

SURVIVE 

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**Strategic Human Capital
Investments to Accelerate
Azerbaijan's Growth**

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PREFACE



As Azerbaijani President, Ilham Aliyev, said at the opening ceremony of the VII Global Forum of the UN Alliance of Civilizations (UNAOC) in Baku in 2016, “our aim is to turn black gold into human capital for Azerbaijan.” Since our independence a generation ago, we have achieved extraordinary development milestones, including high and sustained growth, significant poverty reduction, and upper-middle-income status.

Nevertheless, our country’s current level of human capital development and its contributions to the national wealth have not been fully realized. According to recent World Bank research, while human capital accounts for an average of 58 percent of wealth in upper-middle-income countries, it contributes only 14 percent to Azerbaijan’s wealth. Furthermore, a child born in Azerbaijan today will be only 60 percent as productive when she grows up as she could be if she enjoyed complete education and full health.

Azerbaijan is facing new and emerging challenges in achieving broad-based and private sector-led growth and in making key public services and economic opportunities accessible to all citizens. Since 2015, Azerbaijan experienced its first deep economic difficulties since independence a quarter of a century ago. While oil and gas may continue to play an important role, the economic crisis of the last few years highlights the need for greater economic diversification and for an enhanced role for the private sector as an engine of growth and job creation.

Strategic human capital investments provide us with a way forward. Within the last decade, the Government of Azerbaijan has put human capital development at the forefront of policy discussions. During the 2009 and 2011 high-level Economic Policy Forums, human capital development was identified as

a constraint to sustainable development. Consequently, the government identified high priority areas in education and healthcare. Since that time, it has implemented education financing reforms, student assessment and the quality of education in universities has been improved, a mandatory health insurance system has been piloted, and a state employment policy has been passed aimed at ensuring the efficiency of employment.

Furthermore, in 2018, our government launched the *Azerbaijan Human Capital Forum* with the help of the World Bank. The Forum, which drew over 150 stakeholders concerned with human capital development, underscored the importance of enhancing investments in human capital to prepare Azerbaijan’s citizens for the challenges and opportunities presented by globalization and technological innovations. However, the human capital development agenda will require further policies and interventions.

To ensure sustainable, long-term growth, we need to accelerate investments in critical areas of human capital development to ensure that all citizens have access to comprehensive and quality education, healthcare, well-rounded social protection services, and robust employment prospects. Investing more in human capital now will ensure that the future generations of Azerbaijanis will be able to take full advantage of the opportunities created by the digital revolution. Together with the World Bank and our stakeholders, we aim to realize this goal.

Ali Ahmedov
Deputy Prime Minister

PREFACE



In 2018, the World Bank Group launched the Human Capital Project (HCP), a global effort that supports countries through data, policies, and research to accelerate more and better investments in people for greater equity and economic growth. Without strategic investments in human capital, countries will not have a workforce that is prepared for the highly-skilled jobs of the future and will not be able to effectively compete in the global economy. Human capital development is urgently needed in the South Caucasus, a region confronted with chronic health conditions, growing skills mismatches in the labor market, high unemployment rates among youth and women, inequitable household income levels, and net emigration. The HCP presents us with a unique opportunity to engage in addressing these challenges and accelerating growth in a sustainable and inclusive way.

Recognizing the key role of human capital in growth and development, the Government of Azerbaijan and the World Bank organized a three-day and high-level Human Capital Forum in December 2018, in partnership with the Office of the Prime Minister, Ministry of Education, and Ministry of Labor and Social Protection of the Population. The Forum underscored the importance of enhanced investments in human capital for preparing Azerbaijan's citizens to engage in the global knowledge economy and Azerbaijan to collaborate and compete with other nations. This report, *Survive, learn, thrive: strategic human capital investments to accelerate Azerbaijan's*

growth, builds on the ongoing country engagement and is the first step towards collaboratively designing and implementing strategic human capital investments in the country. The report puts a spotlight on the state of human capital outcomes in Azerbaijan, explores the challenges to building and activating human capital, and recommends specific investments to overcome these challenges.

The World Bank is committed to supporting the Government of Azerbaijan with the establishment and implementation of an ambitious human capital agenda. Through our close collaboration, we will build on this initial stock-taking with deeper analyses to operationalize these recommendations and with financing for high-impact investments in Azerbaijan's people. Together, we can ensure rapid progress towards an Azerbaijan in which all children arrive in school well-nourished and ready to learn, can expect to attain real learning in the classroom, and are able to enter the job market as healthy, skilled, and productive adults.

Sebastian-A Molineus
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EXECUTIVE SUMMARY

Human capital – that is the knowledge, skills, and health that people accumulate over their lives and that enable them to realize their potential as productive members of society – is an important contributor to the wealth of all nations regardless of income status. While Azerbaijan has achieved remarkable economic growth and poverty reduction over the last two decades, it lags its regional peers in terms of human capital accumulation. The recently released Human Capital Index, a component of the World Bank Group's Human Capital Project (HCP),¹ ranked Azerbaijan 69th out of 157 countries and showed that a child born in Azerbaijan today will be only 60 percent as productive when she grows up as she could be if she enjoyed complete education and full health.

This report aims to evaluate Azerbaijan's progress in human capital development and to identify opportunities for accelerating growth. To this end, the analysis uses the HCP to benchmark human capital development in Azerbaijan against its international peers using the Human Capital Index (HCI). The report supplements the HCP with additional analysis assessing key challenges and constraints in the areas that are instrumental for human capital development – education, health, and social protection and labor – and provides pathways for targeted catalytic interventions aimed at yielding positive growth in human capital development in the country.

Within the last decade, the Government of Azerbaijan has made concerted efforts to foster human capital development in the areas of education, health, social protection, and labor. However, further policies and interventions are needed to fulfil the broader agenda for human capital development.

The quality and relevance of education is below expectation, and there are widening inequalities in learning outcomes. While the average number of years of schooling in Azerbaijan is about 11.6, it is only 8.7 when adjusted for the quality of education. Among all ECA countries that participated in PIRLS 2016, Azerbaijan registered the highest gap between its top and bottom performers. Students from wealthier families scored 96 points higher (equivalent to three years of schooling)

than those from the poorer families, based on the most recent Harmonized Learning Outcomes database. Similarly, students in rural areas scored 48 points lower than their urban counterparts. Additionally, the education system is failing to produce the skills that are relevant to the labor market, while the scope and capacity of higher education institutions to develop knowledge and innovation in society is limited.

While Azerbaijan has made significant health gains, many challenges remain, including the growing burden of non-communicable diseases,² the low quality of the primary care system, and significant lifestyle risks such as smoking. Weak prevention and a lack of early detection and management of chronic conditions result in poor health outcomes.

Since the early 2000s, Azerbaijan has made remarkable strides in reducing poverty as a result of high economic growth rates, rising employment, and pension transfers. However, policy issues in social protection and labor are limiting Azerbaijan's growth potential. Despite the significant and steady reduction in poverty, a large share of population remain clustered just above the poverty line and are vulnerable to shocks, and large spatial disparities exist. Furthermore, while Azerbaijan has made significant progress in improving its business environment, limited access to viable financing for small to medium-size enterprises, restrictive trade regulations, and a lack of good governance is impeding firm growth and job creation. The participation of youths and females in the labor market is also very low, suggesting that Azerbaijan is not using the full potential of its workforce.

To ensure long-term economic growth and the sustainability of that growth, Azerbaijan needs to accelerate investments in human capital. Moving from ideation to the implementation of strategic human capital investments will require taking an innovative and whole-of-society approach to widening access to quality healthcare, improving skills development, and increasing social protection and labor market opportunities. In doing so, Azerbaijan will ensure that future generations of Azerbaijanis have the best opportunity to succeed.



CHAPTER 1:

The Case for Human Capital Investments

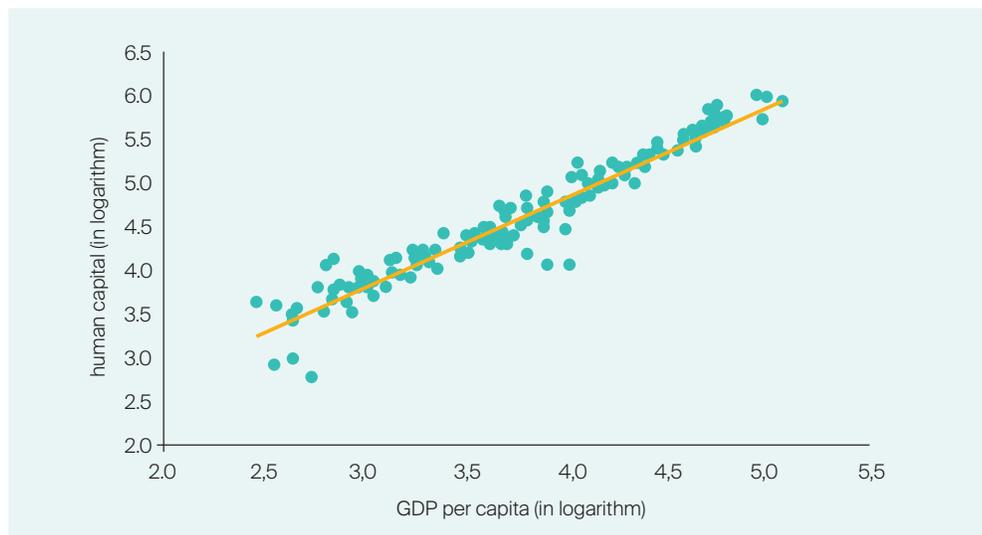


- Knowledge
- Skills
- Health

Human capital consists of the knowledge, skills, and health that people accumulate throughout their lives and that enable them to realize their potential as productive members of society. Investing in people through nutrition, healthcare, quality education, jobs, and skills helps to develop human capital, and this is key to ending extreme poverty and creating more inclusive societies.³ While produced, natural, and physical capital have been traditionally weighted more heavily in estimations of wealth, a recent analysis by the World Bank, *The Changing Wealth of Nations*, shows that human capital comprises the lion's share of global wealth at 64 percent, – up to 70 percent of the wealth of high-income countries but only 41 percent in low-income countries (Figure 1).⁴ This underscores the significance of human capital as a driver of sustainable growth and poverty reduction since it is a much larger driver of economic growth than was previously understood.

