 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the Gambia, the percentage of children in the top 20 percent of households who are not stunted is **85 percent** while it is **72 percent** among the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

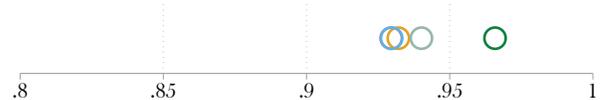
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



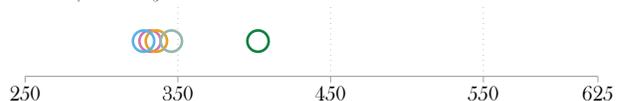
Expected Years of School

Source: Demographic and Health Survey 2013



Harmonized Test Scores

Source: Early Grade Reading Assessment 2011



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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Ghana

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Ghana was ranked 116 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

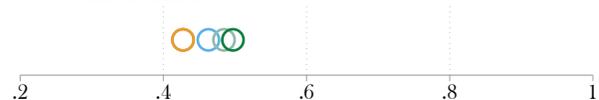
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Ghana, the productivity as a future worker of a child born today in the richest 20 percent of households is **50 percent** while it is **43 percent** for a child born in the poorest 20 percent, a gap of 7 percentage points. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Ghana, the probability of survival of a child born today in the richest 20 percent of households is **94 percent** while it is **91 percent** for a child born in the poorest 20 percent, a gap of 3 percentage points. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Ghana, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **8.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **7.4 years** of school, a gap of **1.3 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Ghana score **317** while those from the poorest 20 percent score **307**, a gap of **9 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Ghana, the percentage of children in the top 20 percent of households who are not stunted is **92 percent** while it is **75 percent** among the poorest 20 percent, a gap of 17 percentage points. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

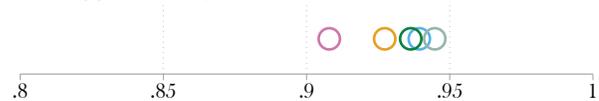
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



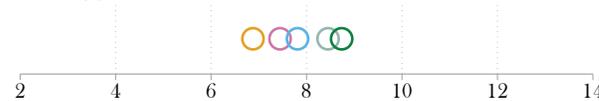
Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



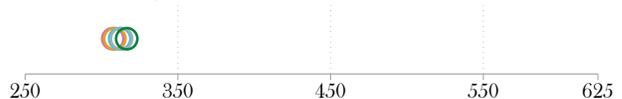
Expected Years of School

Source: Demographic and Health Survey 2014



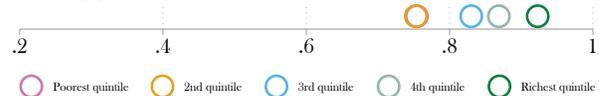
Harmonized Test Scores

Source: Early Grade Reading Assessment 2013



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Guatemala

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Guatemala was ranked 109 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

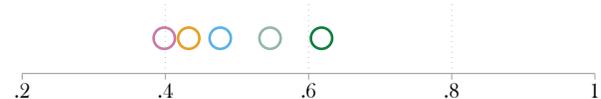
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Guatemala, the productivity as a future worker of a child born today in the richest 20 percent of households is **62 percent** while it is **40 percent** for a child born in the poorest 20 percent, a gap of **22 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Guatemala, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **94 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Guatemala, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.8 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.8 years** of school, a gap of **3 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Guatemala score **449** while those from the poorest 20 percent score **377**, a gap of **72 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Guatemala, the percentage of children in the top 20 percent of households who are not stunted is **82 percent** while it is **34 percent** among the poorest 20 percent, a gap of **48 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

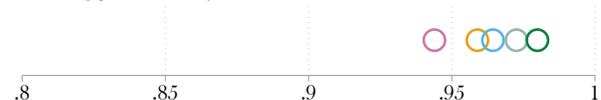
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



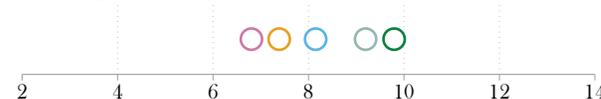
Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



Expected Years of School

Source: Demographic and Health Survey 2014



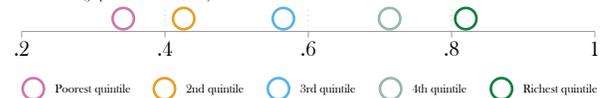
Harmonized Test Scores

Source: Latin American Laboratory for Assessment of the Quality of Education 2013



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Haiti

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Haiti was ranked 112 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

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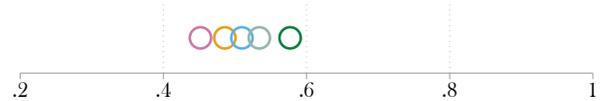
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Haiti, the productivity as a future worker of a child born today in the richest 20 percent of households is **58 percent** while it is **45 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Haiti, the probability of survival of a child born today in the richest 20 percent of households is **94 percent** while it is **90 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Haiti, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.1 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9 years** of school, a gap of **2.1 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Haiti score **351** while those from the poorest 20 percent score **331**, a gap of **20 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Haiti, the percentage of children in the top 20 percent of households who are not stunted is **94 percent** while it is **70 percent** among the poorest 20 percent, a gap of **24 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

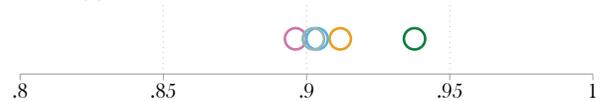
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



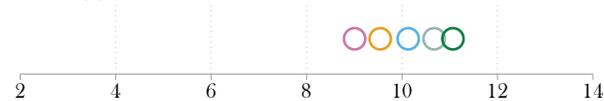
Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



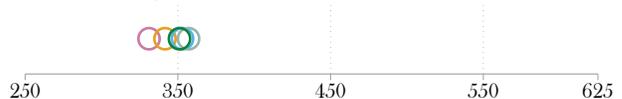
Expected Years of School

Source: Demographic and Health Survey 2012



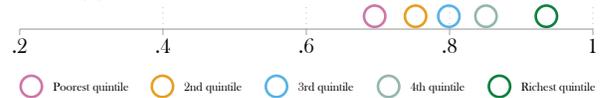
Harmonized Test Scores

Source: Early Grade Reading Assessment 2013



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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Honduras

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Honduras was ranked 103 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

