This brief provides an update to the Human Capital Index (HCI). First launched in 2018, the HCI measures the amount of human capital that a child born today can expect to attain by age 18. It conveys the productivity of the next generation of workers compared to a benchmark of complete education and full health. Worldwide a child born in 2020 can expect, on average, to be 56 percent as productive as she could be when she grows up. All data represent the status of countries pre-COVID-19.

THE HUMAN CAPITAL INDEX

Human Capital Index. A child born in Luxembourg today will be 69 percent as productive when she grows up as she could be if she enjoyed complete education and full health. This is slightly lower than the average for Europe & Central Asia region and lower than the average for High income countries. Between 2010 and 2020, the HCI value for Luxembourg decreased from 0.70 to 0.69. Figure 1 shows how the HCI and each of the components evolved over time.

- **Probability of Survival to Age 5.** 100 out of 100 children born in Luxembourg survive to age 5.

- **Expected Years of School.** In Luxembourg, a child who starts school at age 4 can expect to complete 12.4 years of school by her 18th birthday.

- **Harmonized Test Scores.** Students in Luxembourg score 493 on a scale where 625 represents advanced attainment and 300 represents minimum attainment.

- **Learning-adjusted Years of School.** Factoring in what children actually learn, expected years of school is only 9.8 years.

- **Adult Survival Rate.** Across Luxembourg, 94 percent of 15-year olds will survive until age 60. This statistic is a proxy for the range of health risks that a child born today would experience as an adult under current conditions.

- **Healthy Growth (Not Stunted Rate).** Data on stunting are not available for Luxembourg.

DIFFERENCES IN HCI ACROSS GENDER AND SOCIO-ECONOMIC GROUPS

In Luxembourg, the HCI for girls is higher than for boys. Table 1 shows gender disaggregation for each of the HCI components.

In Luxembourg, there are not sufficient data to disaggregate HCI by socioeconomic groups.

<table>
<thead>
<tr>
<th>Table 1. HCI by Gender and Socio-economic Group</th>
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<tr>
<td><strong>Component</strong></td>
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<tr>
<td>HCI</td>
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<tr>
<td>Survival to Age 5</td>
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HCI Ratio (richest / poorest 20 percent) -


**PROTECT AND INVEST in people**
The outlook for the next generation has been improving in most countries in Europe & Central Asia. Efforts are being made to protect human capital gains against setbacks and accelerate progress for all. The challenges unleashed by COVID-19 require an even stronger policy response, including greater use of technology to improve service delivery and enhanced social assistance programs, to ensure that people receive quality education and health care.

**DOMESTIC RESOURCE UTILIZATION AND MOBILIZATION**

- **Health Spending.** Luxembourg spends 4.7 percent (2017) of its GDP in public spending on health. This is lower than both the regional average (4.9%) and the average for its income group (5.3%). 3 percent (2010) of the population incurs catastrophic health expenditure measured as out-of-pocket spending exceeding 10% of household consumption or income.

- **Education Spending.** Luxembourg spends 4.0 percent (2015) of its GDP in government education spending. This is lower than both the regional average (4.6%) and the average for its income group (4.5%).

- **Social Assistance Spending.** In Luxembourg, data on social assistance spending are not available. The average for its region is 1.8 percent and for its income group is 1.7 percent.

- **Government Revenue.** General government revenue in Luxembourg is 45.5 percent (2018) of GDP. This is higher than both the regional average (38.1%) and the average for its income group (37.3%).

**COMPLEMENTARY INDICATORS**

- **Learning Poverty.** In Luxembourg, 3 percent (2006) of 10-year-olds cannot read and understand a simple text by the end of primary school. This is lower than both the average for its region (11%) and the average for its income group (14%).

- **Pre-primary Gross Enrollment.** In Luxembourg, the gross enrollment ratio in pre-primary education is 92 percent (2017). This is higher than both the average for its region (85%) and the average for its income group (91%).

- **Quality-adjusted Years of Higher Education.** In Luxembourg, about 50 percent (2017) of adults ages 30-34 have a tertiary degree. A child born today can expect to complete 1.7 years of higher education. Factoring in the quality of higher education, expected years of higher education is only 1.5 years.

- **NCD Deaths.** In Luxembourg, the probability of dying between ages 30 and 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory diseases is 10 percent (2016). This is lower than both the average for its region (17%) and the average for its income group (14%).

- **Health Risk Factors.** In Luxembourg, 15 percent of adults are obese, 21 percent are smokers, and 35 percent are heavy drinkers.

- **Hypertension.** In Luxembourg, 26 percent (2015) of the population age 18 and older has hypertension. This is lower than the average for its region (29%) but higher than the average for its income group (25%).

- **Diabetes.** In Luxembourg, 5 percent (2019) of the population ages 20-79 has type 1 or type 2 diabetes. This is lower than both the average for its region (6%) and the average for its income group (9%).

- **Universal Health Coverage (UHC) Index.** The index, ranging from 0 to 100, measures coverage of essential health services based on tracer interventions. In Luxembourg, the UHC Index score is 83 (2017). This is higher than both the average for its region (75) and the average for its income group (79).

- **Social Safety Net Coverage.** In Luxembourg, data on social safety net coverage of the poorest quintile are not available. The average for its region is 46 percent and for its income group is 70 percent.

- **Human Capital Utilization.** In Luxembourg, 67 percent (2018) of the working-age population is employed. This is higher than the average for its region (65%) but lower than the average for its income group (70%).

This brief is based on the most recent data available from the Human Capital Project, World Development Indicators, Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE), UNESCO Institute for Statistics, WHO Global Health Observatory and Global Health Expenditure Database, IMF World Economic Outlook, selected national sources and World Bank staff estimates.

For more information on the definition of indicators and data sources, please visit: www.worldbank.org/humancapital