Figure 1:
Human Capital and Economic Growth

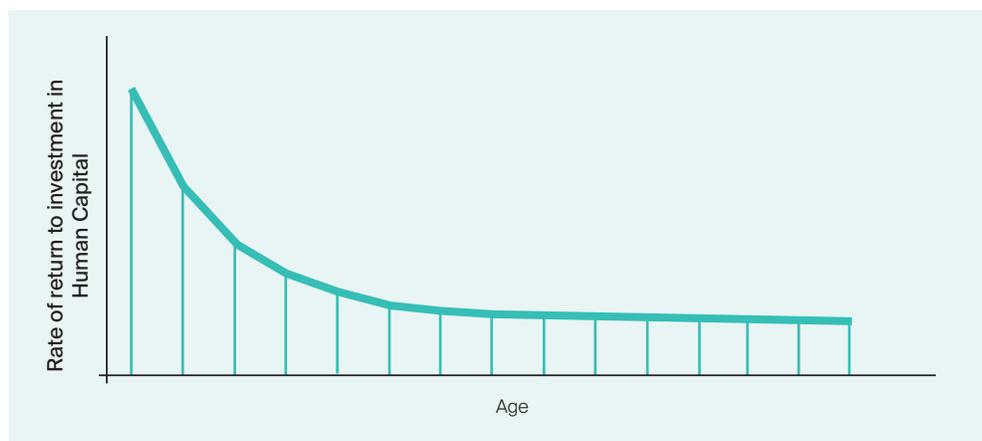
Source: Lange, Wodon, and Carey 2018



Economic returns to human capital investments are highest in early childhood (Figure 2). According to research, early environments play a significant role in shaping later human capital development outcomes. The acquisition of learning and skills enables more learning and skills to develop later. Providing children with adequate health and nutrition enables the development of cognition, a pre-requisite for optimal learning.⁵ From childhood to adulthood, a thriving and healthy child can gain knowledge through schooling and training that crystallizes into skills that they can use on the labor market. Therefore, early advantages accumulate as do early disadvantages. Later remediation of early deficits is more cost prohibitive than doing so at the time. Meanwhile, social protection enables vulnerable individuals to access to health and education services, playing a crucial role in reducing inequalities in human capital formation. Thus, the productivity content of an adult worker is a function of the quantity and quality of investments in human capital made during his or her infancy, childhood, and adolescent years. Also, continued investment in human capital in adulthood sustains the gains from prior investments in the long term.

Figure 2:
The Earlier the Investment in Human Capital, the Higher the Return

Source:
James Heckman,
Nobel Laureate in Economics

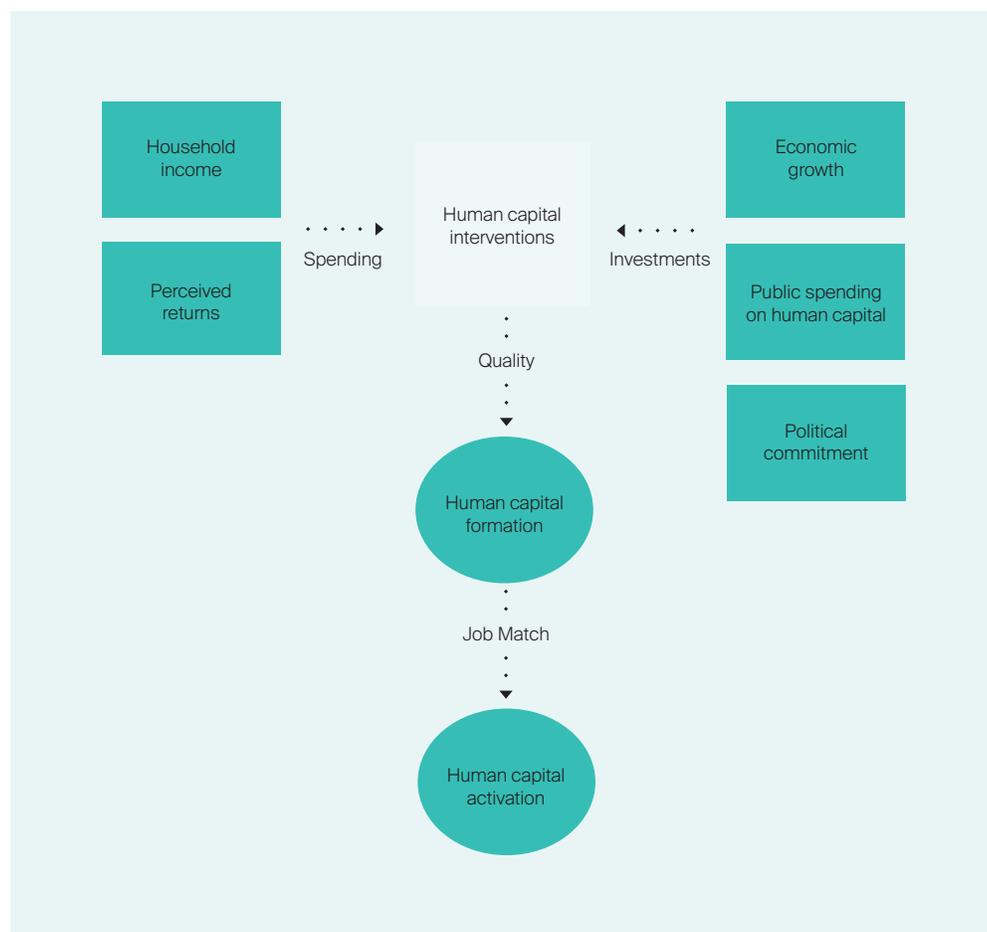


Households, through their decisions on healthcare and education spending, contribute significantly to human capital formation.⁶ The amount that a household spends depends on their income and their perception of the likely returns to be gained. However, the cost of investing in health and education may exceed the means of low-income families. Furthermore, households may underestimate the returns to human capital formation. Thus, poverty and incomplete information may reduce household investments in health and education. Regardless of the cause, underinvesting in human capital contributes to intergenerational cycles of low human capital accumulation and poverty.⁷ When household investments in human capital are below optimal levels, there is a clear rationale for state intervention, given the positive externalities for society that arise from having a productive workforce.

How much states invest in health, education, and social protection depends on how much fiscal space they have for these investments, which is a function of economic growth or GDP, public spending as a share of GDP, and the percentage of public expenditure allocated to human capital. These investments fund interventions in the health, education, and social protection sectors that build human capital if they are of sufficiently high quality. While investments in physical capital, such as roads and bridges, have immediate, tangible results, investments in health and learning do not result in increases in economic productivity until the high-skilled recipients join the workforce and are matched with jobs in higher-productivity sectors. However, without a healthy, educated, and skilled workforce, countries cannot compete in the global marketplace of today or the technology-driven world of tomorrow. Therefore, political commitment to investing in human capital development, formation, and activation is essential for creating sustainable economic growth.

The framework of human capital formation – shaped by state investments, household spending, and the quality and coverage of human capital interventions – is summarized in Figure 3.

Figure 3:
Determinants of Human Capital Formation and Activation



Insufficient human capital is a key constraint that contributed to Azerbaijan's moderate competitiveness rating in the World Economic Forum's Global Competitiveness Report 2019 (ranked 58 out of 141 countries).

The aim of this current report is to assist the government in ensuring that Azerbaijanis are equipped with the necessary health, skills, and opportunities to thrive in the global economy. We assess the state of human capital formation in Azerbaijan and explore the factors at the societal and household level that explain these outcomes. We conclude with recommendations for strategic investments that would enhance the skills, health, and job-readiness of Azerbaijan's next generation of workers and accelerate growth and shared prosperity.



CHAPTER 2:

The State of Human Capital Formation in Azerbaijan



Imagine the health and learning trajectory from birth to adulthood of a child born in Azerbaijan today. Consider the risk that the child does not survive until her fifth birthday. If she does survive until school age, she may not start school or complete the full cycle of 14 years that is the norm in rich countries. If she is poorly nourished as a child and adolescent, her brain is unlikely to be sufficiently developed to support learning and creativity. Depending on the quality of her learning experience, the years that she spends in school may or may not translate into the knowledge and skills that she will need to compete in the labor market. By the time she reaches 18 years, she may carry with her the lasting effects of her poor health and learning in childhood that will limit her physical and cognitive abilities as an adult. The Human Capital Index (HCI) has been developed to quantify this health and learning trajectory in each country and the consequences for the future productivity of a given cohort of the population.⁹

The Human Capital Project

In recognition of the urgent need for additional investments in human capital globally, the World Bank Group launched the Human Capital Project in 2018 with three major pillars:

1.

HCI: An index designed to capture the amount of human capital a child born today could expect to attain by age 18 to make the case for investing in the human capital of the next generation.

2.

Measurement and Research: Improvements in the measurement of human capital outcomes and in research and analysis of the data to support investments in human capital formation.

3.

Country Engagement: Support for early adopters and, ultimately, all countries to prepare national strategies that accelerate progress on human capital formation.

The HCI measures the amount of human capital that a child born today can expect to attain by the end of secondary school given the education and health risks that prevail in the country in which she was born.¹⁰ The index is a proxy for the productivity of the next generation of workers relative to their full potential and consists of three components: survival, schooling, and health.¹¹ The values of the HCI range from 0 to 1, with a value of 1 implying that the future productivity of a child born today is 100 percent of what it could be with full health and a complete education.

Survival

Component 1 (Survival) answers the question: **“Will children born today survive until school age?”** This component reflects the unfortunate reality that not all children born today will survive until the age when the process of human capital accumulation through formal education begins. Survival in the HCI is measured using under-5 mortality rates taken from the United Nations Child Mortality Estimates.

Schooling

Component 2 (Schooling) answers the question: **“How much school will a child complete and how much will they learn?”** This component measures expected learning-adjusted years of schooling by combining information on the quantity and quality of education. The quantity of education is measured as the expected number of years of primary and secondary school that a child born today can expect to attain given the prevailing pattern of enrolment and completion rates across grades. The quality of education is based on the performance of students in major international student achievement testing programs.

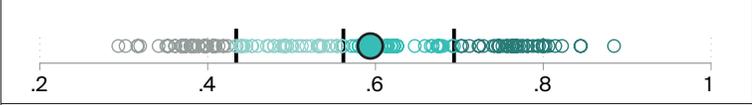
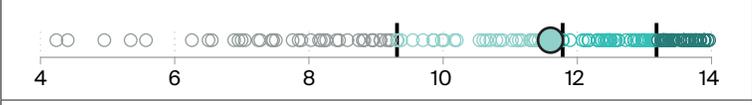
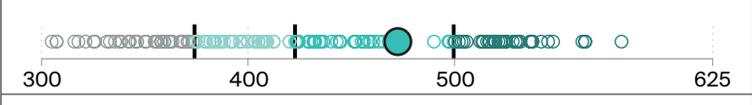
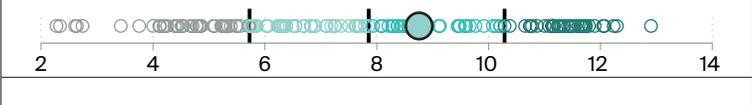
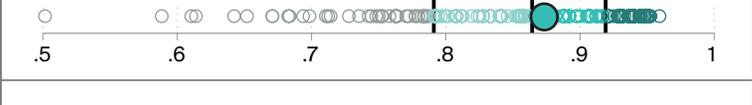
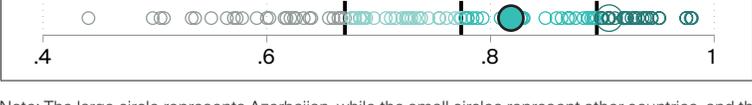
Health

Component 3 (Health) answers the question: **“Will children leave school in good health and be able to thrive as adults?”** Health is measured by two proxies. Adult survival rates measure the fraction of 15-year-olds that survive until the age of 60, capturing the range of fatal and non-fatal health outcomes that a child born today would experience as an adult if current conditions continue into the future. The rate of stunting in children under the age of 5 reflects the prenatal, infant, and early childhood health environment and summarizes the risks to good health that children born today are likely to experience in their early years – with important consequences for health and well-being in adulthood.

What does the Human Capital Index tell us about the state of human capital formation in Azerbaijan?

In Table 1 below, we describe Azerbaijan's performance on the HCI and its components. There are gaps in human capital formation overall – a child born in Azerbaijan today will be 60 percent as productive when she grows up as she would be if she had full health and a complete education. These gaps are predominantly driven by underperformance on learning outcomes. Children complete 11.6 out of 14 total years of schooling and score 472 on average in harmonized test scores relative to a benchmark of 625 for advanced attainment. Health outcomes in children are relatively good, with a nearly 100 percent probability of surviving to the age of 5. However, there is nearly a 20 percent probability of children under the age of 5 being stunted. Beyond childhood, 87 percent of 15-year-olds survive until 60 years of age.