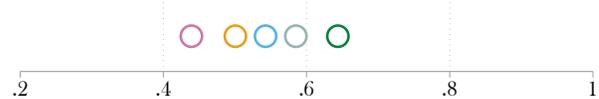
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Honduras, the productivity as a future worker of a child born today in the richest 20 percent of households is **64 percent** while it is **44 percent** for a child born in the poorest 20 percent, a gap of **20 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Honduras, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Honduras, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.3 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.8 years** of school, a gap of **3.5 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Honduras score **430** while those from the poorest 20 percent score **374**, a gap of **56 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is about the same as the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Honduras, the percentage of children in the top 20 percent of households who are not stunted is **93 percent** while it is **58 percent** among the poorest 20 percent, a gap of **35 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

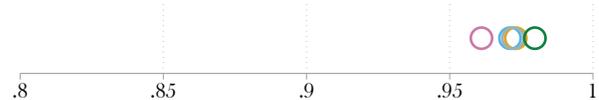
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



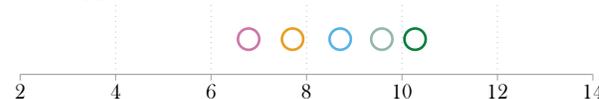
Probability of Survival to Age 5

Source: Demographic and Health Survey 2011



Expected Years of School

Source: Demographic and Health Survey 2011



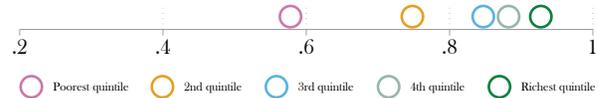
Harmonized Test Scores

Source: Latin American Laboratory for Assessment of the Quality of Education 2013



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2011



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India

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. India was ranked 115 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

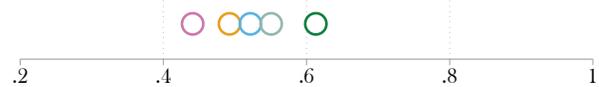
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In India, the productivity as a future worker of a child born today in the richest 20 percent of households is **61 percent** while it is **44 percent** for a child born in the poorest 20 percent, a gap of **17 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In India, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **5 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In India, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.3 years** of school, a gap of **2.4 years** of school. This gap is about the same as the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in India score **383** while those from the poorest 20 percent score **335**, a gap of **48 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In India, the percentage of children in the top 20 percent of households who are not stunted is **78 percent** while it is **49 percent** among the poorest 20 percent, a gap of **29 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

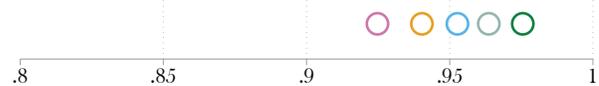
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



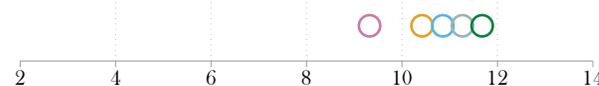
Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



Expected Years of School

Source: Demographic and Health Survey 2015



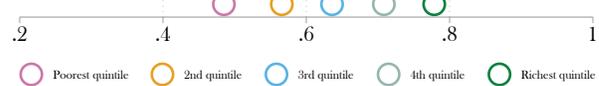
Harmonized Test Scores

Source: Programme for International Student Assessment 2009



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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Jordan

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Jordan was ranked 79 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

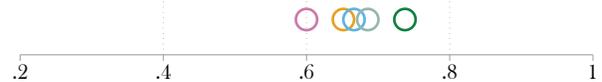
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Jordan, the productivity as a future worker of a child born today in the richest 20 percent of households is **74 percent** while it is **60 percent** for a child born in the poorest 20 percent, a gap of **14 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Jordan, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Jordan, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.7 years** of school, a gap of **1 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Jordan score **448** while those from the poorest 20 percent score **384**, a gap of **64 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Jordan, the percentage of children in the top 20 percent of households who are not stunted is **98 percent** while it is **86 percent** among the poorest 20 percent, a gap of **12 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



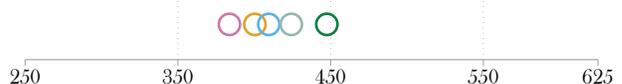
Expected Years of School

Source: Demographic and Health Survey 2012



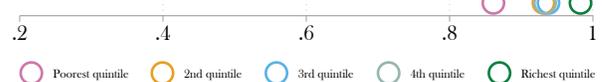
Harmonized Test Scores

Source: Programme for International Student Assessment 2012



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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Kazakhstan

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Kazakhstan was ranked 31 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

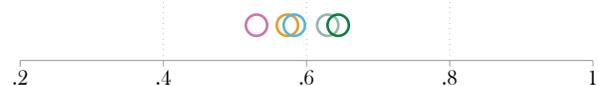
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Kazakhstan, the productivity as a future worker of a child born today in the richest 20 percent of households is **64 percent** while it is **53 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Kazakhstan, the probability of survival of a child born today in the richest 20 percent of households is **96 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Kazakhstan, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10 years** of school, a gap of **.3 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Kazakhstan score **452** while those from the poorest 20 percent score **371**, a gap of **81 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Kazakhstan, the percentage of children in the top 20 percent of households who are not stunted is **90 percent** while it is **81 percent** among the poorest 20 percent, a gap of **9 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

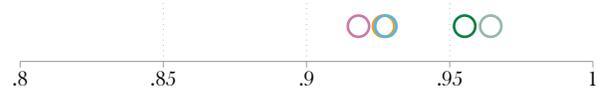
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 1999



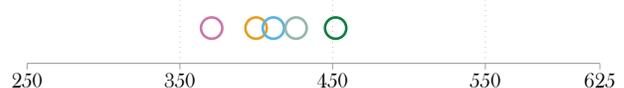
Expected Years of School

Source: Demographic and Health Survey 1999



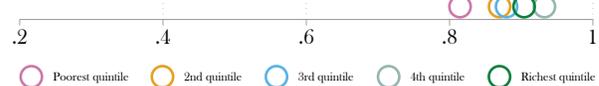
Harmonized Test Scores

Source: Programme for International Student Assessment 2009



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 1999



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Kenya

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Kenya was ranked 94 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

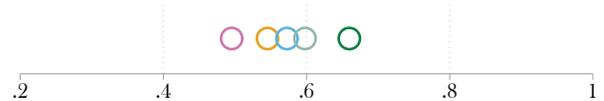
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Kenya, the productivity as a future worker of a child born today in the richest 20 percent of households is **66 percent** while it is **50 percent** for a child born in the poorest 20 percent, a gap of **16 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Kenya, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **94 percent** for a child born in the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Kenya, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.5 years** of school, a gap of **2.2 years** of school. This gap is about the same as the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Kenya score **467** while those from the poorest 20 percent score **404**, a gap of **62 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Kenya, the percentage of children in the top 20 percent of households who are not stunted is **86 percent** while it is **64 percent** among the poorest 20 percent, a gap of **22 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

