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Multilateral Investment Guarantee Agency (MIGA)
Europe and Central Asia Department

WORLD BANK GROUP

Regional Vice President: Anna Bjerde
IFC Senior Vice President: Stephanie von Friedeburg
Vice President and Chief Risk, Legal and Admin Officer: Ethiopis Tafara
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Country Director: Sebastian-A Molineus
IFC Director: Damien Shiels
MIGA Director: Merli Margaret Baroudi
Country Manager: Sarah G. Michael
IFC Country Manager: Ivana Fernandes Duarte
MIGA Europe Hub Head: Olga Sclovscaia
Practice Manager: Salman Zaidi
Task Team Leaders: Alan Fuchs Tarlovsky, Natsuko Kiso Nozaki

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This report was prepared by a World Bank Group team led by Alan Fuchs Tarlovsky (Senior Economist, EECPV) and Natsuko Kiso Nozaki (Economist, EECPV), comprising Maria Fernanda Gonzalez Icaza (Consultant, EECPV), Saida Bagirli (Senior Operations Officer), Zaur Rzayev (External Affairs Officer), Lala Talibova (Executive Assistant) and Armanda Carcani (Program Assistant, EECPV). The team was assisted by Maria Esther Caballero Sanchez (Consultant, EECPV). Substantive contributions were provided from the following team members across the World Bank Global Practices, International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA).

Global Practice/Crosscutting Area	Team Member
Agriculture	Jan Joost Nijihoff, Rufiz Vakhid Chirag-Zade
Digital Development	Himmat Singh Sandhu, Juan Navas-Sabater
Education	Ahmet Levent Yener, Renata Freitas Lemos
Energy and Extractives	Joern Huenteler, Ayse Yasemin Orucu
Environment	Sasa Eichberger, Gulana Enar Hajiyeva, Elena Strukova Golub, Adriana Jordanova Damianova, Madhavi M. Pillai, Kristina Govorukha
Finance, Competitiveness and Innovation	Ifeyinwa Uchenna Onugha, Karina Baba, Haocong Ren, Graciela Miralles Murciego
Fragility, Conflict and Violence	Nadia Fernanda Piffaretti
Governance	Ian Halvdan Ross Hawkesworth, Francesca Recanatini, Daniela V. Felcman, Robin Van Kippersluis, Vanessa Cheng-Matsuno, Kathrin A. Plangemann
Health Nutrition and Population	Moulay Driss Zine Eddine El Idrissi, Elvira Anadolu, Volkan Cetinkaya
IFC	Aliya Azimova, Olga Vybornaia
Macroeconomics, Trade and Investment	Arvind Nair, Nadir Ramazanov, Olena Bogdan
MIGA	Susan Josefina Vasquez Plasencia, Roxana Liciu
Social Protection and Jobs	Mirey Ovadiya, Manuel Salazar, Ngoc-Dung Thi Tran, Javier Sanchez-Reaza
Social Development	Sophia V. Georgieva, Erik Caldwell Johnson
Transport	Nijat Valiyev, Amali Rajapaksa, David Duarte, Aymen Ahmed Osman Ali
Urban, Resilience and Land	Ellen Hamilton, Silpa Kaza
Water	Ranu Sinha, Smita Misra, Hadji Huseynov

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Abbreviations

AIH	Azerbaijan Investment Holding
ASAN	Azerbaijan Service and Assessment Network
ATM	Automated teller machine
AZE	Azerbaijan
CBA	Central Bank of Azerbaijan
CEM	Country Economic Memorandum
CHL	Chile
COP	Conference of the Parties
CPSD	Country Private Sector Diagnostic
DZA	Algeria
ECA	Europe and Central Asia region
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GEO	Georgia
GHG	Greenhouse gas
GW	Gigawatts
HCI	Human capital index
HLO	High-level outcome
IDP	Internally displaced person
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
ILO	International Labour Organizations
ITA	International Trade Administration
KAZ	Kazakhstan
LIC	Low-income country
MIC	Middle-income country
MPO	Macro Poverty Outlook
MYS	Malaysia
NDCs	Nationally Determined Contributions
NEET	Not in employment, education, or training
NOR	Norway
OOP	Out-of-pocket
PEFA	Public Expenditure and Financial Accountability
PER	Peru
RUS	Russian Federation
SAU	Saudi Arabia
SCD	Systematic Country Diagnostic
SMEs	Small and medium enterprises
SOCAR	State Oil Company of Azerbaijan
SOE	State-owned enterprise
SOFAZ	State Oil Fund
SSCRA	State Statistical Committee of the Republic of Azerbaijan
STEM	Science, technology, engineering, and mathematics
TFP	Total factor productivity
TIMSS	Trends in international mathematics and science study
TUR	Türkiye
UAE	United Arab Emirates
UKR	Ukraine
UMC	Upper-middle income countries
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
VET	Vocational education and training
VTCs	Vocational training centers
WDI	World Development Indicators
WHO	World Health Organization

Benchmarking Coverage and Country Acronyms

The regional aggregates used in this report and country acronyms are defined as follows:

Europe and Central Asia region, excluding High-Income Countries

Albania (ALB), Armenia (ARM), Azerbaijan (AZE), Belarus (BEL), Bosnia and Herzegovina (BiH), Bulgaria (BGR), Georgia (GEO), Kazakhstan (KAZ), Kosovo (KSV), Kyrgyz Republic (KYG), Moldova (MDA), Montenegro (MNE), North Macedonia (MKD), Russian Federation (RUS), Serbia (SRB), Tajikistan (TJK), Türkiye (TUR), Turkmenistan (TKM), Ukraine (UKR), Uzbekistan (UZB)

Europe and Central Asia region, High-Income Countries

Croatia (HRV), Estonia (EST), Hungary (HUN), Latvia (LVA), Lithuania (LTU), Romania (ROM), Slovak Republic (SVK), Slovenia (SVN)

Upper-Middle Income Countries (UMC)

Albania (ALB), America Samoa (ASM), Argentina (ARG), Armenia (ARM), Azerbaijan (AZE), Belarus (BEL), Bosnia and Herzegovina (BiH), Botswana (BWA), Brazil (BRA), Bulgaria (BGR), China (CHN), Colombia (COL), Costa Rica (CRI), Cuba (CUB), Dominica (DMA), Dominican Republic (DOM), Equatorial Guinea (GNQ), Ecuador (ECU), Fiji (FJI), Gabon (GAB), Georgia (GEO), Grenada (GRD), Guatemala (GTM), Guyana (GUY), Iraq (IRQ), Jamaica (JAM), Jordan (JOR), Kazakhstan (KAZ), Kosovo (KSV), Lebanon (LBN), Libya (LBY), Malaysia (MYS), Maldives (MDV), Marshall Islands (MHL), Mauritius (MUS), Mexico (MEX), Moldova (MDA), Montenegro (MNE), Namibia (NAM), North Macedonia (MKD), Panama (PAN), Paraguay (PRY), Peru (PER), Romania (ROM), Russian Federation (RUS), Serbia (SER), South Africa (ZAF), St. Lucia (LCA), St. Vincent and the Grenadines (VCT), Suriname (SUR), Thailand (THA), Tonga (TON), Türkiye (TUR), Turkmenistan (TKM), Tuvalu (TUV)