Table 1: The State of Human Capital Formation in Azerbaijan

	Human Capital Index. A child born in Azerbaijan today will be 60 percent as productive when she grows up as she could be if she enjoyed a complete education and full health.
	Probability of Survival to Age Five. Ninety-eight out of 100 children born in Azerbaijan survive to the age of 5.
	Expected Years of School... In Azerbaijan, a child who starts school at the age of 4 can expect to complete 11.6 years of school by her 18th birthday.
	Harmonized Test Scores. Students in Azerbaijan score 472 on a scale where 625 represents advanced achievement and 300 represents minimum achievement.
	Learning-adjusted Years of School. Factoring in what children actually learn, the number of expected years of school is only 8.8 years .
	Adult Survival Rate. Across Azerbaijan, 87 percent of 15-year-olds will survive until the age of 60. This is a proxy for the health outcomes that a child born today would experience as an adult under current conditions.
	Fraction of Not-stunted Children Under-five. Eighty-two out of 100 children are not stunted. Eighteen out of 100 children are stunted and at risk of cognitive limitations that can last a lifetime.

Note: The large circle represents Azerbaijan, while the small circles represent other countries, and the thick, vertical lines and colored circles reflect quartiles of the distribution.

These gaps in human capital formation have direct negative implications for future productivity in Azerbaijan. In the long run, Azerbaijan's per capita GDP could be 1.67 (1/HCI) times higher if it achieved complete education and full health (Table 2). The 2017 HCI also indicated that the current expected deficit in the future productivity of Azerbaijani boys is higher than the deficit for girls. According to available data, Azerbaijani girls have better harmonized test scores and a higher adult survival rate than Azerbaijani boys. However, child survival is equally high among boys and girls, with 98 percent of Azerbaijani children surviving to the age of 5. Overall, the country's score on the HCI increased slightly from 0.56 to 0.60 between 2012 and 2017. The indicator with the most significant improvement was harmonized test scores, which improved from 456 to 472. However, the proportion of non-stunted children under the age of 5 decreased from 0.84 to 0.82.

Table 2:
Time Trends in Azerbaijan's HCI by Gender

Component	2012			2017		
	Male	Female	Overall	Male	Female	Overall
HCI Component 1: Survival						
Probability of Survival to Age 5	0.96	0.97	0.97	0.98	0.98	0.98
HCI Component 2: School						
Expected Years of School			11.2			11.6
Harmonized Test Scores	451	462	456	466	479	472
HCI Component 3: Health						
Survival Rate from Age 15-60	0.82	0.91	0.87	0.83	0.92	0.87
Fraction of Children Under 5 Not Stunted			0.84			0.82
HCI			0.56			0.60

Disaggregating the average HCI scores by income quintiles also reveals disparities in learning and healthy growth between children from poorer households and those from richer households. The future productivity 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.¹² 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 achievement) to 625 (high achievement). 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. However, there is little to no disparity between children in the poorest and richest households in survival up to the age of 5 and expected years of schooling.

Human capital formation in Azerbaijani's children is lower than in its regional peer countries. In 2017, Azerbaijan's HCI at 0.60 was lower than the average among the transition countries of the FSU countries (0.71) and the average in ECA (0.7). The relatively low value of the HCI in Azerbaijan is driven by poorer performance in schooling (expected years of schooling and harmonized test scores), which is worse than the averages in the FSU and in ECA (Figure 4). However, the HCI for Azerbaijan is higher than might be predicted for its income level.

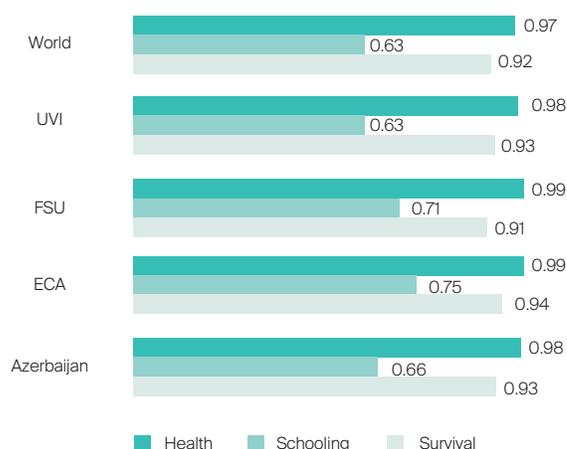
Figure 4:
Benchmarking Azerbaijan's
HCI Components

Source: World Bank

Notes: ECA – Europe and Central Asia;

FSU – Former Soviet Union;

UMI – Upper Middle Income



The HCI is a useful proxy for the productivity implications of human capital formation but does not show the full picture, especially regarding health and education outcomes. In health, the high adult survival rates underestimate the non-fatal health risks that children in Azerbaijan today will be exposed to as adults. These risks could lead to absenteeism, presenteeism (working while sick), and disability, all of which reduce productivity. Moreover, when disability-adjusted life years, a weighted combination of death and disability, is considered, the burden of chronic diseases is higher in Azerbaijan than in countries with similar social and demographic indicators (Table 3).¹³ Additionally, the HCI does not consider tertiary education, even though a highly skilled workforce with a solid post-secondary education is a prerequisite for innovation and growth. Recent evidence suggests that, globally, the private rate of return to schooling is higher at the tertiary level than it is at the primary and secondary education levels. The HCI will be updated periodically to monitor progress, and the components will be progressively tailored to different country contexts.

Table 3:
Age-standardized Rate of
Disability-adjusted Life Years,
2017

Source: Institute for Health Metrics and Evaluation (IHME).
Note: Countries under the UMI category were chosen based on global burden of disease regional classifications, known trade partnerships, and socio-demographic indicators.

	Ischemic heart disease	Neonatal disorders	Respiratory infections	Stroke	Congenital defects	Cirrhosis	Lung cancer	Diabetes	COPD
Azerbaijan	6,089.60	2,572.40	2,516.00	2,176.8	960.2	849.5	503.1	465.6	438.2
UMI Average	2,449.00	1,998.40	644.5	673.9	656.8	1,193.40	768.2	635.9	747.2

Azerbaijan's current performance in terms of human capital formation indicates that children are exposed to risks that will have negative implications for their productivity as adults. The risks are particularly high in terms of expected years of learning-adjusted schooling, performance on harmonized tests, and protection from non-fatal health risks beyond childhood. In Chapter 3, we will examine the determinants of human capital formation in Azerbaijan to inform the development of national priorities to ensure the future productivity of Azerbaijani children.



Meet the Isayev Family

A fictitious family we will follow as they experience risks to their health and learning in Azerbaijan, make household-level decisions on investing in human capital, and benefit from government interventions to close gaps in human capital formation.

The Isayevs live in Qakh, a small district with a population size of less than 60,000, that is situated in Northwest Azerbaijan, bordering Georgia. The family is made up of a couple and their three children (Elchin, Najiba, and Orhan).

Azer is a 56-year-old man who completed secondary education. He raises cattle and sheep for a living.

Aygul is a 50-year-old woman. She completed primary school and is a homemaker. Aygul is pre-diabetic.

Elchin is a 8-year-old boy in the third grade. He attends a public school that is 16 kilometers from his home and rides the school bus.

Najiba is a 14-year-old girl in secondary school. She helps her mother, Aygul, in the home when she is not doing schoolwork.

Orhan is 19-year-old man who completed secondary education and works in agriculture. He helps his father, Azer, with the livestock and provides an additional source of income for the family.

CHAPTER 3:

The Drivers of Human Capital Development



To understand the drivers of trends in human capital development, we draw on the framework described in Chapter 1 and examine the roles played by political commitment, fiscal space, household spending, and state programs in shaping access to learning, health, and skills for children and youths in Azerbaijan.

Political Context

Azerbaijan is a secular nation with a majority-Turkic and majority-Shia Muslim population. It is located in the South Caucasus region and borders the Caspian Sea (to the East), Iran, Russia, Armenia, and Georgia. The country covers 86,600 square kilometers and has an estimated population of 10.2 million. The population is growing (the annual growth rate in 2018 was 0.9 percent), whereas the population in many ECA countries is shrinking. About 56 percent of the population live in urban areas in and around the capital, Baku, which has a population of 2.3 million. The rest of the country has a light and evenly distributed population. Azerbaijan is administratively divided into 66 rayons and 11 cities. Azerbaijan also has Nakhchivan Autonomous Republic as part of it with 7 rayons and one city.

Since its independence from the Soviet Union in 1991, Azerbaijan has succeeded in significantly reducing the poverty rate and has directed revenues from its oil and gas production to develop the country's infrastructure. Reforms are underway to diversify the country's non-oil economy, and additional reforms are needed to address weaknesses in government institutions, particularly in the education and health sectors and the court system.

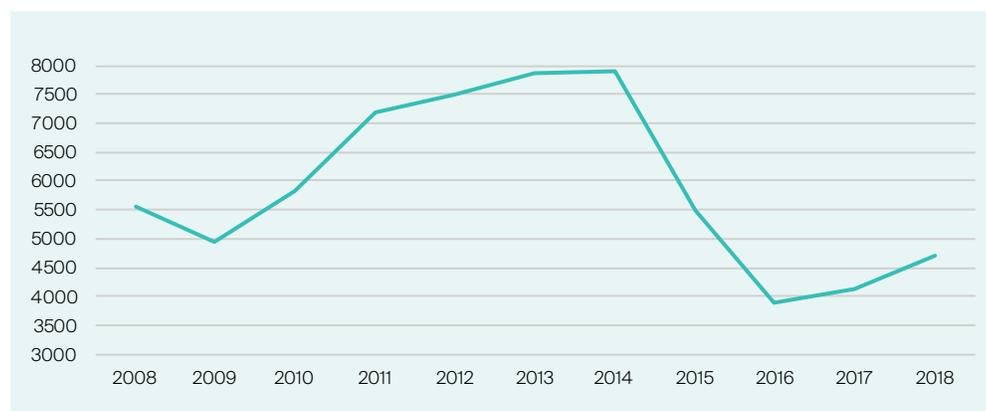
A newly elected government has been tasked with continuing the reforms initiated in the aftermath of the economic recession of 2016. Since a presidential election in April 2018, the Government of Azerbaijan has undergone significant changes in support of the existing structural reforms. These have included the nomination of a new prime minister and the appointment of several key ministers in charge of education, tax reforms, agriculture and rural development, the environment, and energy. The main risks involved in this transition is a potential slowdown in the implementation of structural reforms and an incomplete macro-fiscal policy framework. Structural reforms to improve the business environment, reduce the state's economic footprint, and advance the rule of law will also be necessary for Azerbaijan to transition to a new growth model.

Economic Growth and Fiscal Space

Azerbaijan's impressive decades-long growth has slowed down in recent years because of an economic downturn. Between 2002 and 2013, poverty declined, and real wage increases and rising employment caused the middle class to expand. Social transfers, mostly contributory pensions, also played an important role in reducing poverty and increasing prosperity. Nevertheless, between 2015 and 2016, external shocks and a deceleration in oil production contributed to a dramatic 29 percent decline in per capita GDP (Figure 5). Starting in 2017, the recovery of oil prices and a fiscal stimulus from the government both improved Azerbaijan's economic outlook and growth returned. In 2018, there were signs of sustained recovery evidenced by a per capita GDP of 4,780 manat, which was partially a result of strategic public financing and non-oil economic growth.