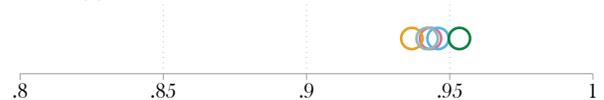
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



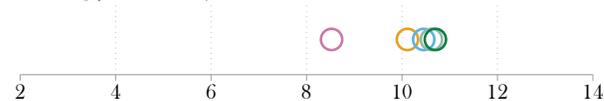
Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



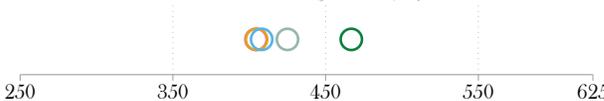
Expected Years of School

Source: Demographic and Health Survey 2014



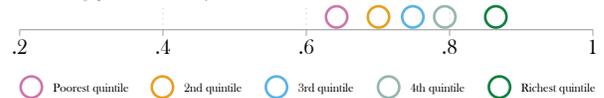
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Kyrgyz Republic

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Kyrgyz Republic was ranked 76 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

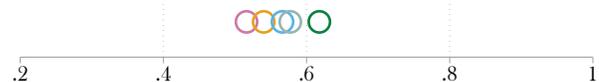
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the Kyrgyz Republic, the productivity as a future worker of a child born today in the richest 20 percent of households is **62 percent** while it is **52 percent** for a child born in the poorest 20 percent, a gap of **10 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the Kyrgyz Republic, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **3 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the Kyrgyz Republic, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.6 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.7 years** of school, a gap of **0 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the Kyrgyz Republic score **390** while those from the poorest 20 percent score **296**, a gap of **94 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the Kyrgyz Republic, the percentage of children in the top 20 percent of households who are not stunted is **89 percent** while it is **82 percent** among the poorest 20 percent, a gap of **7 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



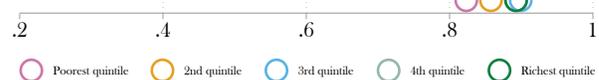
Harmonized Test Scores

Source: Programme for International Student Assessment 2009



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Lesotho

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Lesotho was ranked 143 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

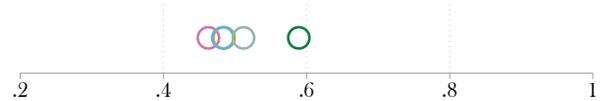
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Lesotho, the productivity as a future worker of a child born today in the richest 20 percent of households is **59 percent** while it is **46 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Lesotho, the probability of survival of a child born today in the richest 20 percent of households is **93 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Lesotho, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.2 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.5 years** of school, a gap of **1.7 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Lesotho score **384** while those from the poorest 20 percent score **348**, a gap of **37 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Lesotho, the percentage of children in the top 20 percent of households who are not stunted is **87 percent** while it is **56 percent** among the poorest 20 percent, a gap of **31 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

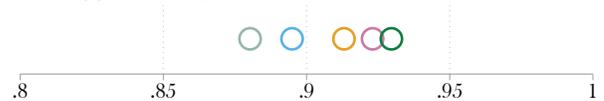
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



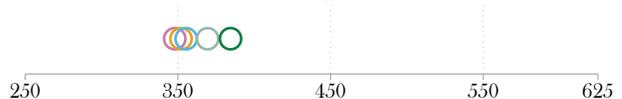
Expected Years of School

Source: Demographic and Health Survey 2014



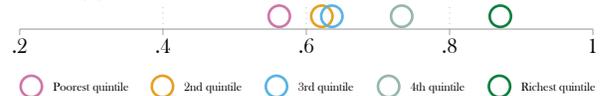
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Madagascar

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Madagascar was ranked 140 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

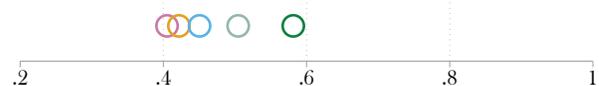
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Madagascar, the productivity as a future worker of a child born today in the richest 20 percent of households is **58 percent** while it is **41 percent** for a child born in the poorest 20 percent, a gap of **18 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Madagascar, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **89 percent** for a child born in the poorest 20 percent, a gap of **6 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Madagascar, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.2 years** of school, a gap of **4.2 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Madagascar score **467** while those from the poorest 20 percent score **427**, a gap of **41 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Madagascar, the percentage of children in the top 20 percent of households who are not stunted is **56 percent** while it is **52 percent** among the poorest 20 percent, a gap of **4 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

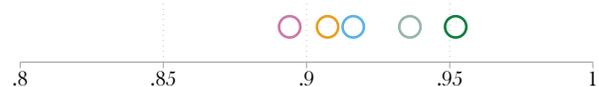
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



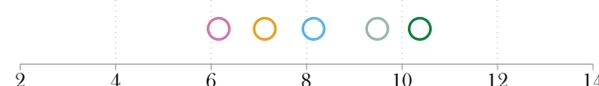
Probability of Survival to Age 5

Source: Demographic and Health Survey 2008



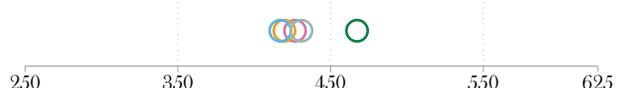
Expected Years of School

Source: Demographic and Health Survey 2008



Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2006



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2008



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Malawi

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Malawi was ranked 125 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

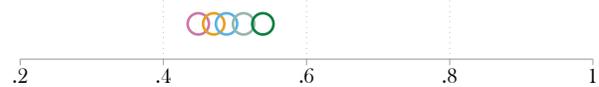
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Malawi, the productivity as a future worker of a child born today in the richest 20 percent of households is **54 percent** while it is **45 percent** for a child born in the poorest 20 percent, a gap of **9 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Malawi, the probability of survival of a child born today in the richest 20 percent of households is **94 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Malawi, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.2 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.7 years** of school, a gap of **1.5 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Malawi score **338** while those from the poorest 20 percent score **325**, a gap of **13 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Malawi, the percentage of children in the top 20 percent of households who are not stunted is **77 percent** while it is **55 percent** among the poorest 20 percent, a gap of **22 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

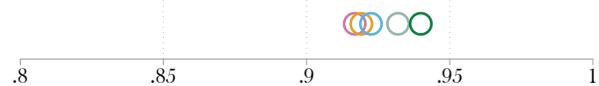
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