Aspirational Comparators

Chile (CHL), Malaysia (MYS), Mexico (MEX), Norway (NOR), Romania (ROM)

Structural Comparators

Ecuador (ECU), Georgia (GEO), Kazakhstan (KAZ), Mongolia (MNG), Peru (PER), Thailand (THA), Ukraine (UKR)

Regional Comparators

Kazakhstan (KAZ), Norway (NOR), Romania (ROM), Serbia (SRB), Ukraine (UKR)

Aspirational Comparators for Governance and Institutions

Chile (CHL), Malaysia (MYS), Slovenia (SVN), United Arab Emirates (UAE)

Structural Comparators for Governance and Institutions

Kazakhstan (KAZ), Tajikistan (TJK), Türkiye (TUR)

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Executive Summary

The Azerbaijan Systematic Country Diagnostic (SCD) Update 2022 identifies the most critical challenges facing the government in the effort to achieve the country's national goals and the twin goals of eradicating extreme poverty and promoting shared prosperity. It also identifies policy priorities to address these challenges within a changing economic and geopolitical environment. The SCD is a comprehensive evidence-based analysis founded on the latest data and analyses available. The document benefited from comments and feedback provided by stakeholders in Azerbaijan, including national authorities, the private sector, and civil society. By reflecting voices on the ground, the SCD is intended to support the implementation of the country's development agenda as outlined in "Azerbaijan 2030: National Priorities for Socio-Economic Development" (Azerbaijan 2030) (President of the Republic of Azerbaijan 2021). The analysis is built on the findings of the first-generation Azerbaijan SCD, which was published in 2015, and also updates the analysis to account for recent developments since 2015. The SCD likewise plays a crucial role in providing an analytical basis for the Country Partnership Framework (CPF), a document that will guide the World Bank's engagement and partnership with the government of Azerbaijan over the next four to six years.

Azerbaijan has experienced acute economic and geopolitical challenges since the publication of the first SCD in 2015. When the first SCD was published, Azerbaijan was facing the most severe recession since 2000 because of the oil price shock in 2014. Since then, the country has witnessed momentous events, including a devaluation of the manat, a credit crunch in the financial sector, and a banking crisis that followed in 2015-16; a triple shock of the COVID-19 pandemic, a collapse in energy demand and prices, and the armed conflict with Armenia in 2020; and, most recently, the invasion of Ukraine in 2022. The economy of Azerbaijan was slowly recovering in 2017–19 owing to favorable external factors and numerous policy reforms implemented by the government. However, the triple shock in 2020 affected the economy and reversed the trend in poverty reduction and shared prosperity. Poverty increased in 2020, showing how households living just above the poverty line are vulnerable to shocks. The shared prosperity premium also turned negative during 2015–20, which indicates that growth since 2015 has not only been slow, but that the gains have been unevenly shared.

Azerbaijan's development trajectory is at a critical juncture: more rapid, sustainable, inclusive, and resilient growth is becoming pivotal to achieving the country's aspirational goal of doubling gross domestic product (GDP) per capita by 2030 (Hampel-Milagrosa et al. 2020; World Bank 2021j). Unprecedented double-digit growth in the 2000s successfully led Azerbaijan to upper-middle-income status in 2009. The rapid growth during this period was also associated with a significant decline in poverty and the expansion of the middle class. However, the oil price shock in 2014 revealed the economy's vulnerability because of lingering structural rigidities that were hindering the realization of the economic potential of Azerbaijan. To sustain growth in the longer term and to achieve the twin goals of poverty reduction and increased shared prosperity, rapid progress in the reforms identified in Azerbaijan 2030 is needed alongside new policies and drivers of growth to increase the resilience of the economy and of households to shocks. There is a risk for Azerbaijan of not meeting the national goal of doubling GDP per capita by 2030 unless the government acts forcefully to overcome the remaining challenges.[1]

To achieve a more competitive, dynamic, resilient, sustainable, and inclusive society and economy that resonate with the aspirational goals outlined in Azerbaijan 2030, the SCD identifies four major challenges that must be addressed. These challenges are interlinked, reinforcing the positive impacts on each other, and present opportunities for harnessing new drivers of growth. Rebalancing the economy toward the new growth model is the first critical challenge. Changing economic and geopolitical environments that have emerged since 2015 highlight the need for a new growth model through which Azerbaijan can achieve national goals and the World Bank's twin goals. Intensified risks from climate change, declining oil and gas reserves, uncertainties arising from the heightened geopolitical tensions in the wider region, and the need for the recovery and reconstruction of post-conflict areas are among the most significant structural headwinds that require changes in the growth model. The new growth model thus puts more emphasis and urgency on the need to enhance diversification from an economy driven by the hydrocarbon sector and physical capital accumulation to an economy led by the private sector characterized by the larger contribution from the nonhydrocarbon sectors and human capital accumulation. Greater integration into the global economy through trade in the nonhydrocarbon sector—for example, by unleashing the productivity of the agricultural sector, embracing the benefits of digitalization, and rebalancing spatial development, supported by effective fiscal management—represents the

[1] Longer-term simulations show that the GDP growth may slow to an average of only 0.5 percent over 2024–50, with GDP per capita increasing by 8 percent and 11 percent in 2030 and 2050, respectively, compared with the level in 2020 (World Bank, forthcoming, CEM).

channel to restore Azerbaijan's full growth potential and build resilience to external shocks. The government and stakeholders should also take advantage of the unique potential of the country to become a regional transit and transport hub because of its location.

The new growth model requires a dynamic private sector, with the state's role shifting toward that of a facilitator. Fostering private sector growth that is dynamic, innovative, and competitive both domestically and globally is thus the second challenge. In Azerbaijan, public spending has been the major channel for the state to share the wealth of the hydrocarbon sector, enabling drastic poverty reduction and enhanced shared prosperity, especially during the period of rapid growth. However, this is not sustainable in the longer term. Although the private sector outside hydrocarbons has played a limited role in Azerbaijan's growth, the sector has great growth potential if the business environment is improved. Continued efforts through financial and banking sector reforms as well as better integration of Azerbaijan's economy into international trade are key to enhancing the opportunities for private sector growth. The role of the state remains critical but will need to be shifted from the state as an active investor and driver of growth to the state as an enabler of growth by ensuring macroeconomic and financial stability and easing the constraints on private sector growth. A dynamic private sector has the potential to increase productivity and generate better quality jobs. Other important reforms proposed to build a dynamic private sector include improving access to finance, particularly among small and medium enterprises (SMEs); ensuring that the supply of skills meets changing labor market demands, especially in the formal sector; addressing issues related to market competition, including the widespread dominance of state-owned enterprises (SOEs) and the informal sector; developing a stronger competition regulation; developing an institutional framework to enforce implementation of the regulations; encouraging innovation and entrepreneurship; and improving the investment climate.