Figure 5:
Gradual Recovery of Azerbaijan's Economy After Severe Shock to Oil Prices

Source: World Development Indicators



Nevertheless, oil and gas continue to play an important role in Azerbaijan's future, which is not without risks. Oil prices, which had remained above US\$60 per barrel since the fourth quarter of 2017, have drastically declined to approximately US\$32 per barrel in March 2020.¹⁵ Additionally, the gradual normalization of monetary policy in Europe and the United States is likely to increase interest rates and tighten credit conditions.¹⁶ The potential increase in protectionism worldwide may also indirectly reduce the growth prospects of the region and increase uncertainty about commodity prices. These potential risks indicate that the Azerbaijan economy needs a new growth model and needs to overcome the structural challenges that are hindering the development of new sources of growth.

Outside the extractive industries, growth in the services and agriculture sectors has revived as a result of greater diversification and trade, but this growth remains tenuous. Improved terms of trade have resuscitated output in the services sector. In the first half of 2018, agricultural output also expanded by 6.5 percent year-on-year, fueled by higher exports to the Russia Federation.¹⁷ Nevertheless, there are several constraints to the asset diversification needed for the country to achieve non-oil competitiveness. Productivity levels have not increased significantly, especially in those sectors that seem to employ the largest shares of the workforce, such as the agricultural sector. There is limited churning of firms from low productivity to higher productivity industries, while there is also a mismatch of skills supplied to those in demand and high levels of informality in the economy.

No diversification strategy can be successful without a more solid human capital base. The link between human capital formation and employment – as well as innovation, productivity, competitiveness – is well established. This is especially relevant for Azerbaijan, where the skills gap is a significant constraint on private sector competitiveness. Building the skills base needed for Azerbaijanis to participate more actively and productively in the labor market will require improving the quality of secondary education (where significant gaps exist in student performance between Azerbaijan and other upper middle-income countries) and increasing equitable access to tertiary education. . Health is another significant roadblock to accelerating Azerbaijan's growth. The healthcare system is plagued by the inefficient use of resources, which has limited access to quality healthcare and resulted in high out-of-pocket costs for individuals. Social protection services and employment programs also need to be expanded, especially for the poor and vulnerable groups. Overall, the government acknowledges that more investment is needed in the human development sectors and has already taken visible steps in that direction.¹⁸

In recent years, Azerbaijan's investment in education has increased. In 2019, education spending went up by 14 percent compared to 2018. Most of the spending increase was in general education, the budget for which increased by 18 percent due to an increase in teachers' salaries. The 2020 budget has a much larger increase of 40 percent. Overall, the share of the education spending in total budget spending went up from 8.6 percent in 2018 to an estimated 11.7 percent in 2020. As a percentage of GDP, education spending rose from 2.5 percent in 2018 to a projected 3.8 percent in 2020.

Health spending also rose by 44 percent in 2019 compared to 2018 and is projected to increase by another 34 percent in 2020. These increases are due to the transition to mandatory health insurance. Health spending's share in total budget spending rose from 3.1 percent to a projected 4.6 percent in 2020. As a percentage of GDP, health spending rose from 0.9 percent in 2018 to a projected 1.6 percent in 2020.

Additionally, the government plans to attract additional financial resources to the healthcare system by mobilizing more domestic resources. In 2020, the government will require the payment of compulsory health insurance premiums of up to 2 percent by employees and employers and will introduce premiums for additional groups such as non-state and non-oil workers, entrepreneurs, and civil servants in the next one to three years. At the same time, excise taxes will be levied on automobile gasoline, diesel fuel, and liquefied gas produced nationally for domestic consumption, vodka, liquor and liquor products, beer (excluding non-alcoholic beer), cigarettes and cigarette substitutes, and energy drinks, and all of these resources will be used to fund the Compulsory Medical Insurance Fund.

Since 2019, spending on social benefits and pensions has also increased by 40 percent by presidential decree. Spending on social pensions, social benefits, allowances, and salaries increased due to the increase in the minimum wage, which has almost doubled since 2019.¹⁹ As a result of these reforms, Azerbaijan has the highest minimum pension among the countries of the Commonwealth of Independent States (CIS) and the second highest minimum wage.

Household Income and Spending

Following the modest economic recovery, the percentage of Azerbaijanis living below the national poverty line slightly decreased from 5.9 to 5.1 between 2016 and 2018, and the unemployment rate dropped from 5 percent to 4.9 percent.²⁰ However, more than half a million of Azerbaijanis are still living on less than 175 manat per month. Furthermore, the gains in productivity have not been distributed equitably and economic polarization is high as can be seen from Azerbaijan's income Gini index of 26.6 percent.

Despite an increase in household spending on health and education, inequalities exist. Between 2008 and 2018, the consumption expenditures of households in monthly per capita manat included an increase in spending on health from 3.6 to 13.8 manat and in education from 1.3 to 5.2 manat.²¹ Nevertheless, increases in the minimal cost of living and in nominal average wages of 11.6 percent and 6 percent respectively was not enough to compensate for higher prices, and spatial disparities exist in the consumption of these essential goods and services.²² For instance, nearly 50 percent of men in urban areas have had a postsecondary education, whereas nearly 60 percent of men in rural areas have only completed secondary education.²³

State Interventions in Education, Health, Social Protection, and Jobs

Education

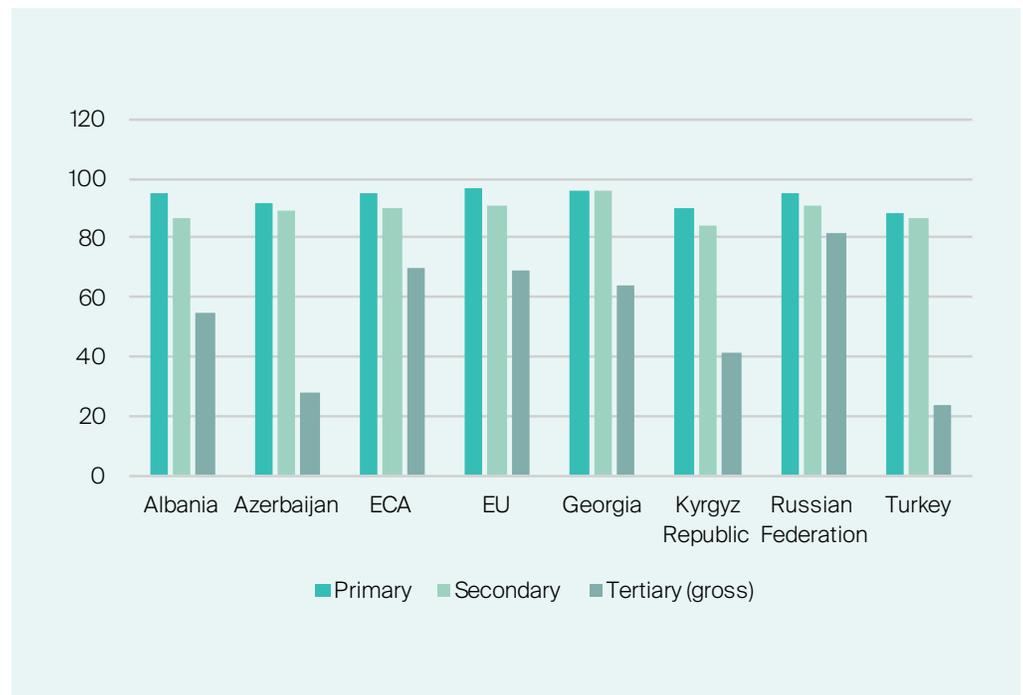
Interventions: In recent years, systematic measures have been taken in Azerbaijan to increase the professionalism of teachers based on international experience including the introduction of a system of module-credits and competitive training for general education teachers. Moreover, a transparent and objective competition mechanism has been introduced for recruiting teachers. Measures were also taken to modernize the infrastructure and curriculum of vocational education. One of the most important reforms undertaken in the country in recent years has been the transition to a new financing mechanism for higher education, which stipulates that state budget financing for higher education institutions should be based on a per capita financing principle. Concurrently, scholarship programs and loans have been established to increase access to higher education, especially for vulnerable groups. In accordance with a presidential decree, the state program for increasing the international competitiveness of the higher education system for 2019-2023 was approved in 2018 with the aim to improve the quality and increase the innovation and international competitiveness of higher education. In recent years, pre-school education has also been a priority for the Ministry of Education. In the next year, it is planned to increase enrollment in pre-school education to 90 percent to align with the indicators of developed countries.

Achievements: The extensive education reforms undertaken in recent years have resulted in many gains. Primary and secondary education net enrollment rates are high and on a par with ECA countries (Figure 6). Over the past four years, 17,561 primary school teachers have been trained in ECEC, and new content and teaching materials have been developed and used. State funding for ECEC has increased from 24 percent in 2013 to 80 percent in 2019, with more than 105,000 children now benefiting from preschool education both in residential areas and in remote villages, where there have historically been no preschool institutions. Higher education opportunities in the country have also

been expanded, with a 21 percent increase in the number of students enrolling in the last five years. Furthermore, as a result of the introduction of a new funding mechanism for higher education institutions, their per student spending increased by an average of 30 percent. Full scholarships from the state budget have been provided to more than 100 students from vulnerable social groups admitted to higher education institutions in 2019/20. This has made it possible to realize the concept that “every young person should be able to receive an education.” Also, the share of admissions to public higher education institutions from rural schools increased by approximately 1 percentage point to 54 percent from 2017 to 2018. In 2014 to 2018, a diagnostic evaluation of teachers’ knowledge and skills in general education institutions was conducted by the Ministry of Education and resulted in a total of more than 150,000 teachers having their weekly workloads increased by 1.5 times and their salaries doubled, including teachers in rural areas. As a result of these comprehensive teacher reforms, teaching has become a more competitive and reputable profession.

Figure 6:
Net Enrollment Rates by Level of Education for Azerbaijan and Comparators, 2018 or latest available

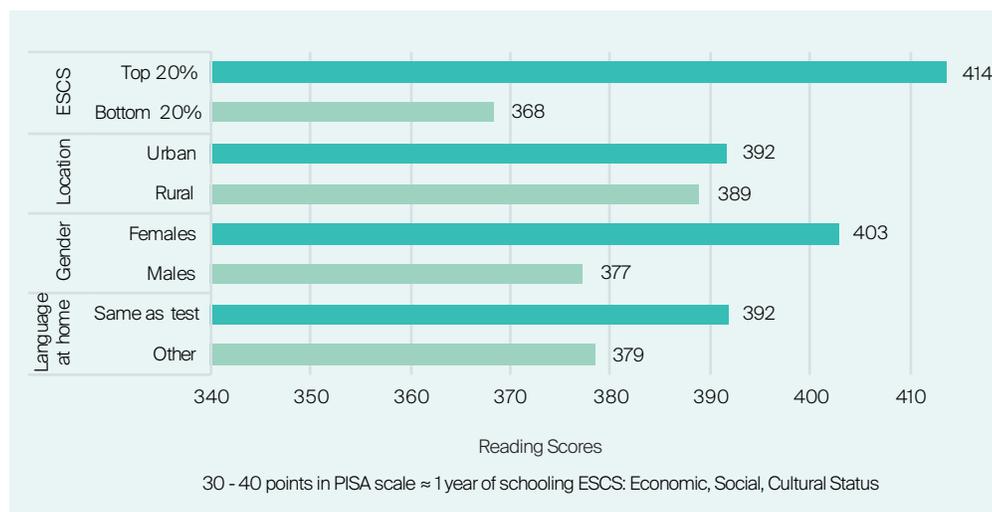
Source: World Bank Development Indicators



Challenges: Despite relatively widespread access to education and recent efforts by the government, Azerbaijan has one of the lowest levels of enrollment in preschool and tertiary education among its neighbors, and children and youths from vulnerable groups still face barriers to accessing education. While Azerbaijan has established interventions in all of the key areas of child development, there is still no multisectoral coordination of these efforts or any dedicated spending allocated to ECEC (besides in the education sector), which is hindering the achievement of universal coverage of ECEC programs. According to the results of PISA 2018, in which only Baku participated, Azerbaijani students performed well below the average for ECA in reading, math, and science by roughly the equivalent to two years of schooling, and vulnerable students lag even further behind (Figure 7). In Azerbaijan, higher education institutions, which often serve as drivers of research and innovation in other countries, lack strong links to industry and have little capacity to drive entrepreneurship and business development. Azerbaijan spends the least on research and development (R&D) as a share of GDP (approximately 0.2 percent) compared to countries of a similar size. Consequently, the quality of research in Azerbaijan is ranked relatively low internationally. Furthermore, the availability of competitive funding is limited, which also inhibits the development of the sector.