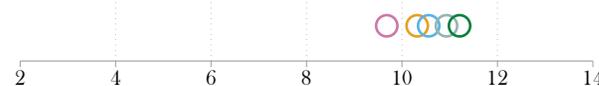
Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



Expected Years of School

Source: Demographic and Health Survey 2015



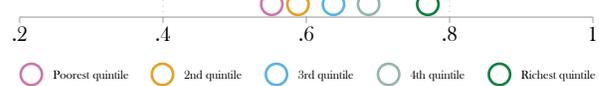
Harmonized Test Scores

Source: Early Grade Reading Assessment 2012



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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Mali

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Mali was ranked 154 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

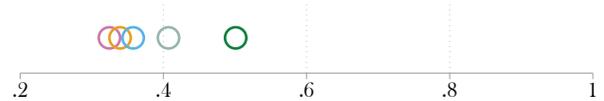
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Mali, the productivity as a future worker of a child born today in the richest 20 percent of households is **50 percent** while it is **32 percent** for a child born in the poorest 20 percent, a gap of **18 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Mali, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **88 percent** for a child born in the poorest 20 percent, a gap of **6 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Mali, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **2.6 years** of school, a gap of **6.8 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Mali score **313** while those from the poorest 20 percent score **309**, a gap of **3 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Mali, the percentage of children in the top 20 percent of households who are not stunted is **85 percent** while it is **60 percent** among the poorest 20 percent, a gap of **25 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

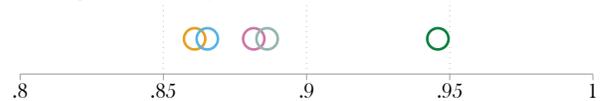
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2015



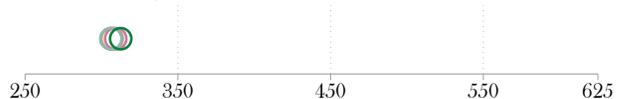
Expected Years of School

Source: Multiple Indicator Cluster Survey 2015



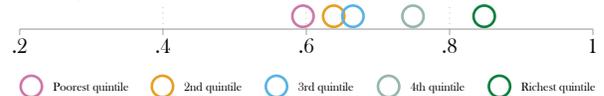
Harmonized Test Scores

Source: Early Grade Reading Assessment 2015



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2015



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Moldova

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Moldova was ranked 75 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

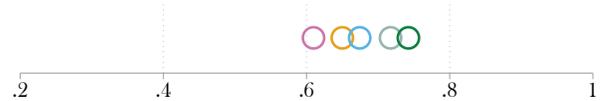
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Moldova, the productivity as a future worker of a child born today in the richest 20 percent of households is **74 percent** while it is **61 percent** for a child born in the poorest 20 percent, a gap of **13 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Moldova, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Moldova, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9 years** of school, a gap of **1.3 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Moldova score **530** while those from the poorest 20 percent score **472**, a gap of **58 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is about the same as the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Moldova, the percentage of children in the top 20 percent of households who are not stunted is **93 percent** while it is **85 percent** among the poorest 20 percent, a gap of **8 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

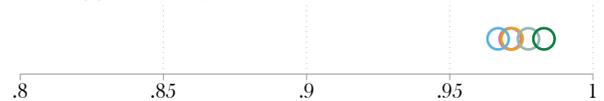
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



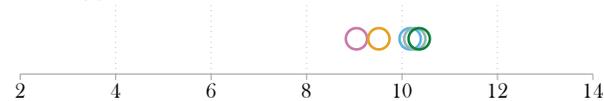
Probability of Survival to Age 5

Source: Demographic and Health Survey 2005



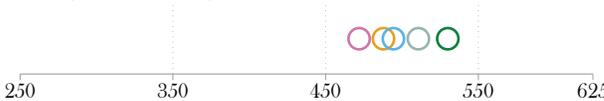
Expected Years of School

Source: Demographic and Health Survey 2005



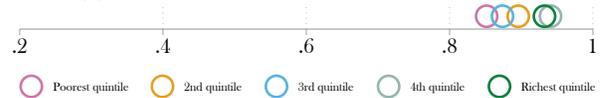
Harmonized Test Scores

Source: Progress in International Reading Literacy Study 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2005



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Mozambique

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Mozambique was ranked 148 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

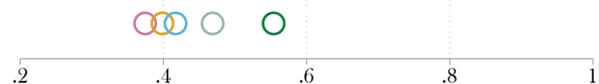
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Mozambique, the productivity as a future worker of a child born today in the richest 20 percent of households is **55 percent** while it is **37 percent** for a child born in the poorest 20 percent, a gap of **18 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Mozambique, the probability of survival of a child born today in the richest 20 percent of households is **91 percent** while it is **87 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Mozambique, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.9 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.6 years** of school, a gap of **4.3 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Mozambique score **395** while those from the poorest 20 percent score **350**, a gap of **45 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Mozambique, the percentage of children in the top 20 percent of households who are not stunted is **76 percent** while it is **49 percent** among the poorest 20 percent, a gap of **27 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

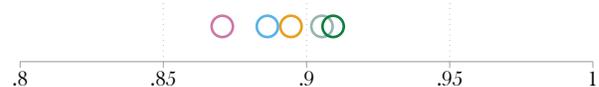
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



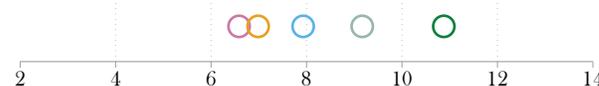
Probability of Survival to Age 5

Source: Demographic and Health Survey 2011



Expected Years of School

Source: Demographic and Health Survey 2011



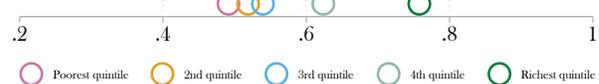
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2011



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Myanmar

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Myanmar was ranked 107 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Myanmar, the productivity as a future worker of a child born today in the richest 20 percent of households is **62 percent** while it is **43 percent** for a child born in the poorest 20 percent, a gap of **20 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Myanmar, the probability of survival of a child born today in the richest 20 percent of households is **97 percent** while it is **90 percent** for a child born in the poorest 20 percent, a gap of **7 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Myanmar, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.1 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **6.7 years** of school, a gap of **3.4 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Myanmar score **438** while those from the poorest 20 percent score **396**, a gap of **42 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Myanmar, the percentage of children in the top 20 percent of households who are not stunted is **85 percent** while it is **63 percent** among the poorest 20 percent, a gap of **22 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