The transition to the new growth model should be accompanied by an increase in human capital accumulation, which is the third major challenge facing Azerbaijan in achieving inclusive and sustainable growth. Because labor is the main asset of the population, enhancing labor productivity through investment in human capital is the best way to ensure inclusive growth in the longer term. Given the potentially huge impact of human capital accumulation on growth, the government and stakeholders could seize the opportunity to invest further in human capital, that is, the knowledge, skills, and health that people accumulate over their lives. Building a competitive human capital base will not only improve productivity and support private sector growth but will enable Azerbaijan to compete in the global economy. This competition requires modern knowledge of digitalization and preparation of the population to anticipate and adapt to a rapidly changing environment. Closing the gap in the access to quality services and enhancing the opportunities to use the accumulated human capital will be essential if Azerbaijan is to achieve greater geographic and demographic inclusion. Enhancing the inclusion of vulnerable groups, such as women and internally displaced persons (IDPs) would improve equity and the productivity of labor and help the country achieve sustainable growth. Policy priority areas that need attention include improvement in the quality of basic education through modernization of the curricula and improving teacher competence; greater access and relevance in higher education through closer coordination with the labor market and by building capacity of higher education institutions to gain academic and financial autonomy; addressing the dual burden of malnutrition among children and noncommunicable disease among adults; and confronting the gaps in the access to health services, while reducing the catastrophic risk of impoverishment because of service payments.

The global renewed sense of urgency to accelerate the transitions to greener economies will create new opportunities to overcome the limits of the current fossil fuel–dependent model and build long-term prosperity in a sustainable and inclusive way. Accelerating a climate-resilient and green transition is the fourth major challenge for Azerbaijan in the face of this global shift. The past decade has seen an increasing global tension between shorter-term concerns over energy security and the longer-term impacts of climate change, leading to international commitments to green growth and acknowledgment of the need to move away from dependence on fossil fuels. The short-term concerns over energy security, amplified by supply chain disruptions because of the war in Ukraine, may have a positive impact on export revenues in Azerbaijan. However, in the longer term, a global shift toward low emissions will accelerate and will likely affect Azerbaijan's economy by reducing export revenues from both the hydrocarbon and nonhydrocarbon sectors if actions are not taken. In addition, Azerbaijan is among the countries that are more vulnerable to risks from climate change. Thus, investments are critical in sectors such as energy, transportation, renewable energy, untapped natural resources, the greening of the financial system, and digitalization. Revisiting the current tariff system to encourage the efficient use of energy is also a policy option to consider. Investments in the green transition should ensure an equitable transition that is as fair and inclusive as possible, and progress and impacts should be monitored regularly.

The SCD considers two additional crosscutting themes and critical preconditions in addressing other challenges and implementing necessary reforms. One is governance and institutions. In the years since the publication of the first SCD, the government has initiated numerous reforms in the face of the formidable challenges detailed earlier. In addition, the government of Azerbaijan has been undertaking a series of reforms to reduce corruption, most recently as demonstrated by President Ilham Aliyev's approval of the "2022-2026 National Action Plan to Strengthen the Fight Against Corruption" on April 4, 2022, as a means to increase the transparency of government agencies, prevent corruption, strengthen the accountability of government agencies before the public, and ensure the sustainability of anticorruption measures (AZERTAC 2022). Examples of recent reforms are listed in Table A 1. Still, there is scope for further strengthening governance and institutions. Greater citizen engagement and less concentration of power in the executive may further improve the efficiency of service delivery, create a competitive business environment, and enhance transparency even further in public fiscal management. Given that countries with strong institutions, more equal societies, and enhanced citizen engagement in the decision-making process tend to sustain growth for longer terms with better service delivery, reaching remaining governance opportunities will be central to supporting stronger and sustainable growth and shared prosperity (World Bank, forthcoming, CEM).

The second crosscutting area identified in the SCD is centered on data and information availability and transparency. Despite national efforts to enhance data collection and the dissemination of statistics, much of the strategic value of data and statistics remains untapped. Because data are essential to evidence-based policy making to improve the lives of people and support innovation in the private sector, the SCD discusses the value of enhancing data collection and use in the country. Enhancing transparency and data usage by promoting an open data policy would be instrumental in raising reliability of data and national statistics and harnessing the potential of data. Digital transformation also provides an opportunity to enhance data transparency and availability and to benefit from greater data availability by facilitating data processing and use. Digital transformation contributes to economic diversification, growth, human capital development, transparency, and inclusive development, and also features in Azerbaijan 2030 as a driver of sustainable growth and global competitiveness.

The SCD prioritizes policy areas and maps them to the high-level outcomes (HLOs) to be achieved in the longer run. Many policy priority areas identified in the first SCD remain valid. However, because of the economic and geopolitical challenges that emerged after the publication of the first SCD, new policy areas emerged as priorities, as follows: (1) greater emphasis on balancing development across locations, including post-conflict areas; (2) digital development as a foundation for the new growth model; (3) more emphasis on improving the business climate to accelerate private sector growth that promotes innovation, entrepreneurship, and competition; (4) enhancing the inclusion of the vulnerable, such as women and IDPs, through increased human capital accumulation and opportunities to use the accumulated human capital productively; and (5) more emphasis on the need to accelerate the transition to greener growth and on building the resilience to the risks stemming from climate change. All the priority areas are critical to achieving the HLOs that are aligned with the country's strategic goals as presented in Azerbaijan 2030.

Introduction

Azerbaijan's development trajectory is at a critical juncture, whereby more rapid, sustainable, inclusive, and resilient progress is critical to achieving the country's goals. After the independence of Azerbaijan from the former Soviet Union, per capita income was equivalent to the per capita income of a low-income country. In the following years, economic growth was substantial, and the country transitioned to upper-middle-income status in 2009. Yet, the economy also remained vulnerable to external factors as demonstrated by the slow recovery from the oil price shock in 2014 and the banking crisis and recession that followed in 2015–16. The recovery from the triple shock in 2020—the COVID-19 pandemic, volatility in energy demand and prices, and the armed conflict with Armenia—was more rapid in 2021, largely because of the rebound from a low base.[2] More rapid, inclusive, resilient, and sustainable growth is needed if the government is to achieve the ambitious target of doubling gross domestic product (GDP) per capita by 2030 (Hampel-Milagrosa et al. 2020; World Bank 2021j).

Acknowledging the continued relevance of the priorities identified in the first-generation Azerbaijan Systematic Country Diagnostic (SCD), this second-generation SCD is conducted as an update. It identifies the most critical challenges currently facing Azerbaijan in the effort to achieve the World Bank's twin goals—poverty reduction and sharing prosperity—and the priority policy areas for addressing these challenges. The analysis builds on the findings of the first-generation SCD published in 2015 **(**Box 1**)**. This SCD highlights the reforms, new policies, and institutional changes adopted in recent years. However, it finds that, in practice, the impacts of these initiatives have not yet fully materialized. The SCD thus revisits the priority policy areas presented in the first SCD and reorganizes them under four major challenges in line with the most recent empirical evidence available and information from stakeholder consultations. These challenges are also in alignment with Azerbaijan's strategic goals as advocated in "Azerbaijan 2030: National Priorities for Socio-Economic Development" (Azerbaijan 2030) (President of the Republic of Azerbaijan 2021), which are as follows: (1) a steadily growing, competitive economy; (2) a dynamic, inclusive society based on social justice; (3) areas of modern innovations and competitive human capital; (4) reintegration, recovery, and the return of populations to conflict-affected areas; and (5) a clean environment and a country of green growth.