Figure 7:
Equity of Learning
Outcomes, PISA 2018

Source: OECD PISA database



Health

Interventions: Azerbaijan has taken impressive steps towards achieving universal primary healthcare. The introduction of the Mandatory Health Insurance (MHI) pilot in February 2017 was a significant step towards the transformation of the health system in Azerbaijan. The government intends to implement the mandatory health insurance system nationwide by 2020 and has already allocated 26 percent in additional funding for this initiative in 2020. It is also planning some innovative strategies to mobilize more resources to fund the health system over the next few years, including insurance premiums and excise taxes. To streamline the delivery network and use resources efficiently, most health facilities (except for some tertiary-level hospitals or/and research institutions) were transferred in 2018 to the Tabib agency (as the official provider of services) under the State Agency for Mandatory Health Insurance (SAMHI). Financial resources will also be channeled through SAMHI, which will be the purchaser of the health services. Finally, to strengthen the material and technical capacity of medical institutions in connection with the compulsory health insurance, efforts have been made to upgrade and optimize hospital infrastructure and purchase new medical equipment and vehicles.

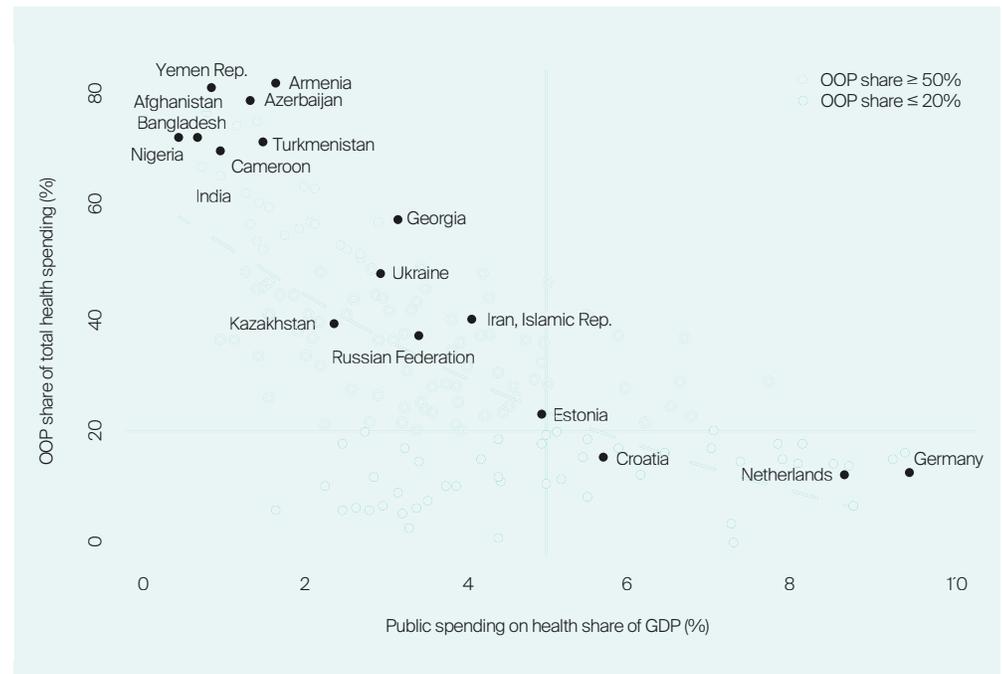
Achievements: Azerbaijan has achieved commendable improvements in its healthcare system. The changes introduced by the MHI pilot have already resulted in the health system performing better in the three pilot regions. The numbers of inpatient admissions and surgeries have increased, and primary healthcare has started to regain the confidence of the population. Shifting from input-based to output-based financing has also increased the efficiency of service delivery. There was a significant reduction in the number of hospital beds between 2010 and 2011, with the bed to population ratio falling from 7.6 beds per 1,000 population to 4.7 beds, which is more in line with the OECD average of 4.4 beds per 1,000 population, while accounting for population growth.²⁴ Finally, a well-organized public prevention campaign led to reduction in injuries from road accidents, fire, heat, and drowning, which were the top causes of DALYs in the country between 1990 and 2016.

Challenges: Azerbaijan is facing a growing burden of non-communicable diseases (NCDs). The top three risk factors for morbidity and mortality are high systolic blood pressure, high body mass index, and smoking and alcohol consumption. These factors contribute to the most prevalent illnesses in Azerbaijan – cardiovascular disease, neoplasms (abnormal growth of tissue in the body commonly associated with cancer), and respiratory infections. Furthermore, the increase in the incidence of oncological diseases and of primary diseases over the past 10 years suggest that, in the short term, oncological diseases will be in first place among NCDs in terms of mortality rates. Therefore, prevention, early detection, and effective management of chronic conditions is not only critical for improving health outcomes but could also avert or reduce the need for expensive hospital care. Despite the traction gained from the MHI program, Azerbaijan's healthcare system is primarily financed by out-of-pocket (OOP) payments, which account for 78.6 percent of current health spending, well above the WHO recommended level of 20

percent (Figure 8). Patients tend to bypass primary healthcare to seek care directly from specialists, which results in fragmented and more expensive provision of care and poor management of diseases that are preventable at the primary care level. This limits the financial risk protection afforded to the population and is an inefficient and inequitable way to finance a health system. The expenses of health facilities are dominated by fixed costs (salaries and utilities), leaving very little space for treating patients and procuring medical supplies and consumables. Finally, the training given to family and primary care physicians is limited and is not adequate to tackle the large burden of NCDs and requires substantial improvements.

Figure 8:
Out-of-Pocket Spending as a Share of Total Health Spending (%)

Sources: *World Development Indicators, 2018; WHO Global Health Expenditure Database, 2018*



Social Protection and Jobs

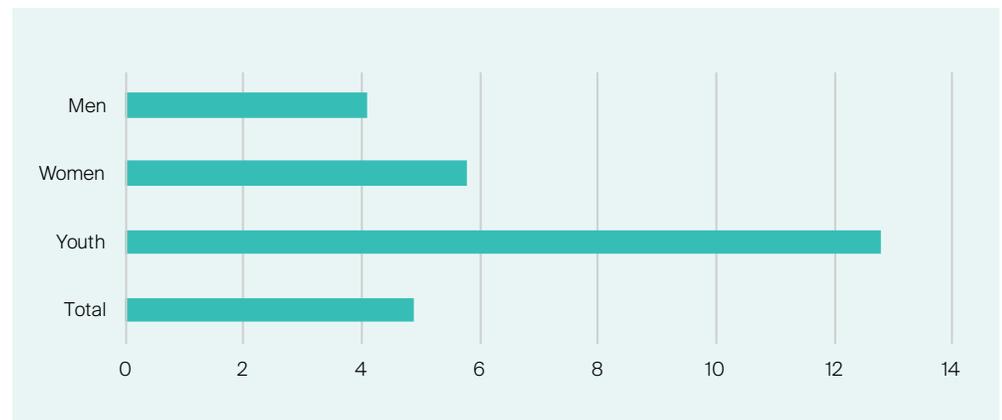
Interventions: Azerbaijan has well-functioning elements of a social protection system. There are both contributory (mandatory social insurance scheme) and non-contributory benefit programs (state-funded/non-contributory social assistance). The government has also introduced an electronic data management system, the database used for the Targeted Social Assistance (TSA) program, to streamline services and data collection. It also recently launched the first DOST²⁵ office (DOST is the Azerbaijani acronym for a Center for Sustainable and Operational Social Security) in Baku to deliver social services more efficiently. A Centralized Electronic Information System (CEIS) with an “e-social portal” was established in 2019 and now operates 16 subsystems and 2 registries. Through this portal, which is of the utmost importance in terms of transparency, citizens can access all information about themselves in the areas of labor, disability, employment, social protection, and social security. Moreover, the government has introduced changes in tax policies and rates to facilitate the development of private sector businesses, and to reduce informal labor.

Achievements: Since the early 2000s, Azerbaijan has made remarkable progress in reducing poverty as a result of high economic growth rates, rising employment, and pension transfers. High real wage increases and rising employment, particularly in services and construction, contributed to the decline in poverty and the expansion of the economic middle class. Social transfers, mostly contributory pensions, also contributed to poverty reduction and played an important role in raising the incomes of those in the bottom 40 percent. However, since 2015, negative shocks have impaired Azerbaijan’s economic performance, putting a damper on poverty reduction and leaving a large population vulnerable to shocks. Nevertheless, in terms of the ease of doing business, Azerbaijan has moved up from 99th out of 175 countries in 2006 to 25th among 190 countries in 2019.

Challenges: Despite these achievements, the TSA covered only about 72,000 households at the end of 2019, which accounts for only around 3 percent of the population. Only one out of every five households in the poorest quintile were beneficiaries of the TSA program according to 2015 household survey data, which are the latest data available, and there are also regional and urban/rural disparities in poverty. Moreover, despite progress made in the business environment, high interest rate loans (18 percent per annum) and the limited availability of subsidized credit prevent firms, especially small to medium-size enterprises (SMEs), from getting adequate access to finance. Azerbaijan's trade regulations and taxes do not strongly favor exporting over production for the domestic market, which constrains firms' ability to tap into the potential of global markets. There is also a considerable need for market institutions to ensure a level playing field, transparent and enforceable property rights, and well-regulated private sector, all of which are essential for private investment and entrepreneurship. Finally, while unemployment in Azerbaijan is much lower than the averages for the EU and ECA (6.5 and 6.8 respectively), the labor force participation of women, and youth is limited (Figure 9).^{26,27} These findings suggest that Azerbaijan does not use the full potential of its workforce, which is especially critical given the twin demographic trends of decreasing fertility rates and a growing brain drain from the country.

Figure 9:
Unemployment Rate in Azerbaijan, 2018

Source: *International Labour Organization*



This assessment identifies the factors that enable and constrain human capital formation in Azerbaijan. There is a demonstrated commitment by political leadership to build human capital development in Azerbaijan. However, the low coverage of key health, education, and social protection programs is a constraint to fulfilling these commitments. Concomitantly, there are inequities in household spending on healthcare and education. While the government has implemented interventions in health, education, social protection, and jobs that have facilitated improvements in survival and learning, addressing the persistent and emerging challenges to future productivity in each sector will be a necessary step towards ensuring the future productivity of Azerbaijanis and, in particular, of the most vulnerable groups.