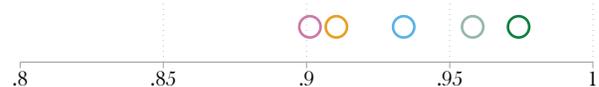
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



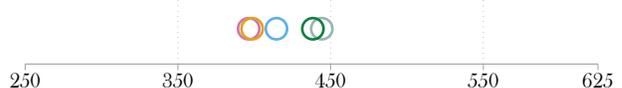
Expected Years of School

Source: Demographic and Health Survey 2015



Harmonized Test Scores

Source: Early Grade Reading Assessment 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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Namibia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Namibia was ranked 117 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

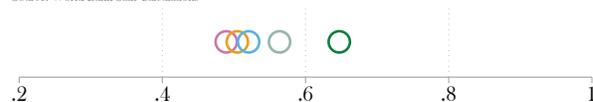
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Namibia, the productivity as a future worker of a child born today in the richest 20 percent of households is **65 percent** while it is **49 percent** for a child born in the poorest 20 percent, a gap of **16 percentage points**. This gap is about the same as the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Namibia, the probability of survival of a child born today in the richest 20 percent of households is **97 percent** while it is **93 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Namibia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.8 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.4 years** of school, a gap of **1.4 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Namibia score **427** while those from the poorest 20 percent score **346**, a gap of **81 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Namibia, the percentage of children in the top 20 percent of households who are not stunted is **90 percent** while it is **71 percent** among the poorest 20 percent, a gap of **20 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

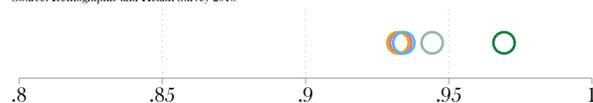
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



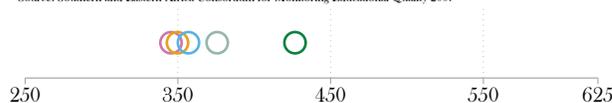
Expected Years of School

Source: Demographic and Health Survey 2013



Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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Niger

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Niger was ranked 155 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

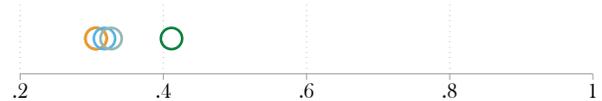
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Niger, the productivity as a future worker of a child born today in the richest 20 percent of households is **41 percent** while it is **31 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Niger, the probability of survival of a child born today in the richest 20 percent of households is **89 percent** while it is **86 percent** for a child born in the poorest 20 percent, a gap of **3 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Niger, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **7.5 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **2.6 years** of school, a gap of **5 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Niger score **321** while those from the poorest 20 percent score **281**, a gap of **40 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Niger, the percentage of children in the top 20 percent of households who are not stunted is **66 percent** while it is **54 percent** among the poorest 20 percent, a gap of **12 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

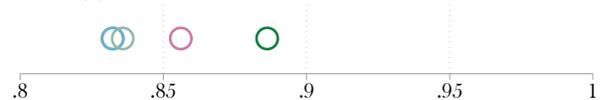
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



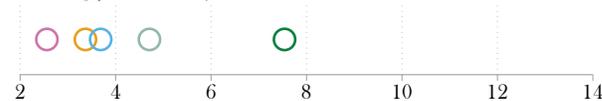
Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



Expected Years of School

Source: Demographic and Health Survey 2012



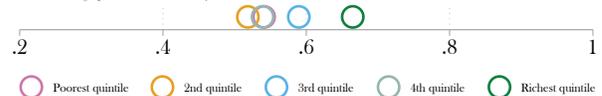
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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Paraguay

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Paraguay was ranked 90 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

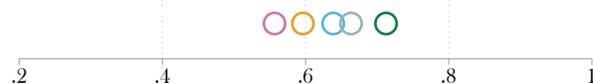
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Paraguay, the productivity as a future worker of a child born today in the richest 20 percent of households is **71 percent** while it is **56 percent** for a child born in the poorest 20 percent, a gap of **16 percentage points**. This gap is about the same as the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Paraguay, the probability of survival of a child born today in the richest 20 percent of households is **100 percent** while it is **97 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Paraguay, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.8 years** of school, a gap of **1.7 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Paraguay score **429** while those from the poorest 20 percent score **359**, a gap of **69 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Paraguay, the percentage of children in the top 20 percent of households who are not stunted is **99 percent** while it is **87 percent** among the poorest 20 percent, a gap of **12 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2016



Expected Years of School

Source: Multiple Indicator Cluster Survey 2016



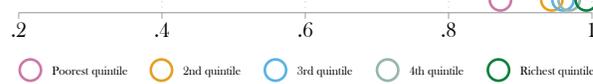
Harmonized Test Scores

Source: Latin American Laboratory for Assessment of the Quality of Education 2013



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2016



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Peru

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Peru was ranked 72 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

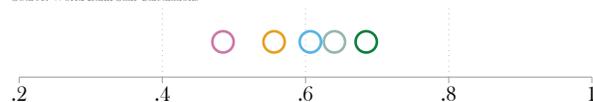
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Peru, the productivity as a future worker of a child born today in the richest 20 percent of households is **68 percent** while it is **48 percent** for a child born in the poorest 20 percent, a gap of **20 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Peru, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Peru, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.3 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.2 years** of school, a gap of **1.1 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Peru score **464** while those from the poorest 20 percent score **348**, a gap of **116 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Peru, the percentage of children in the top 20 percent of households who are not stunted is **96 percent** while it is **61 percent** among the poorest 20 percent, a gap of **35 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

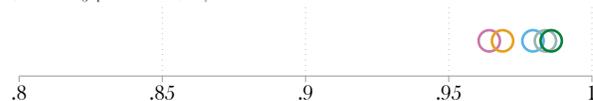
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



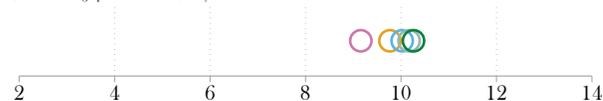
Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



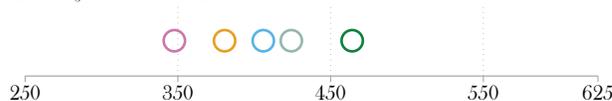
Expected Years of School

Source: Demographic and Health Survey 2012



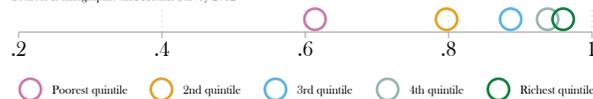
Harmonized Test Scores

Source: Programme for International Student Assessment 2015



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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Senegal

