This 2-page brief provides the 2020 Human Capital Index (HCI) released in September 2020, and a set of indicators that are complementary to the HCI. 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. Although the effects of COVID-19 on the HCI are yet to be measured due to the lack of data, we expect the post-pandemic HCI to be relatively lower due to the deep learning and health losses globally. Data collection efforts to allow updates to the HCI remain critical for all countries to inform policies and programs to address the setbacks to human capital.

THE HUMAN CAPITAL INDEX

A child born in Luxembourg just before the pandemic 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 the Europe & Central Asia region (69 percent) and lower than the average for High Income countries (71 percent).

THE HUMAN CAPITAL INDEX COMPONENTS

- **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.
- **Fraction of Children Under 5 Not Stunted.** Internationally comparable 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. The table below shows gender disaggregation for each of the HCI components. There are insufficient data to disaggregate the HCI by socio-economic groups.

<table>
<thead>
<tr>
<th>HCl and its components</th>
<th>Boys</th>
<th>Girls</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCI</td>
<td>0.67</td>
<td>0.70</td>
<td>0.69</td>
</tr>
<tr>
<td>Survival to Age 5</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Expected Years of School</td>
<td>12.4</td>
<td>12.5</td>
<td>12.4</td>
</tr>
<tr>
<td>Harmonized Test Scores</td>
<td>489</td>
<td>497</td>
<td>493</td>
</tr>
<tr>
<td>Learning-adjusted Years of School</td>
<td>9.7</td>
<td>9.9</td>
<td>9.8</td>
</tr>
<tr>
<td>Adult Survival Rate</td>
<td>0.93</td>
<td>0.96</td>
<td>0.94</td>
</tr>
<tr>
<td>Not Stunted Rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes for all figures in this brief:
- represents Luxembourg.
- represents the average for High Income countries.
- represents the average for Europe & Central Asia.
- represent other countries in the World.
Human capital, a crucial ingredient for economic growth, is multi-dimensional and cumulatively built over the lifecycle. Due to the slow moving nature of the HCI, an additional set of Human Capital Complementary Indicators (HCCIs) offer a snapshot of proximate dimensions of human capital in Luxembourg that can be monitored to measure simultaneous progress in intermediate outcomes. These selected HCCIs are based on the latest available data (italicized and shown in parenthesis) and benchmarked against regional and country income group averages. They highlight where the need is for investment in people in each stage of life and for data collection and updates for evidence-based policy making.

**EARLY CHILDHOOD**

- Neonatal mortality (deaths per 1,000 live births). The neonatal mortality rate is 2 per 1,000 live births (2020), lower than both the regional average (4) and the income group average (4).

- Pre-primary school gross enrollment (%). The pre-primary school gross enrollment ratio is 91 percent (2019), higher than both the regional and income group averages.

- Completeness of birth registration (%). Complete birth registration is 100 percent (2017), compared to 100 at the regional level and 100 at the income group level.

**SCHOOL AGE**

- Primary school completion (%). Primary school completion rate is 82 percent (2019), lower than both the regional (98%) and income group (99%) averages.

- Gross secondary school enrollment (%). The secondary school gross enrollment rate is 105 percent (2019), lower than both the regional (107%) and income group (110%) averages.

- Lower secondary school completion (%). The lower secondary school completion rate is 117 percent (2019), higher than both the regional (98%) and income group (98%) averages.

**YOUTH**

- Adolescent fertility (births/1000 women). The adolescent fertility rate, i.e., the number of births for every 1000 women aged 15-19, is 4 (2020). This is lower than both the average for its region (15) and the average for its income group (13).

- Gross tertiary education enrollment (%). Tertiary education gross enrollment ratio is 18 percent (2019), lower than the regional (69%) and income group (70%) averages.

- Youth unemployment (%). Youth unemployment is 15 percent (2022), lower than the regional average (18%) and similar to the income group average (15%).

**ADULTS & ELDERLY**

- Female labour force participation (%). The female labour force participation is 62 percent (2022), higher than both the regional (54%) and income group (55%) averages.

- Male labour force participation (%). The male labour force participation is 70 percent (2022), higher than the regional average (69%) and lower than the income group average (73%).

- Life expectancy at birth (years). Life expectancy at birth is 82 years (2020), higher than both the regional (78 years) and income group (80 years) averages.