Policies, Programs, and the Isayev Family

Azer, while generally healthy for his age, has been a long-time smoker and has been suffering from more frequent respiratory infections. Lately he has had a persistent cough. During a visit with a family physician, the physician told Azer that the coughing was due to smoking but was unable to provide proper guidance on how to stop smoking. He referred Azer to a specialist, but Azer does not want to pay the high OOP when he already knows the problem is his own smoking. He will try (again) to quit on his own.

Aygul loves spoiling her family with delicious homemade meals and sweets. Pakhlava, a rich dessert made of thin pastry layered with honey and chopped nuts, is her favorite to make. She has quite a sweet tooth ever since childhood. Without access to comprehensive health coverage, she does not know that she is pre-diabetic or that her weight is above the normal range for her height, making her more susceptible to Type 2 Diabetes, heart disease, and stroke.

Orhan has been trying to find a job so that he can help his family and become more independent now that he has finished secondary school, but he has been struggling to find work.

Najiba is doing really well in secondary school, especially in math and biology, her favorite subjects. She dreams of being an astronaut but believes that's only a fairy tale. She feels that a more realistic career would be to become a math or science teacher in her village, which is what many of the women in her village who work do. She loves children and learning so daydreaming about becoming a teacher (and thinking about her future) makes her smile.

Elchin is an adorable and fun boy who likes to socialize with his friends at school. He struggles in reading up to his grade level, but he is grateful that Najiba takes the time to help him with his homework after school, sometimes explaining the material better than his teacher because she knows him well.



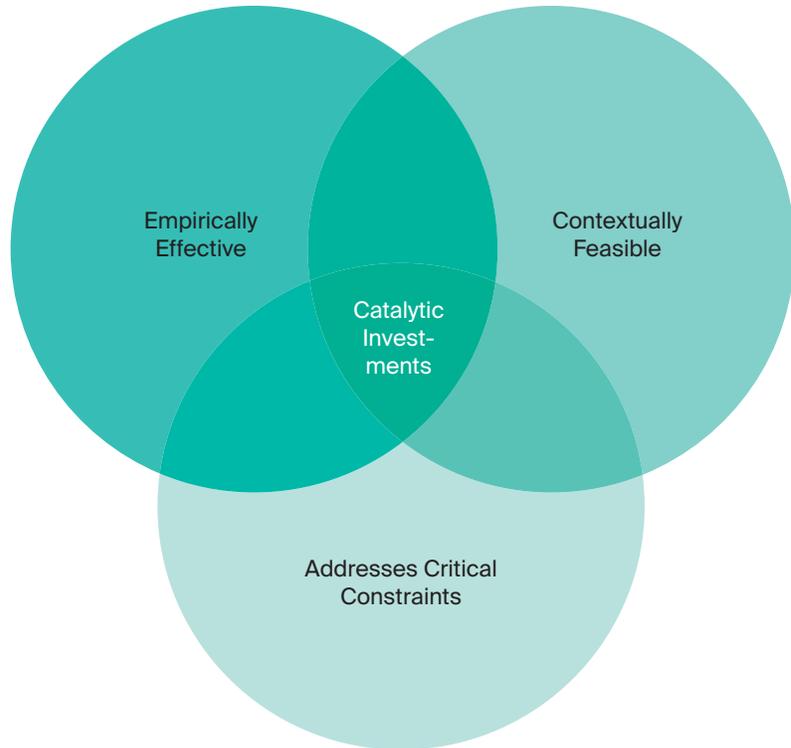
CHAPTER 4:

Catalyzing Human Capital Formation in Azerbaijan



The Government of Azerbaijan is committed to making the catalytic investments that will close the gaps in productivity that arise from exposure to health and education risks. These investments must overcome constraints to accessing and improving the quality of essential interventions in health, education, and social protection within the Azerbaijani context (Figure 10). In consultation with policymakers in each sector, we have identified interventions that have been empirically demonstrated to be effective in alleviating critical challenges to human capital accumulation and that are also feasible to implement in Azerbaijan.

Figure 10:
What Makes an Investment Catalytic?



Education

In consultation with the Ministry of Education, we have identified two interventions for increasing human capital development in Azerbaijan in the short to medium term: (i) developing a multisectoral mechanism to increase access to quality ECEC and (ii) establishing an innovation fund to stimulate innovation, quality, and relevance in higher education.

1. Develop a multisectoral mechanism to increase access to quality ECEC

Development in early childhood is a multi-dimensional process. To meet children’s diverse needs during the early years, government coordination is essential, both horizontally across different sectors and vertically from the local to national levels. In many countries, non-state actors (either domestic or international) participate in delivering ECEC services, so mechanisms to coordinate with non-state actors are also essential.

While the Ministry of Education has prioritized preschool education, the Government of Azerbaijan has not yet adopted a comprehensive multisectoral ECEC strategy. Nor is there an institution responsible for coordinating a framework for integrated ECEC services, for designing regulations, and for implementing government programs across the key ECEC sectors, education, health, and social protection, with the whole child in mind. This hinders the government’s ability to develop a national strategy and manage resources for ECEC across the responsible sectors. Azerbaijan can learn from Chile which has a comprehensive multisectoral ECEC strategy that has had a substantial impact, particularly on vulnerable students.

Chile Crece Contigo (CHCC) and Nobody's Perfect

Chile Crece Contigo (Chile grows with you) is an integrated service delivery network that aims to help all children to reach their full potential for development, regardless of their socioeconomic status. Three key ministries are involved in the CHCC: health, education, and social protection.

The network was designed to respond to children's developmental needs and their families' requirements for support in a timely and relevant way. CHCC tracks each child's developmental trajectory from pregnancy until they enter preschool (at 4 years old). In 2017, CHCC was extended until the end of the first cycle of elementary school (through grade 4). CHCC provides universal and differentiated services depending on the child's and the family's needs to achieve ECEC objectives.

A well-developed management information system (MIS) tracks all children and activities including referrals and is accessible to all ECEC sectors. Tracking starts during the mother's initial prenatal check-up, at which point an individual scorecard is created for the child. Each of the primary actors within the CCC service network, including the family support unit, the public health system, the public education system, and other social services, has access to the child's file and is required to update it as the child progresses through the different ECEC services. If the child is at risk of vulnerability, such as inadequate nutrition, the system identifies the service needed to address the risk.

Examples of services provided by CCHC include prenatal care, regular health check-ups for young children, parenting education and interventions, early childhood education and care programs, specialized services for vulnerable children and families, including for children with disabilities and educational outreach to the whole population.

Since its inception in 2007, the program has expanded significantly and is considered to be highly successful. By 2009, the number of municipalities participating in the program grew by more than twofold, and covered around 870,000 children aged 0 to 6 years old, including children from 60 percent of the most vulnerable households. In 2017, more than 1.7 million children benefitted from the program, and the total government investment in CCHC was approximately US\$426.8 million. In addition, it has been found that the more families use CHCC benefits and the longer the subsystem has been operating in the commune, the greater its positive effects.

Strong political support based on the principles of equity and child rights combined with a significant funding commitment from the government has been crucial for the creation, scaling up, and sustainability of CHCC. The ultimate sustainability of CHCC will require the establishment of a well-trained and compensated cadre of early child development professionals and paraprofessionals as well as an improved and decentralized management and evaluation system.

Source: *Government of Chile*

2. Establish an innovation fund to stimulate innovation, quality, and relevance in higher education

To foster research relevant to the development and diversification of the national economy, higher education need more access to competitive funding. One important mechanism that has been used to encourage innovation within the higher education system is an innovation fund (also known as a competitive fund or a quality improvement fund). While these funds are not especially effective in promoting system-wide restructuring or policy reform, it has been used with consistent success by institutions, governments, and development assistance agencies to promote adaptive change within teaching, learning, and research programs.²⁸ Given the significant higher education reforms occurring in Azerbaijan, this kind of fund would allow for more adaptive learning programs that can later be scaled up into more widespread policy actions.

Innovation funds have four main benefits. First, the competitive aspect of these funds generally makes them more efficient instruments for allocating public funding within higher education than more traditional approaches based on budgetary planning. Second, they have proven to be effective mechanisms for improving the quality and increasing the relevance of higher education. In this regard, they have been particularly useful in promoting the introduction of institutional strategic planning within universities and fostering “ownership” (or commitment) among institutional staff. Third, their incentive system rewards rapid changes in professional attitudes and institutional culture by providing awards for creative thinking. The fund offers opportunities for university staff to pursue their ambitions, to experiment, and to test possible solutions. In the process, they often transform planning and decision-making, leadership styles, and accountability within the participating institutions. Fourth, innovation funds are very flexible and can quickly respond to changing policy priorities. The fund can easily be reoriented from one year to the next by adjusting the institutional eligibility criteria and the proposal evaluation criteria.

A recent example of an innovation fund in Montenegro could provide some lessons for Azerbaijan to adapt to its own context (Table 4). To strengthen R&D capacity in Montenegro’s national innovation system, the World Bank supported the Higher Education and Research for Innovation and Competitiveness (HERIC) Project between 2012 and 2017, which established a competitive grants program to fund larger R&D activities than those that were then being funded that could lead to international collaboration and the generation of commercial innovations. Grants were awarded to 12 researchers in Montenegrin research institutions or firms that applied to initiate an R&D “subproject” together with an international partner. The Ministry of Science would issue a call for proposals, and an evaluation committee made up of recognized international and national experts would evaluate them based on several criteria, including their quality, the capacity of the domestic and international sponsors, and the expected scientific and technological results. The grant for each sub-project was expected to be between €100,000 and €400,000 for a period of up to three years, which would cover, among other items, the salaries of the subproject leaders and the young researchers and technicians, materials and equipment, and travel expenses. The project was successful in prompting the development of new products, patents, and laboratories relevant to the economy. It also strengthened cooperation between researchers and the business sector as well as building national and international partnerships.

Table 4:
International Lessons on Competitive Funding in Higher Education

Source: World Bank

Montenegro
Higher Education and Research for Innovation and Competitiveness (HERIC) Project Launched in 2012 with funding from the World Bank
<p>Objective:</p> <ul style="list-style-type: none"> Strengthen R&D capacity in the national innovation system 10 grants ranging from €100,000 and €400,000 to enable public/private or international R&D partnerships and/or business start-ups with research institutes or university faculties
<p>Results:</p> <ul style="list-style-type: none"> Helped to develop new products, patents, and laboratories relevant to the economy Improved cooperation between researchers and the business sector and built national and international partnerships Established 10 partnerships

Health

1. Increase the efficiency of financial resources to ensure better healthcare provision

In consultation with the Ministry of Health, we have identified two catalytic interventions in the short to medium term: (i) increasing the efficiency of financial resources to ensure better healthcare provision and (ii) digitizing the healthcare management system to ensure an integrated model of care.