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Senegal was ranked 121 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

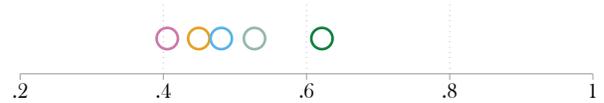
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Senegal, the productivity as a future worker of a child born today in the richest 20 percent of households is **62 percent** while it is **41 percent** for a child born in the poorest 20 percent, a gap of **22 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Senegal, the probability of survival of a child born today in the richest 20 percent of households is **97 percent** while it is **91 percent** for a child born in the poorest 20 percent, a gap of **6 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Senegal, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.6 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **5.4 years** of school, a gap of **4.3 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Senegal score **440** while those from the poorest 20 percent score **370**, a gap of **71 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Senegal, the percentage of children in the top 20 percent of households who are not stunted is **91 percent** while it is **72 percent** among the poorest 20 percent, a gap of **20 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

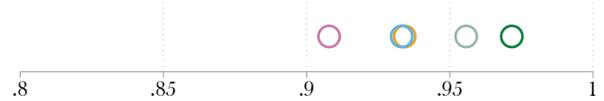
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



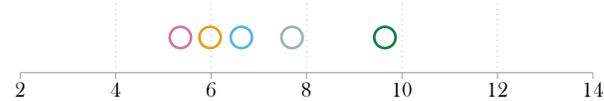
Probability of Survival to Age 5

Source: Demographic and Health Survey 2014



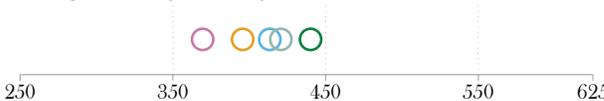
Expected Years of School

Source: Demographic and Health Survey 2014



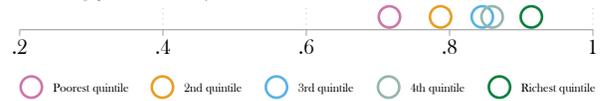
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2014



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Tajikistan

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Tajikistan was ranked 89 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

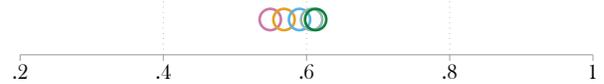
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Tajikistan, the productivity as a future worker of a child born today in the richest 20 percent of households is **61 percent** while it is **55 percent** for a child born in the poorest 20 percent, a gap of **6 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Tajikistan, the probability of survival of a child born today in the richest 20 percent of households is **96 percent** while it is **94 percent** for a child born in the poorest 20 percent, a gap of **2 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Tajikistan, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.1 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.7 years** of school, a gap of **.4 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Tajikistan score **449** while those from the poorest 20 percent score **428**, a gap of **22 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Tajikistan, the percentage of children in the top 20 percent of households who are not stunted is **79 percent** while it is **68 percent** among the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2012



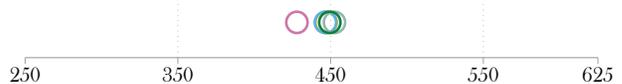
Expected Years of School

Source: Demographic and Health Survey 2012



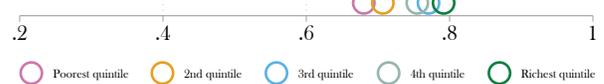
Harmonized Test Scores

Source: Early Grade Reading Assessment 2016



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2012



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Tanzania

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Tanzania was ranked 128 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

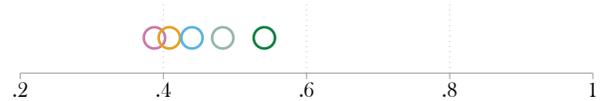
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Tanzania, the productivity as a future worker of a child born today in the richest 20 percent of households is **54 percent** while it is **39 percent** for a child born in the poorest 20 percent, a gap of **15 percentage points**. This gap is about the same as the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Tanzania, the probability of survival of a child born today in the richest 20 percent of households is **93 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **0 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Tanzania, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.4 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **5.4 years** of school, a gap of **3.9 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Tanzania score **407** while those from the poorest 20 percent score **331**, a gap of **76 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Tanzania, the percentage of children in the top 20 percent of households who are not stunted is **81 percent** while it is **61 percent** among the poorest 20 percent, a gap of **20 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



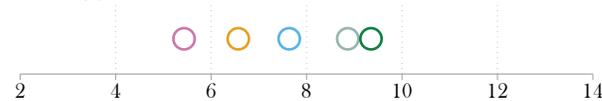
Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



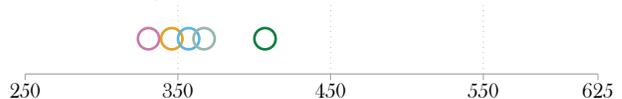
Expected Years of School

Source: Demographic and Health Survey 2015



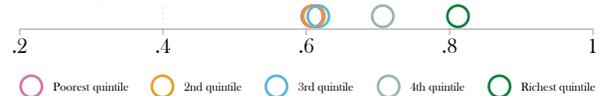
Harmonized Test Scores

Source: Early Grade Reading Assessment 2013



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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Togo

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Togo was ranked 122 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

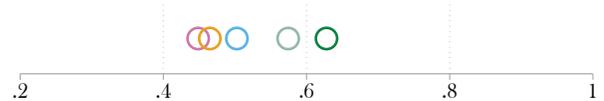
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Togo, the productivity as a future worker of a child born today in the richest 20 percent of households is **63 percent** while it is **45 percent** for a child born in the poorest 20 percent, a gap of **18 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Togo, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **88 percent** for a child born in the poorest 20 percent, a gap of **7 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Togo, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.6 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.9 years** of school, a gap of **1.8 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Togo score **425** while those from the poorest 20 percent score **356**, a gap of **69 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Togo, the percentage of children in the top 20 percent of households who are not stunted is **90 percent** while it is **67 percent** among the poorest 20 percent, a gap of **23 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

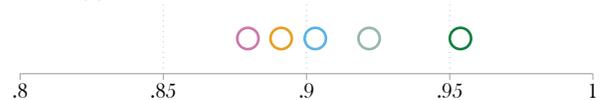
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



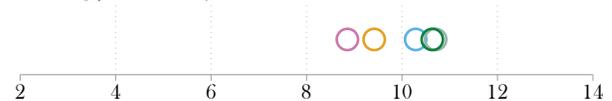
Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