This report provides evidence that there is a window of opportunity to lay a sustainable foundation for a more competitive, dynamic, resilient, and inclusive economy and society in Azerbaijan. This may be achieved by addressing four core challenges that are linked: (1) rebalancing the economy toward the new growth model, (2) fostering private sector growth, (3) enhancing human capital modernization, and (4) supporting a climate-resilient and green transition. Additionally, the SCD examines challenges related to governance and institutions and the availability of reliable data as critical preconditions for tackling all four challenges. Many of the challenges and policy priorities identified in the first SCD are still valid. The economy is still highly dependent on a hydrocarbon sector led by the state, and human capital accumulation is relatively low. Although the poverty rate is also low, efforts are still needed to address inequality across locations and sociodemographic groups. Governance and institutions are still relatively weak in some dimensions, acting as barriers to progress across multiple sectors and affecting the ability to reduce inequality and achieve sustainable and resilient growth. The validity and reliability of national data and statistics are also a challenge. However, some of the constraints facing the country have become more binding, and new priority policy areas have emerged because of the changing economic and geopolitical environment, including opportunities for recovery and the reconstruction of post-conflict areas; greater development potential as a regional hub due to supply chain disruptions resulting from the war in Ukraine; the growing need for digital development; the requirement to adapt and remain resilient in the face of the uncertainties revealed by the heightened political tensions in the wider region; and greater emphasis on the preparation for green transition and the need to enhance the resilience to climate change.

The economic forecast is uncertain because of regional and global tensions. However, in the medium term, growth is expected to return to the forecast level before the war in Ukraine as the fundamental nature of the challenges facing Azerbaijan is still valid (World Bank 2022d). In fact, economic uncertainties revealed by the war in Ukraine emphasize even more the need to accelerate the pace of proposed and ongoing reforms. While many countries are being confronted by the effects of the crisis in Europe through trade

[2] Real growth in gross domestic product (GDP) rose by 5.6 percent in 2021, after a negative rate of −4.3 percent in 2020 (World Bank 2022d).

disruptions and slower growth, the net impact on Azerbaijan's economy is difficult to measure. As a net producer and exporter of oil and gas, Azerbaijan is expected to increase exports and revenues because of higher oil prices and demand associated with the effects of the sanctions on Russia. This may propel growth in Azerbaijan in 2022. While the economy may experience growth driven by increased demand for the country's resources, a significant rise in the international prices of food, fertilizer, and other necessity items may disproportionally impact the less well-off and increase poverty and inequality.[3]

Box 1: Summary of the challenges identified in the first-generation SCD

The first SCD in 2015 identified the need to rebalance the economic structure of Azerbaijan across three dimensions. This SCD takes stock of the progress. It argues that, despite some advances, the results are insufficient to achieve the twin goals. Thus, to a large extent, the challenges identified in the first SCD remain valid. These challenges are summarized across three pillars:

- **A shift from a natural resource-based economy led by the state to a more well-balanced growth led by a competitive private sector at higher productivity**. The rapid growth beginning in 2000 was driven by an increase in oil production and prices and, partially, by the nontradable sectors in construction and services that were supported by the high public investment fueled by oil revenues. To ensure growth and fiscal sustainability in light of the macroeconomic risk that emerged in 2014, the first SCD called for rebalancing the role of the public and private sectors and for private sector investment to start replacing public sector investment to unleash productivity growth in areas such as agriculture, that are characterized by low productivity, but that absorb a large share of the workforce.
- **A shift from a growth model driven by the physical capital stock to one driven by the more well-balanced composition of capital.** The increased contribution of human capital accumulation to growth was identified as the key to growth and shared prosperity. The diversification of the structure of the economy from a state-led natural resource–based economy was to be accompanied by a solid human capital base. The skills gap was identified as a significant constraint on private sector competitiveness, calling for the establishment of a better link between education and employment. Uneven access to quality services in education and health care and unequal access to opportunities to use human capital across locations and sociodemographic groups were also identified as critical constraints on growth and shared prosperity.
- **Strengthening governance and institutions to act as foundational drivers for development and growth across sectors**. Addressing the challenges identified requires modernization to make governance and institutions more transparent and effective and to associate them with a longer-term vision. The reforms involved actions to reduce corruption, strengthen the judiciary, and bolster the rule of law. The reforms were to be supported by more accountability among local governments and support for a greater voice among citizens. The effort of the government to prioritize, implement, and monitor progress toward clear objectives was expected to be supported by solid evidence based on improved data collection and better reporting practices.

Source: World Bank 2015.

Section 1. Key Trends in Growth, Poverty, and Shared Prosperity since 2015

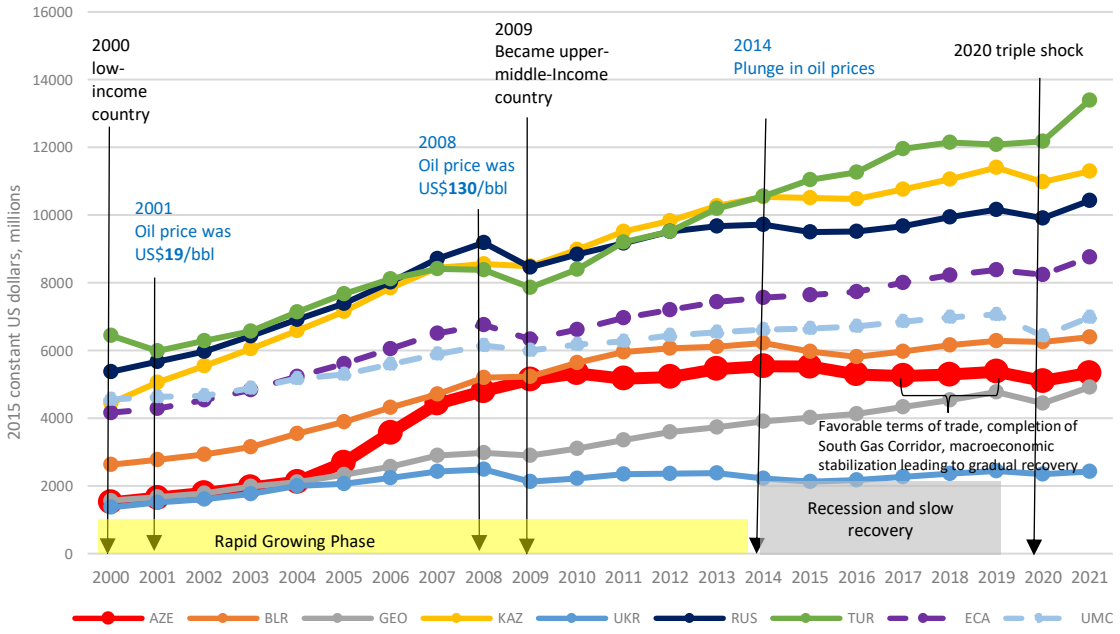
Socioeconomic progress has been impressive in Azerbaijan, which has transitioned to upper-middle-income status in less than a decade. However, the current growth model is unsustainable because of persistently high reliance on the hydrocarbon sector. Despite some rebalancing efforts in recent years, economic growth is still below what is needed to achieve the country's ambitious goals. The reduction in poverty has been remarkable, and the poverty rate is low, but inequality endures, and the 2020 triple shock revealed vulnerabilities of households to shocks that could push them back to poverty. More efforts are needed to address the spatial gap in welfare and build a secure middle class.