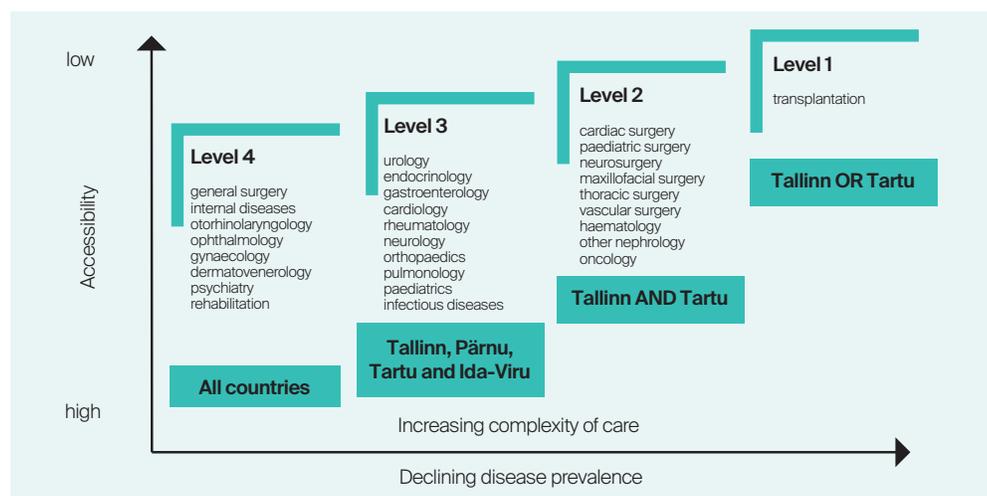
To ensure that planned increases to the health budget are used effectively, it will be important for the government to develop a plan for using these additional resources efficiently. It has already made progress in this direction by changing the healthcare financing system from passive purchasing of health services to strategic purchasing— from input-based financing to results-based financing. In this regard, SAMHI is currently developing new payment mechanisms for primary care and hospital care with the aim of increasing efficiency, incentivizing performance, and improving the quality of care. However, the benefits package will have to be costed and revised not only to ensure the financial sustainability of the system but also to guarantee quality of care. Moreover, the government should continue its efforts to consolidate hospital infrastructure and to optimize the delivery network.

There are many countries in Europe that have successfully improved the quality of care through the efficient financing of health systems. For example, the Estonian Health Insurance Fund (EHIF), the core purchaser of health services in Estonia has developed a transparent contracting process and introduced criteria for selecting the best providers in terms of quality and cost. Health care providers are contracted for at least three years. The last contract cycle for inpatient and outpatient specialists as well as nursing care ended in the first quarter of 2014. This provided an opportunity to revise the selective contracting criteria in accordance with not only changes in the health care delivery system and population needs, but also to further prioritize providers with a higher quality of care. These changes included the increasing role played by primary care based on family medicine, the gradual increase in the gatekeeping and prevention roles of primary care, the smaller but more focused role of higher-level specialist care, and the increased capacity of hospitals as a result of EU investments.

Strategic or active purchasing, in contrast with passive purchasing (in other words, the use of historical budgets), is the main instrument for promoting efficiency in the use of health funds. It does this by identifying actual health needs and any regional variations, the interventions and services that best meet these needs, and how these interventions and services should be purchased or provided given the availability and quality of providers. In Estonia, to ensure the optimal organization of provision, four levels of access were defined for outpatient specialist care, which closely related to the complexity of the care and to the prevalence of disease (Figure 11). Today, Azerbaijan is contending with similar issues to those faced by Estonia and seeks to develop the expertise and systems to implement an effective strategic purchasing policy. The Estonian experience may hold important lessons for Azerbaijan as the country looks to overcome inequalities in access while concentrating care and improving care quality.

Figure 11:
Geographical Organization of Health Care in Estonia

Source: Habicht et al 2015



Other countries whose experience Azerbaijan may learn from include Turkey, France, and Croatia. Nearby countries like Georgia, Kazakhstan, Russia, Moldova, Belarus, and the Kyrgyz Republic have also started health financing reforms, which are at different stages of implementation.

2. Digitize the healthcare management system to ensure an integrated model of care

Having access to accurate, complete, and relevant clinical data enables care providers to deliver higher quality and more efficient and cost-effective care. Studies have shown that electronic health initiatives that include electronic health record (EHR) systems connected to a health information exchange (HIE) reduce the number of redundant tests performed, increases administrative efficiency, and speeds up the processing of referrals, prescriptions, and hospital discharges.²⁹ Electronic healthcare systems can increase patient safety by eliminating transcription mistakes, thereby reducing medication errors and adverse drug events. Moreover, the collection and exchange of patients' clinical data makes possible alternatives to face-to-face care provider visits that are equally effective, less costly, and more efficient for both patients and providers.

To support the nationwide scale up of the MHI program, developing an electronic healthcare management system will be critical to ensure integrated care that is both efficient and effective. Given the growing burden of NCDs in Azerbaijan, primary healthcare needs to play a central role in prevention and early detection, which will require collaboration among service providers. Moreover, the healthcare system should be patient-oriented and having patients' medical records available online to all of their providers an electronic system could include would allow for a more holistic treatment of chronic diseases. Having an electronic management system would also allow for large-scale use of data for the timely provision of medicine and emergency care, the processing of statistical data on morbidity and mortality, the forecasting of developments in the healthcare system, and the collection and analysis of precise data on the distribution of personnel and services in different regions. As the government considers moving towards a digital system, European countries such as Denmark, the UK, and the Netherlands provide lessons learned and best practices to consider in the development of the system (Table 5).

Table 5:
Electronic Health Systems - Decision Points and Best Practices from Europe

Source: Deutsch and Turisco 2009

Topic	Decision Points	Best Practices / Key Lessones Learned
1. Planning and Sustaining the Initiative	Setting Expectations	These are healthcare initiatives, supported by technology
	Value Definition and Measurement	Build a value program into the plan with health-based measures calculated before and after installation
	Determining IT Requirements	Broad scope for setting requirements, periodic review
	Funding and Sustainability	Those who gain from the value need to be willing to pay the cost
2. Major Issue Management	Privacy and Security	Early communication regarding options, rolebased access-preferred option with ability to break the glass Data sharing - opt in, opt out, opt in with restrictions, assume opt in
	Patient Identification	Clean PHI data, unique ID number is the preferred approach
3. Governance and Communication	Governance	Involve all key stakeholders, centralize decision making whenever possible, seek input
	Communications	Comprehensive strategy executed by governance group, communicate to each constituency using the right method, two-way interactions
4. Technology and Interoperability	Technical Architecture	Fit to meet healthcare reform program and policy needs, foundation for the future
	Standards and Certification	Must-haves
5. Implementation	Planning	Strong link to policy, continuous planning with process and resources to support changes
	Implementation Rollout and Support	Pilot and roll out incrementally, support continuously

Social Protection and Jobs

In discussion with the Ministry of Labor and Social Protection of the Population, we have identified two catalytic interventions to build and activate human capital: (i) increasing investment in social assistance to support the poorest and most vulnerable and (ii) expanding the scope and coverage of active labor market programs (ALMPs) to help vulnerable populations to access employment opportunities.

1. Increase investment in social assistance to support the poorest and most vulnerable

Increasing the amount and efficiency of spending on social assistance – as the government has begun to do in 2019 and 2020³⁰ – would make it possible to take several measures to mitigate the negative impact of macroeconomic shocks on the poor and build a stable and resilient middle class. The additional resources could be used to expand the coverage of poverty targeted social safety nets, in particular the Targeted Social Assistance (TSA) program, which would increase the resilience of poor households and serve as a buffer and automatic stabilizer. Parallel investment is also needed to “activate” poor and vulnerable people, including TSA beneficiaries, to take advantage of labor market opportunities. These initiatives might include supporting income-generating activities and self-employment in areas where wage employment opportunities are scarce. Coordinated, multisectoral interventions will be needed to enhance the productivity and human capital potential of the poor and vulnerable.

2. Expand the scope and coverage of active labor market programs (ALMPs)

Building on existing efforts, the government could strengthen the capacity of the State Employment Service (SES) to facilitate the matching between labor supply and demand. This might involve strengthening the participation of employers in the design and implementation of ALMPs as well as the revision of the curricula for adult vocational training courses. In addition, more tailored and client-oriented employment services could be provided to vulnerable jobseekers and the unemployed, especially to support youth employment.

Currently, the ALMPs in Azerbaijan consist of the Self-Employment Program (which was piloted in 2014 and was nationally scaled up in 2016) and short-term professional training and public works provide through DOST centers.³¹ While the budget allocation for ALMPs increased in 2019 and 2020 (mostly to scale up the Self-Employment program and public works), the government should consider: (i) fostering work-based learning through internships and wage subsidies, especially for young people who lack any previous work experience; (ii) increasing the capacity of the SES to implement and coordinate a broader range of different ALMPs; and (iii) increasing the capacity of the SES to provide higher quality and more efficient employment services.

Moreover, the government should consider taking special measures to encourage more women to participate in the labor market. Azerbaijan would benefit from introducing policies to reduce the labor market disadvantages for women related to maternity, such as expanding early childhood education and promoting flexible working arrangements (such as remote working, flexible hours, and a compressed work week) as have been introduced in countries like Malaysia, Japan, Germany, and the UK that faced similar demographic challenges.

Non-tax Benefits to Support Parents with Young Children

In many countries, providing parents with child and social protection support is crucial to enable them to afford to access early childhood education services. Child benefit payments are often provided in the form of a monthly allowance until the child reaches a certain age or in the form of bonuses at the time of the birth of a child. About 84 economies out of a World Bank dataset of 189 provide child allowances or support to parents. Most high-income OECD countries and ECA economies provide non-tax child benefits to parents (94 percent and 92 percent, respectively).

Governments also grant allowances specifically for the use of childcare. Twenty-nine out of the 100 countries examined by the World Bank's 2018 *Women, Business and the Law* report provide parents with allowances specifically for the use of childcare. In 2017, the United Kingdom introduced a new scheme to support working parents with childcare. Parents eligible for the Tax-Free Childcare scheme can set up an online account to pay for registered or approved childcare providers. The government contributes the equivalent of US\$2.90 for every US\$11.61 a parent pays into their childcare account. In some economies, the allowance is granted to the parents, while in others it is granted directly to the childcare provider. In Finland, for example, the government provides a private daycare allowance for children under school age who are not enrolled in a municipal daycare center. While the allowance is claimed by the parents, it is paid directly to the private day care provider.

Source: *World Bank (2018). Women, Business, and the Law data*



Moving from Ideation to Implementation



Moving from the ideation of these catalytic interventions to their implementation will require collaboration among relevant stakeholders within Azerbaijan, expanding the fiscal space for these investments, focusing on learning from results, leveraging external partnerships, and deploying technology to accelerate access to human capital interventions.

A Whole-of-Society Approach

Given the multi-sectoral nature of human capital investment, establishing an inter-ministerial working group to develop the strategy for human capital development and its implementation is vital for moving the human capital agenda forward in Azerbaijan. To overcome the existing problem of departmentalism within the rigid structures of Azerbaijan's public institutions, which hamper the use of existing resources and incentives, the Ministries of Finance, Economy, Education, Health, and Labor and Social Protection should be integral parts of such a team. This team may establish a Human Capital Center jointly with a consortium of relevant higher education institutions, civil society organizations, and development partners to support the consensual formulation of national objectives related to human capital development.

Mobilizing and Maximizing Resources

The recent increased financial investments in the areas of education, health, and social protection in Azerbaijan are commendable. However, there will need to be a costing of the proposed interventions to estimate the resources required to achieve the targeted results. It may be necessary to mobilize more domestic resources through additional excise taxes on goods as well as optimizing tax collection. For instance, policymakers might consider simplifying taxes for small and medium-size enterprises, which also can help to reduce corruption, and/or instituting e-filing to reduce the time and effort spent on manual filing. It will also be vital to increase the efficiency of current spending. Targeting regions and groups that are lagging in terms of human capital outcomes can also maximize value for money and accelerate progress in improving learning and health outcomes, while reducing inequalities.