Expected Years of School

Source: Demographic and Health Survey 2013



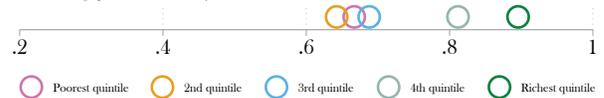
Harmonized Test Scores

Source: Programme for the Analysis of Education Systems 2014



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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Turkey

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Turkey was ranked 53 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Turkey, the productivity as a future worker of a child born today in the richest 20 percent of households is **77 percent** while it is **49 percent** for a child born in the poorest 20 percent, a gap of **29 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Turkey, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **92 percent** for a child born in the poorest 20 percent, a gap of **6 percentage points**. This gap is larger than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Turkey, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.1 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **7.9 years** of school, a gap of **3.2 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Turkey score **521** while those from the poorest 20 percent score **426**, a gap of **94 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Turkey, the percentage of children in the top 20 percent of households who are not stunted is **96 percent** while it is **69 percent** among the poorest 20 percent, a gap of **27 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

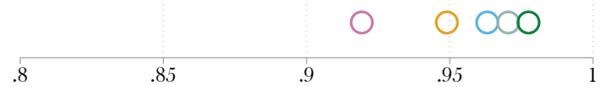
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



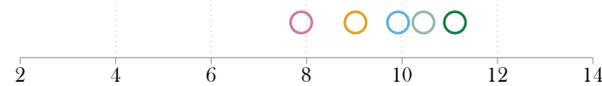
Probability of Survival to Age 5

Source: Demographic and Health Survey 2003



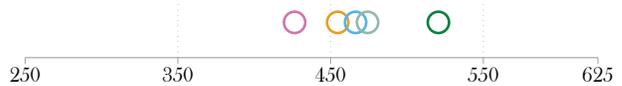
Expected Years of School

Source: Demographic and Health Survey 2003



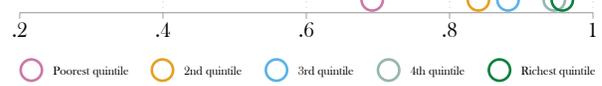
Harmonized Test Scores

Source: Programme for International Student Assessment 2012



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2003



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Uganda

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Uganda was ranked 137 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Uganda, the productivity as a future worker of a child born today in the richest 20 percent of households is **55 percent** while it is **45 percent** for a child born in the poorest 20 percent, a gap of **10 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Uganda, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **91 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Uganda, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **9.5 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **8.3 years** of school, a gap of **1.2 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Uganda score **399** while those from the poorest 20 percent score **355**, a gap of **44 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Uganda, the percentage of children in the top 20 percent of households who are not stunted is **83 percent** while it is **67 percent** among the poorest 20 percent, a gap of **16 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



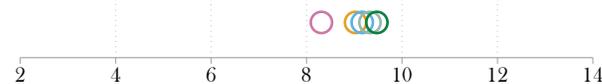
Probability of Survival to Age 5

Source: Demographic and Health Survey 2016



Expected Years of School

Source: Demographic and Health Survey 2016



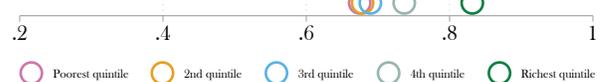
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2016



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Vietnam

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Vietnam was ranked 48 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

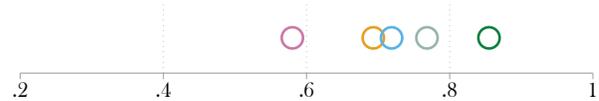
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Vietnam, the productivity as a future worker of a child born today in the richest 20 percent of households is **85 percent** while it is **58 percent** for a child born in the poorest 20 percent, a gap of **27 percentage points**. This gap is larger than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Vietnam, the probability of survival of a child born today in the richest 20 percent of households is **99 percent** while it is **96 percent** for a child born in the poorest 20 percent, a gap of **3 percentage points**. This gap is slightly smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Vietnam, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.6 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9.6 years** of school, a gap of **2.1 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Vietnam score **560** while those from the poorest 20 percent score **487**, a gap of **73 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Vietnam, the percentage of children in the top 20 percent of households who are not stunted is **94 percent** while it is **59 percent** among the poorest 20 percent, a gap of **35 percentage points**. This gap is larger than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

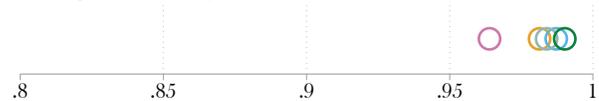
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2013



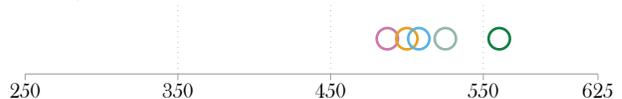
Expected Years of School

Source: Multiple Indicator Cluster Survey 2013



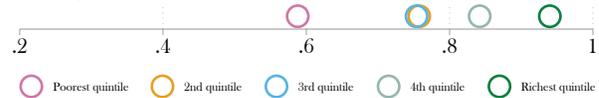
Harmonized Test Scores

Source: Programme for International Student Assessment 2015



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2010



The Human Capital Project is a global effort to accelerate the amount and quality of investments in people.

For more information on the Human Capital Project, please visit www.worldbank.org/humancapitalproject



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West Bank and Gaza

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. West Bank and Gaza was ranked 82 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

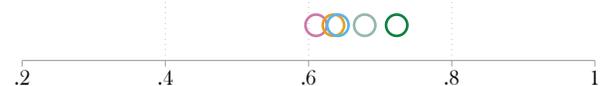
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In the West Bank and Gaza, the productivity as a future worker of a child born today in the richest 20 percent of households is **72 percent** while it is **61 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In the West Bank and Gaza, the probability of survival of a child born today in the richest 20 percent of households is **98 percent** while it is **98 percent** for a child born in the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In the West Bank and Gaza, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11.5 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **10.9 years** of school, a gap of **.6 years** of school. This gap is smaller than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in the West Bank and Gaza score **458** while those from the poorest 20 percent score **372**, a gap of **86 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In the West Bank and Gaza, the percentage of children in the top 20 percent of households who are not stunted is **94 percent** while it is **93 percent** among the poorest 20 percent, a gap of **1 percentage points**. This gap is smaller than the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

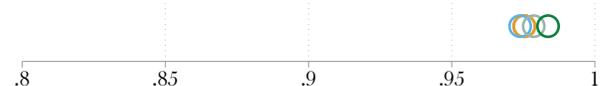
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Multiple Indicator Cluster Survey 2014