[3] Forecasts of GDP growth have been lowered from 3.1 percent to 2.7 percent in 2022 and from 2.7 percent to 2.2 percent in 2023 following the start of the war in Ukraine (World Bank 2022d). According to the State Customs Committee, Azerbaijan's exports rose twofold in January–February 2022 relative to the same period in 2021, most of which was accounted for by the oil and gas sector (92 percent). Imports increased during the period by 22 percent (Azer Press 2022), increasing the forecasted balance of payments in 2022 to 22.7 percent. However, the balance of payments in 2023 and 2024 are expected to slow to 16.5 percent and 12.3 percent, respectively (World Bank 2022d).

Subsection 1.1 Progress in Economic Growth

When the first SCD was published in 2015, Azerbaijan was facing the most severe recession since 2000. A slow recovery followed in 2017–19, but the triple shock of 2020—the COVID-19 pandemic, a collapse in energy demand and prices, and armed conflict with Armenia—stalled economic growth, contracting gross domestic product (GDP) by 4.3 percent in 2020 (World Bank 2022d). The economy recovered in 2021, reaching an estimated real GDP growth rate of 5.6 percent, but is forecast to grow at around 2.4 percent during 2022–24. After the plunge in oil prices in 2014, average annual growth of GDP (in constant 2010 USD) slowed to an average of 0.4 percent during 2015–19. This represented a sharp contrast with the rapid average annual growth of GDP (in constant 2010 USD) of 12.1 percent during 2000–14. The recovery during 2017–19 was slow relative to structural comparators (Figure 1). The recovery in 2021 was a bit more rapid, largely because of the low base, but forecasts suggest a return to moderate growth of around 2.4 percent in 2022–24 (World Bank 2022d). Moreover, forecasts beyond 2022 remain uncertain given the evolving regional and global environment. The downside risks, particularly in the nonenergy sector related to the protracted war in Ukraine and disruptions in global commodity markets, are elevated (World Bank 2022d). Estimates show that, without drastic economic reform, the GDP growth rate may slow to an average of only 0.5 percent over 2024–50 (World Bank, forthcoming, CEM).

Figure 1: Growth trajectory, GDP per capita (constant 2015 US dollars)



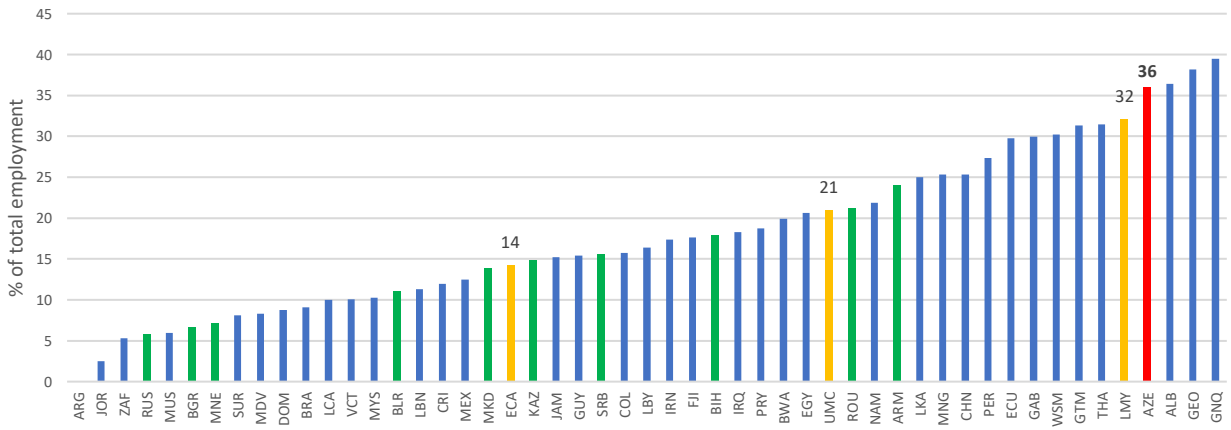
Sources: World Bank 2022d; WDI (World Development Indicators) (dashboard), World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

Little has changed in the sectoral composition of GDP and employment. The share of employment in the agricultural sector is high relative to international standards, absorbing 36 percent of total employment in 2019, thereby showing a relatively minor reduction from the 41 percent in 2000 (Figure 2)**.**[4] If the sample is restricted to upper-middle-income countries with GDP per capita between US$4,000 and US$12,000 in 2020 (constant 2015 US dollars), the share of the labor force employed in the agricultural sector in Azerbaijan is exceeded only in Albania, Equatorial Guinea, and Georgia and is far above the regional average of 14 percent and slightly higher than the low- and middle-income-country average of 32 percent.[5] This labor is characterized by low value added per worker and low consequent labor productivity (Figure 3).[6] Services absorb half of employment, while

[4] The figures are based on the modeled estimates of the International Labour Organizations. According to the estimates by the Ministry of Labor and Social Protection, the share of agricultural employment has recently decreased to 25 percent of the working age population.
[5] The upper-middle-income countries are countries with gross national income per capita at US$4,096–US$12,695 as of July 2021.
[6] The decline in value added per worker in industry since 2010 (figure 3, panel b) derives from the decline in oil production. Oil production peaked in 2010 and has been in a steady decline ever since. There may be a temporary increase, but the declining trend is expected to

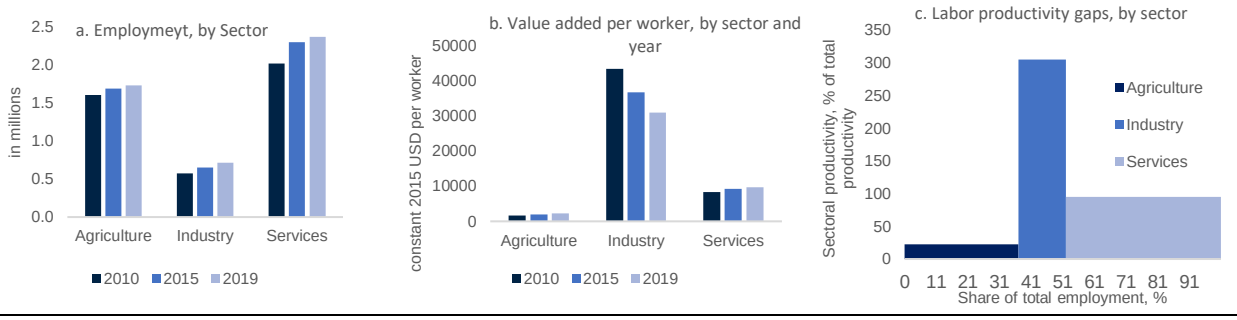
disproportionately contributing 42 percent of GDP in 2019 (World Bank, forthcoming, CPSD). The public sector has a high share within the service sectors. Despite the preeminence of industrial activities in output (mainly mining and construction), these capital-intensive sectors accounted for only around 15 percent of the workforce in 2019. In the past decade, Azerbaijan has not seen a reallocation of employment across sectors, which has also contributed to a large gap in productivity (Figure 3, panel c).