Measuring, Learning and Adapting

“What is not measured is not managed” is one of the truisms of management science. The availability of and access to accurate and timely data will be critical for evidence-based policy making, measuring performance, directing scarce resources to their most effective use, and monitoring and evaluating human capital formation. In Azerbaijan, there is scope for data collection and management in the social sectors to be strengthened. For instance, there is a critical need for more data to gauge labor market developments (supply and demand) from sources such as household surveys, labor force surveys, and enterprise surveys. While the government makes substantial investments in periodic data collection in the social sectors, little analysis is done of these data to inform policymaking.

Leveraging External Partnerships

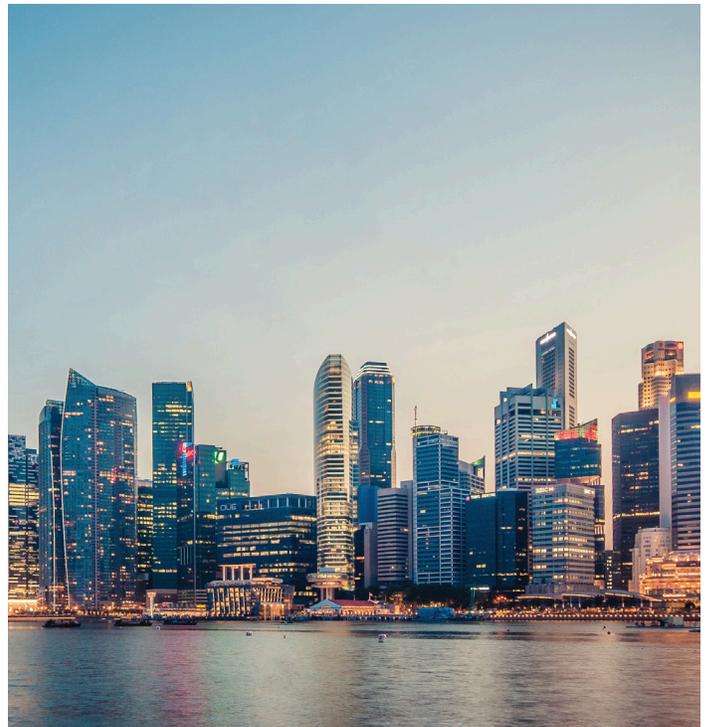
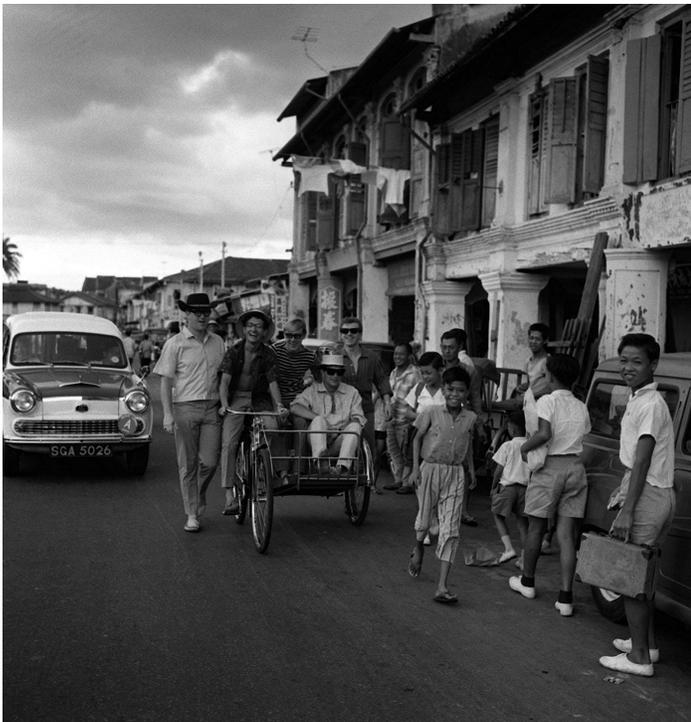
The Government of Azerbaijan may also need to form strategic partnerships with external stakeholders who are aligned with the objective of human capital development, have a comparative advantage in terms of technical expertise for the design of the proposed interventions, and can provide financial support for the catalytic human capital investments. The World Bank Group is such a partner. The Bank's Country Partnership Framework FY16-20 for Azerbaijan identifies human capital development as a priority investment in the medium term. Drawing on its extensive experience in structuring and implementing strategic investments globally, the World Bank Group is well-placed to build the technical capacity necessary to undertake catalytic investments in health, education, and social protection in Azerbaijan. The Bank can also engage other development partners and local stakeholders and commit significant financial resources to these investments.

Deploying Technology to Accelerate Impact

While Azerbaijan's ICT sector is not fully developed, the potential exists for technology to strengthen its human capital formation. For example, having an integrated e-health infrastructure would improve service quality, lower costs, increase the availability of healthcare services, and widen access to standardized electronic medical records and digital prescriptions. ICT can also enable e-learning through electronic books, electronic seminars, open-access educational materials, distance learning, and web-based exams as well as creating electronic resources for teachers including peer-to-peer sharing websites. Moreover, despite Azerbaijan's relatively high per capita income, less than one-third of the population has a bank account, and only one-quarter has a debit card. However, increasing the use of mobile money can increase financial inclusion in the country. It is important to note that the application of technology in and of itself has the potential to increase the digital skills of Azerbaijanis and narrow inequalities if made accessible to all.

CHAPTER 6:

Towards a Strategic Focus on Human Capital Development



After Singapore became independent, its economic outlook was uncertain as a small island country that was home to 2 million people with no natural resources. In the decades that followed, Singapore would develop into one of the world's most competitive economies with a GDP of US\$58,248 per capita in 2018. The rapid growth of Singapore's economy was primarily driven by the expansion of the manufacturing and services sectors, enabled by a strategic focus on human capital investments (see box below).³² Singapore now ranks as the best country in the world in terms of human capital development. The Singaporean case illustrates what can be achieved in terms of economic growth by ensuring that the population is healthy, knowledgeable, skilled, and matched to high-productivity jobs.

The Singaporean Growth Miracle: Powered by Strategic Human Capital Investments

Singapore is a small country that is home to about 5.6 million people. Lacking in natural resources, Singapore's growth has been driven by a focus on human capital investments. The results are astounding. Between 1965 and 2017, Singapore's per capita GDP in constant 2010 US dollars increased from US\$4,000 to US\$58,248.

In the early 1960s to the late 1990s, an educated and skilled labor force facilitated economic diversification and export upgrading. Initial investments in education focused on increasing the coverage of basic education for labor-intensive manufacturing. However, the government progressively shifted its focus from the coverage of basic education to improving the quality of upper-secondary, tertiary, and vocational education, which facilitated the growth of technology-intensive manufacturing.

The development of human resources was a core element in every strategic economic plan during this period. A government institution – the Ministry of Manpower – was set up with the objective of leading policy development for human capital. The “Manpower 21” blueprint outlined a plan to enable Singapore to become the talent capital of the world through the constant improvement of employee skills and knowledge. For example, through the skills development fund, employers were compelled to contribute to skills development.

Investments in learning were paralleled with efforts to develop a health system that facilitated access to care. Government regulation exerted downward pressure on healthcare costs and reduced financial barriers to access – facilities are largely public, and physicians employed by the state, and reimbursable medication were pre-specified. The extensive formalization of the rapidly growing economy allowed Singapore to implement health insurance funded through payroll taxes to individual-level health savings accounts. Limiting coverage to hospitalization and capping government expenditures further contained health expenditure under these “Medisave” accounts. Through “Medishield,” funds are pooled across all of the insured to cover expenses from major or prolonged illness, and through “Medifund,” vulnerable groups are covered through general government expenditure.

Singapore is now a high-income country and has the best human capital outcomes in the world. A child born today in Singapore will attain 88 percent of her full productivity as an adult given the current health and learning environment. The Singaporean example illustrates the potential gains that can be reaped by adopting a strategic focus on human capital investments.

With more than twice Singapore's human capital potential, Azerbaijan could join Singapore as a high-income country.

This assessment provides a starting point for developing, planning, and financing a multisectoral agenda to harness Azerbaijan's most precious resource – its people. We have examined the state of human capital formation, highlighting successes in terms of child survival and nutrition, while flagging the gaps in enrollment, learning outcomes, and healthy life expectancy that limit productivity in adulthood. We have identified the opportunity to accelerate human capital development, while acknowledging the constraints presented by fiscal space limitations, gaps in the coverage and quality of essential health, education, social protection, and jobs interventions, and inequities in household spending on human capital. Finally, in partnership with national policymakers, we have identified several catalytic investments to address binding constraints to health and learning in Azerbaijan.

The next phase of the human capital policy dialogue in Azerbaijan should focus on putting this strategy into practice. This will involve: (i) developing an implementation plan for the proposed catalytic interventions; (ii) undertaking costing exercises for each intervention; (iii) defining the mechanisms for monitoring progress in implementing the strategy and subsequent changes in human capital outcomes; (iv) specifying criteria and mechanisms for targeting investments to social groups or regions with poorer human capital outcomes; and (v) identifying options for financing these reforms, including improving tax administration, introducing new taxes, reprioritizing human capital spending in the state budget, and increasing the efficiency of sectoral spending. The World Bank Group remains committed to providing technical and financial support to for operationalizing and implementing this ambitious strategy.

The cost of inaction on human capital development is going up for Azerbaijan. There is a mounting global evidence that countries need to invest more in human capital to sustain economic growth, prepare workforces for the more highly skilled jobs of the future, and compete effectively in the global economy. The rapidly evolving knowledge economy raises the premium on high-order skills in advanced and emerging economies like Azerbaijan. However, the country's under-skilled and mismatched workforce and a growing chronic disease burden will present significant challenges in the medium to long-term in the absence of any reforms to increase the rate of human capital formation. Therefore, Azerbaijan finds itself at a tipping point. Human capital investments can be a way to reduce inequalities of opportunity, stabilize demand during economic shocks, smooth consumption, and protect vulnerable groups during structural changes. For families like the Isayevs, the decisions of today to invest in access to quality healthcare, learning opportunities, social protection, and labor market interventions will determine their ability to compete in the global marketplace of tomorrow.

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investments in human capital as a critical step to boosting inclusive and
sustainable growth. The HCP was formally launched during the 2018
Annual Meetings in Bali, Indonesia. It seeks to raise awareness and
increase demand for interventions to build human capital. The HCP has
three elements: (i) the Human Capital Index; (ii) a program to strengthen
research and measurement on human capital; and (iii) support to countries
to accelerate progress in raising human capital outcomes.
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disability-adjusted life years (DALYs) in 1990, the share rose to 73 percent
in 2016 (from 66 to 86 percent of deaths, respectively). Communicable
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infections accounting for almost 7 percent of DALYs in 2016 (IHME, 2017).
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citizens was increased from 116 manat (or 80 manat for a number of
categories) to 160 manat. In addition, the amount of social benefits and
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related to the administration of social services (pensions, disability
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- 31 Around 47,600 people were recruited for 38,000 public works created
through DOST centers in 2019. The budget allocation for public works
increased by 44 percent in 2020.
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