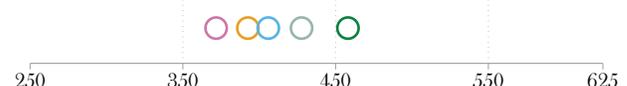
Expected Years of School

Source: Multiple Indicator Cluster Survey 2014



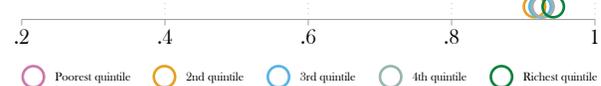
Harmonized Test Scores

Source: Trends in International Mathematics and Science Study 2011



Fraction of Children Under 5 Not Stunted

Source: Multiple Indicator Cluster Survey 2014



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Zambia

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Zambia was ranked 131 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

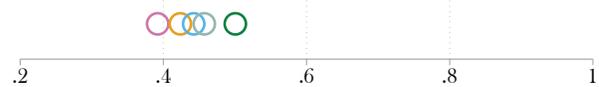
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Zambia, the productivity as a future worker of a child born today in the richest 20 percent of households is **50 percent** while it is **39 percent** for a child born in the poorest 20 percent, a gap of **11 percentage points**. This gap is smaller than the typical gap across the 50 countries (15 percentage points).
- **Probability of Survival to Age 5.** In Zambia, the probability of survival of a child born today in the richest 20 percent of households is **94 percent** while it is **90 percent** for a child born in the poorest 20 percent, a gap of **4 percentage points**. This gap is about the same as the typical gap across the 50 countries (4 percentage points).
- **Expected Years of School.** In Zambia, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **10.7 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **7.4 years** of school, a gap of **3.3 years** of school. This gap is larger than the typical gap across the 50 countries (2.4 years).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Zambia score **313** while those from the poorest 20 percent score **310**, a gap of **3 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is smaller than the typical gap across the 50 countries (55 points).
- **Healthy Growth (Not Stunted Rate).** In Zambia, the percentage of children in the top 20 percent of households who are not stunted is **71 percent** while it is **53 percent** among the poorest 20 percent, a gap of **19 percentage points**. This gap is about the same as the typical gap across the 50 countries (19 percentage points).

HCI By Quintile of Socioeconomic Status

SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2013



Expected Years of School

Source: Demographic and Health Survey 2013



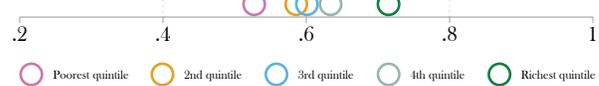
Harmonized Test Scores

Source: Early Grade Reading Assessment 2011



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2013



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Zimbabwe

Insights from Disaggregating the Human Capital Index

The launch of the World Bank Human Capital Index (HCI) in October 2018 highlighted large gaps in human capital outcomes across 157 countries around the world. The global HCI shows how shortfalls in health and education among children today will reduce the productivity of the next generation of workers. Zimbabwe was ranked 114 out of 157 countries in the global HCI.

Gaps in human capital outcomes within countries across socioeconomic groups are large as well. This country profile documents these within-country gaps using a newly-developed version of the HCI disaggregated by socioeconomic status (SES-HCI). It presents data on key indicators of human capital outcomes among children (child survival, expected years of school, harmonized test scores, and the fraction of children under 5 who are not stunted), together with a version of the SES-HCI, for 50 low- and middle-income countries where data are available.

This version of the SES-HCI relies on the same general methodology as the global HCI, but uses different data sources in order to allow for this disaggregation, and so is not directly comparable with the global HCI. For details on the data and methodology of the SES-HCI, see *A Socioeconomic Disaggregation of the World Bank Human Capital Index*, by D'Souza, Gatti and Kraay (2019).

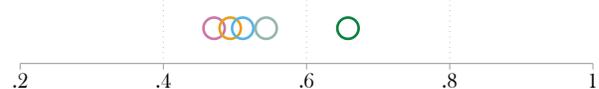
HOW DO HUMAN CAPITAL OUTCOMES DIFFER BY SOCIOECONOMIC STATUS?

- **SES-Disaggregated Human Capital Index (SES-HCI).** In Zimbabwe, the productivity as a future worker of a child born today in the richest 20 percent of households is **66 percent** while it is **47 percent** for a child born in the poorest 20 percent, a gap of **19 percentage points**. This gap is larger than the typical gap across the 50 countries (**15 percentage points**).
- **Probability of Survival to Age 5.** In Zimbabwe, the probability of survival of a child born today in the richest 20 percent of households is **95 percent** while it is **90 percent** for a child born in the poorest 20 percent, a gap of **5 percentage points**. This gap is slightly larger than the typical gap across the 50 countries (**4 percentage points**).
- **Expected Years of School.** In Zimbabwe, a child in the richest 20 percent of households who starts school at age 6 can expect to complete **11 years** of school by her 18th birthday while a child from the poorest 20 percent can expect to complete **9 years** of school, a gap of **1.9 years** of school. This gap is smaller than the typical gap across the 50 countries (**2.4 years**).
- **Harmonized Test Scores.** Students from the richest 20 percent of households in Zimbabwe score **462** while those from the poorest 20 percent score **369**, a gap of **94 points** on a scale that ranges from 300 (minimal attainment) to 625 (high attainment). This gap is larger than the typical gap across the 50 countries (**55 points**).
- **Healthy Growth (Not Stunted Rate).** In Zimbabwe, the percentage of children in the top 20 percent of households who are not stunted is **85 percent** while it is **68 percent** among the poorest 20 percent, a gap of **17 percentage points**. This gap is smaller than the typical gap across the 50 countries (**19 percentage points**).

HCI By Quintile of Socioeconomic Status

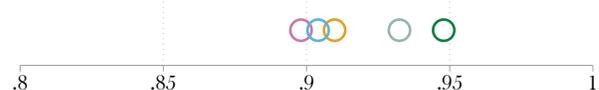
SES-Disaggregated Human Capital Index (SES-HCI)

Source: World Bank Staff Calculations



Probability of Survival to Age 5

Source: Demographic and Health Survey 2015



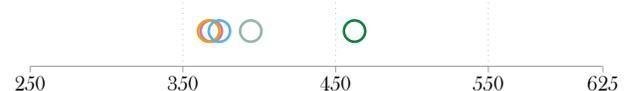
Expected Years of School

Source: Demographic and Health Survey 2015



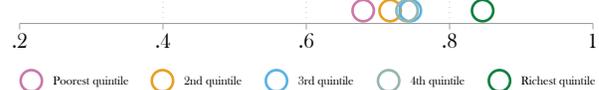
Harmonized Test Scores

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality 2007



Fraction of Children Under 5 Not Stunted

Source: Demographic and Health Survey 2015



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