Figure 2: Share of employment in agriculture



Source: WDI.
Note: Employment in agriculture as a share of total employment is based on modeled estimates of the International Labour Organizations (ILO) for 2019. Green bars indicate countries in Europe and Central Asia. Yellow bars denote averages for ECA region (excluding high-income countries), upper-middle-income countries, and low- and middle-income countries.

Figure 3: Employment, value added, and productivity, by sector



Source: CEM Scan Master Tool 2021-07-28, World Bank.

Job quality is also low compared with regional comparators. The share of good jobs—associated with full-time working hours, tenure, and written contracts—is extremely low in Azerbaijan (Figure 4).[7] Inequality in access to good jobs is also exceptionally high by international standards (Figure 5), which has important implications for persistent inequality, low social mobility, and the size of the informal sector. With a growing population entering the labor market, seizing the advantages of this demographic dividend will require the urgent provision of new sources of high-quality jobs. These job opportunities are unlikely to come from the extractives sector (World Bank 2015).

continue in the longer term because of the aging of the oil fields, the lack of significant new oil field discoveries, and the global green transition.

[7] Good jobs are defined as jobs that meet three criteria: (a) the work involves more than 20 hours a week; (b) it is salaried work through a contract; and (c) it offers some measure of tenure (Fuchs Tarlovsky et al. 2019).

Figure 4: Share of the labor force employed in good jobs

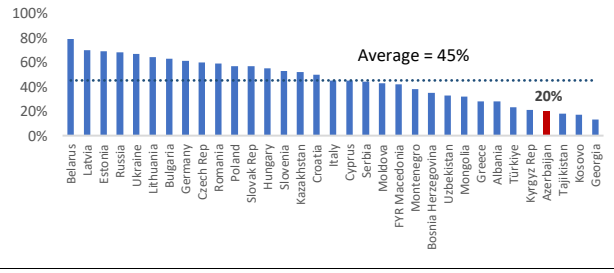
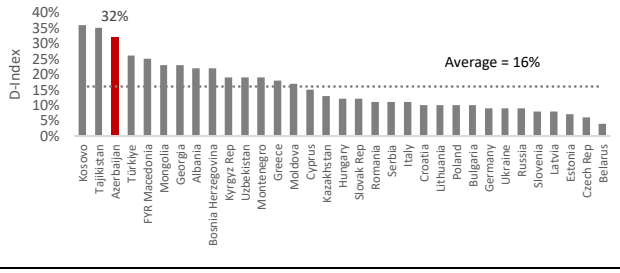


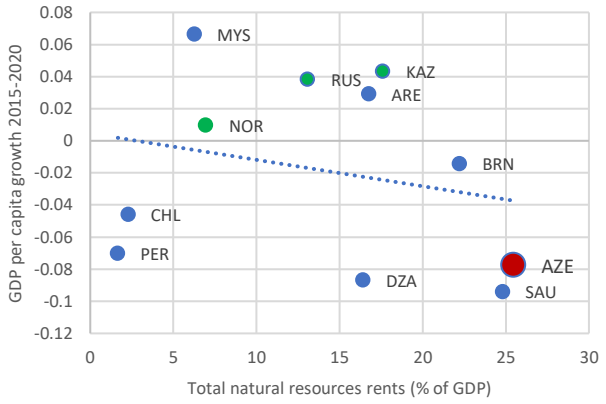
Figure 5: D-index of inequality for access to good jobs



Source: Fuchs Tarlovsky et al. 2019.
Note: Good jobs are defined as employment for at least 20 hours per week and with a written contract. The D-index (dissimilarity index) is based on the methodology of Fuchs Tarlovsky, Tiwari, and Shidiq (2018).

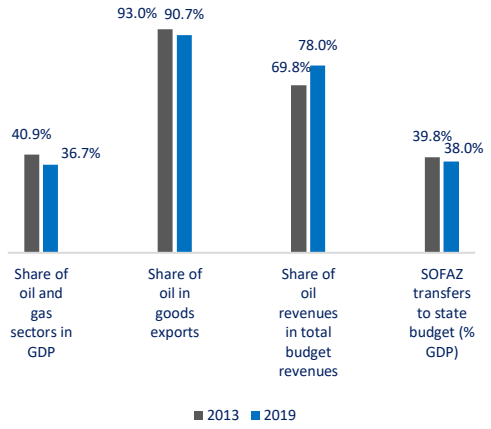
In recent years, the greater dependency on natural resources has been associated with slower economic growth, indicating that diversification is the ultimate source of resilience and growth. While many factors underlie the slower growth, data show that the correlation between GDP per capita growth and the country's dependence on natural resources was negative in 2015–20 (Figure 6). This suggests that more stable economic growth could be achieved by greater and more sustained growth in the nonhydrocarbon sectors and by building a more diversified asset base of human, physical, and natural capital, as highlighted in the first SCD. Figure 6 also shows heterogeneity in growth rates given the share of natural rents. For example, among the countries in which total natural resource rents range between 10 percent and 30 percent of GDP, Azerbaijan, along with Algeria and Saudi Arabia, is associated with negative growth, while countries such as Kazakhstan, Russia, and the United Arab Emirates observe positive growth. Possible factors explaining the variations in the growth across countries that rely relatively more on natural resources are the level of economic diversification and strength in governance and institutions (see Box 2).[8]

Figure 6: GDP growth and natural resources rents



Source: WDI.
Note: Total natural rents as a percentage of GDP in 2019. Comparators include upper-middle-income countries selected based on their share of rents from oil and natural resources. The green data points denote countries in Eastern Europe and Central Asia. The dotted blue line shows the trend.

Figure 7: Economic relevance of the hydrocarbon sector



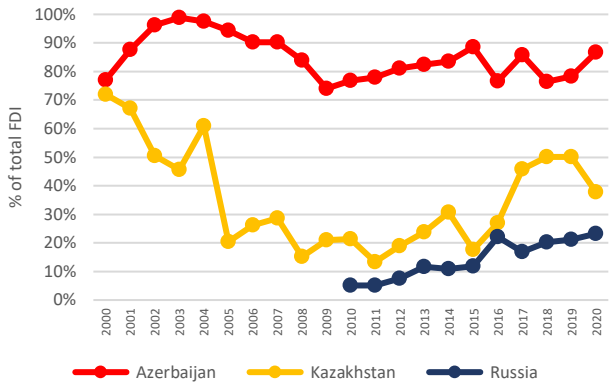
Source: WDI and SSCRA.

The slow, negative growth rates in 2015–19 highlight the vulnerability of the growth model in Azerbaijan and raise questions about the sustainability of past achievements. Moreover, Azerbaijan is far less diversified than other resource-dependent countries, such as Kazakhstan and Russia. Despite measures taken to improve the business climate and to create a diversified economy with a competitive private sector, progress has been slow.

[8] Cross-country comparisons also show that Azerbaijan is the only country in which the sectoral value added in industry consistently fell from 2010 and 2015 to 2019. The comparison group consists of Chile, Kazakhstan, Malaysia, Peru, Russia, and the United Arab Emirates.

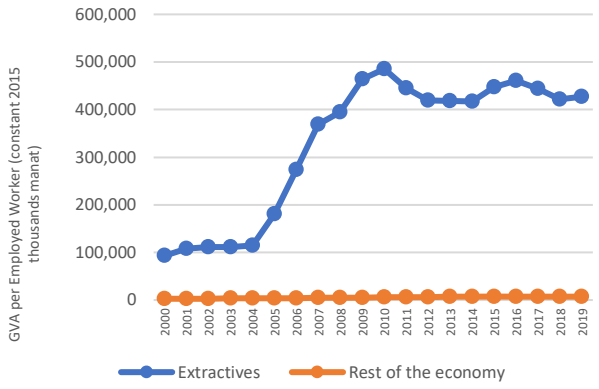
The dominance of the hydrocarbon sector has persisted even after the 2015 recession. The sector continues to account for roughly 90 percent of export revenue and close to 80 percent of the total budget (see Figure 7). The share of foreign direct investment (FDI) in the hydrocarbon sector is also substantially higher compared with regional resource-rich countries, such as Kazakhstan and Russia (Figure 8). This led to high labor productivity in the extractive industries that is more than 100 times greater than in the rest of the economy (Figure 9).

Figure 8: FDI inflows in the oil and gas sector



Sources: Data of Central Bank of Azerbaijan, various; Central Bank of Russian Federation; National Bank of Kazakhstan.

Figure 9: Productivity gap, gross value added in constant 2015 prices



Sources: SSCRA; Gross Value Added by Kind of Economic Activity (dashboard), UNDATA, United Nations Statistics Division, New York, http://data.un.org/Data.aspx?q=Gross+Value+Added+&d=SNAAMA&f=grID%3a202%3bcurrID%3aNCU%3bpcFlag%3a0.

Box 2: Literature on economic growth, natural resources, and institutions

The empirical literature on the relationships among natural resources, the quality of institutions, and economic growth has not reached a consensus because of challenges in identifying the causal inference. However, many studies show a positive correlation between institutions and growth given the level of natural resources. For example, Mehlum, Moene, and Torvik (2006) focus on countries rich in natural resources and provide evidence on the positive correlations between institutional quality and economic growth, suggesting that, with sufficient quality in institutions, natural resources can foster long-term development. Similarly, Raggl (2017) and Raifu (2021), by focusing on Nigeria, find that the effect of natural resources on economic growth depends on the quality of institutions. Raggl (2017) further finds evidence that the growth-enhancing effect of natural resources is tied to the level of corruption.

Some recent studies use panel data from multiple countries to identify causality. By using panel data on 76 countries over 1980–2012, Antonakakis et al. (2017) conclude that resource dependence is neither a curse nor a blessing, and the quality of institutions is a key determinant of how each country will use its resources to promote economic growth. Belarbi et al. (2021), using panel data from 19 countries over 1996–2017, also show that the quality of institutions has a positive and significant effect on growth when oil dependence is either low or high and that the relationship between growth and oil dependence is stable only among countries with high-quality institutions.

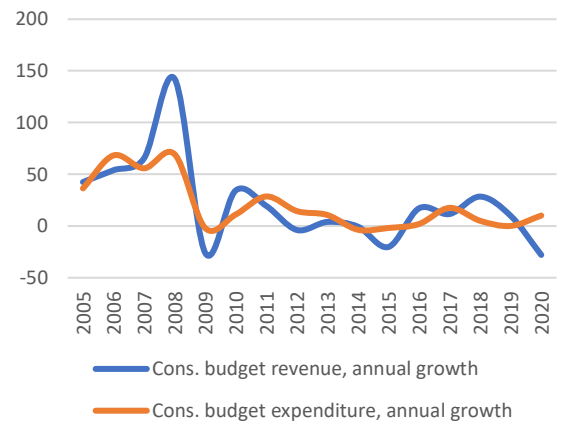
Subsection 1.2 Macroeconomic Situation

Preserving macroeconomic stability has been a challenge in Azerbaijan due to lack to coordination among economic policies. Progress has been made during the post-2014 recession period reflected in the improved policy coordination through the establishment of a Financial Stability Board (FSB) in 2016, succeeded by the Economic Council in 2020. Substantial dependence on oil revenues exposes the country to risks emanating from the volatility in oil prices, the exhaustibility of revenues, and exchange rate fluctuations. The effective management of these risks through fiscal, monetary, and financial sector policies is critical to safeguarding macroeconomic and financial stability. The Economic Council established in 2020 has a broad mandate to coordinate economic policies and expected to provide an effective forum for coordinating both short-term and long-term economic policies. The remaining challenge is to effectively operationalize the broad mandate by identifying priorities based on rigorous empirical analyses and by specifying the activities to achieve the objectives (World Bank, forthcoming, CEM).

The government has addressed procyclical fiscal policies that may harm macroeconomic stability. Fiscal spending followed the oil revenue cycle (Figure 10). This procyclical fiscal policy has transmitted oil revenue

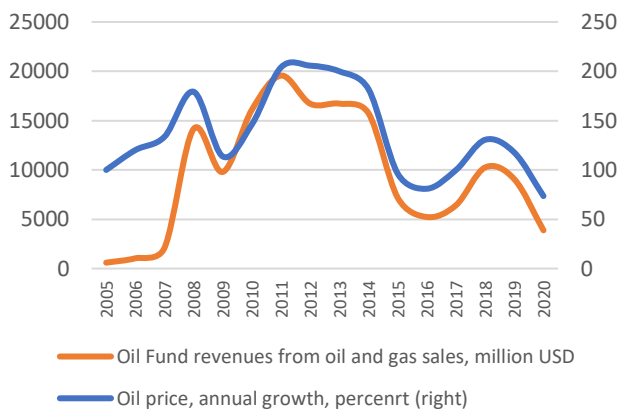
volatility to the economy, leading to boom-bust episodes (Figure 11).[9] After the 2016 crisis, some fiscal policy changes were introduced to ensure countercyclicality, such as a new fiscal rule in 2019. The sizable assets of the State Oil Fund (SOFAZ) also provide a buffer against short-term external shocks. However, the savings associated with oil revenues have declined over time (see Figure 31), which may affect the benefits and wealth of the future generation. Savings are set to fall again if the oil and gas sector faces headwinds in the medium to long term.

Figure 10: Fiscal spending and revenue



Source: World Bank, forthcoming, CEM.

Figure 11: Volatility in oil prices and SOFAZ revenue



Source: World Bank, forthcoming, CEM.

The effectiveness of monetary policy has been limited: the de facto fixed exchange rate peg is not buffering external shocks. **However, there has been a progress to address this by reducing dollarization.** Fiscal policy has bred exchange rate expectations that are closely linked to oil price movements. Together with structural weaknesses in the financial sector, this has contributed to high dollarization. The sharp decline in oil prices in 2014 exposed the vulnerability of the fixed exchange rate regime. The Central Bank of Azerbaijan (CBA) lost almost two-thirds of its international reserves defending the peg. Subsequent devaluations erased half the value of the manat against the US dollar. This exposed weaknesses in the financial sector and triggered a shift toward dollarization (World Bank, forthcoming, CEM). However, government efforts to reduce dollarization, such as differentiated interest rate of deposits by currency introduced in 2016, are having an impact, with a reduction in the level of dollarization of loans and deposits (World Bank, forthcoming, CEM).[10]

Subsection 1.3 Progress in Poverty Reduction and Shared Prosperity

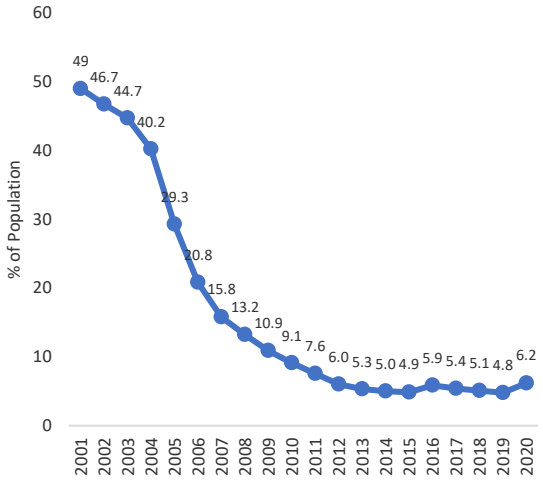
The rapid economic growth during 2000–14 was accompanied by a remarkable fall in poverty rates, which also led to the expansion of the middle class. The national poverty rate calculated by the State Statistical Committee (SSCRA) declined from close to 50 percent to 5 percent between 2001 and 2019 (Figure 12). Alongside gains in poverty reduction, the middle class grew significantly between 2005 and 2013.[11] The proceeds of rapid growth were redistributed among the population through a periodic increase in real wages and an expansion in social spending (World Bank 2015). National poverty, nonetheless, increased by 1.4 percentage points in 2020 as a result of the triple shock.

[9] For example, during a period of high revenue, fiscal spending surged. However, a decline in oil revenues, such as in 2009 and 2015–16, was coupled with a cut in fiscal spending. The non-oil economy recorded high growth during the high spending period (2005–14) but plunged into a recession after the deep cut in fiscal spending after the plunge in oil prices in late 2014. Such volatility in the economy is detrimental to sustainable growth and harms the long-term development prospects of Azerbaijan. It is important that volatility in the global energy markets does not transmit to the Azerbaijan economy through volatile spending, or through credit and price increases in the case of overheating (World Bank, forthcoming, CEM).

[10] According to CBA, other efforts by the government to increase the effectiveness of the monetary policy includes efforts to form an active money market through the expansion of the government securities market and diversify supply channels in the foreign exchange market.

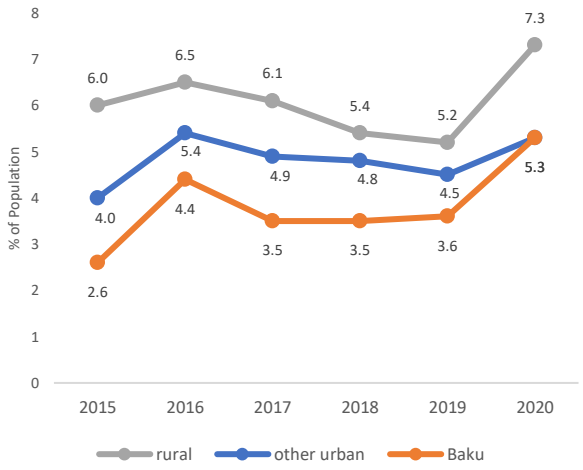
[11] This is based on World Bank's calculation using data on average monthly per capita household consumption expenditure by decile provided by SSCRA.

Figure 12: National poverty headcount ratio



Source: Data of SSCRA.
Note: The World Bank has not reviewed the official national poverty rates since 2013.

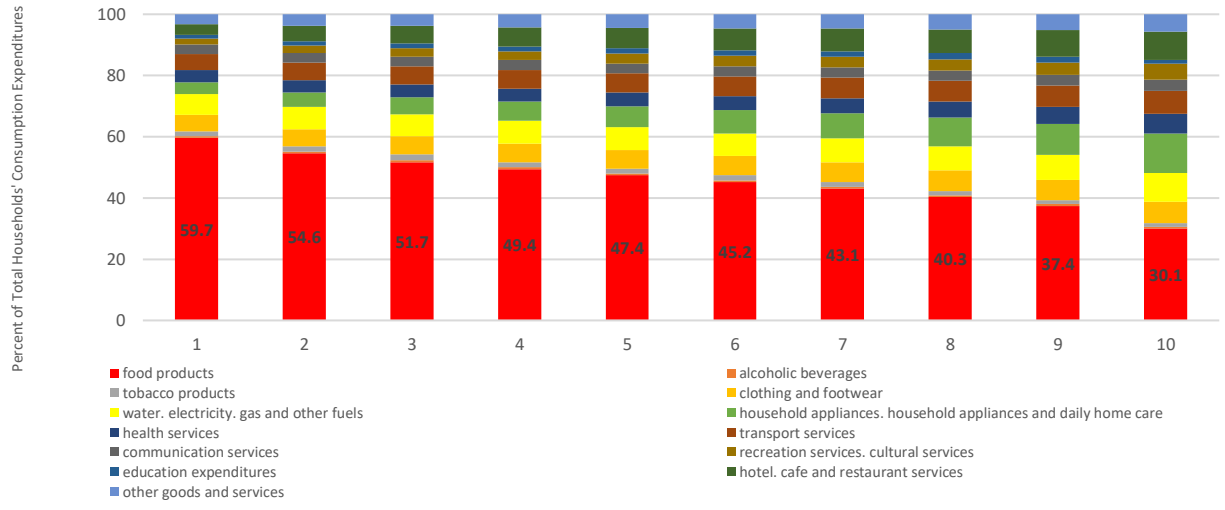
Figure 13: Poverty headcount ratio, Baku, other urban areas, and rural areas



Source: Data of SSCRA.
Note: The World Bank has not reviewed the official national poverty rates since 2013.

The progress in poverty reduction was remarkable in rural areas, which narrowed the gap with the rest of the country during 2016–19. However, the triple shock, including COVID-19 lockdown measures and restrictions, had differential impacts, with large impacts in rural areas and Baku. The impact of the war in Ukraine is uncertain. Yet, given the larger share of household budgets spent on food among the less well off, high food inflation may increase poverty in 2022. After the outstanding outcomes in poverty reduction during the commodity boom, progress in poverty reduction appeared to slow or stabilize in 2016–19 (see Figure 12). However, this was associated with a steady decline in poverty rates in rural areas, which narrowed the gap between rural areas and the rest of the country (see Figure 13). Yet, once again, the gap between rural and other urban areas widened from 0.7 to 4.0 percentage points in 2019–20, as rural poverty increased by more than 2.0 percentage points, followed by an equally significant increase of 1.7 percentage points in Baku. High food price inflation may lead to even higher poverty and inequality in 2020 because of the larger share of food expenditures among the less well off (Figure 14).

Figure 14: Composition of household consumption expenditure, 2020

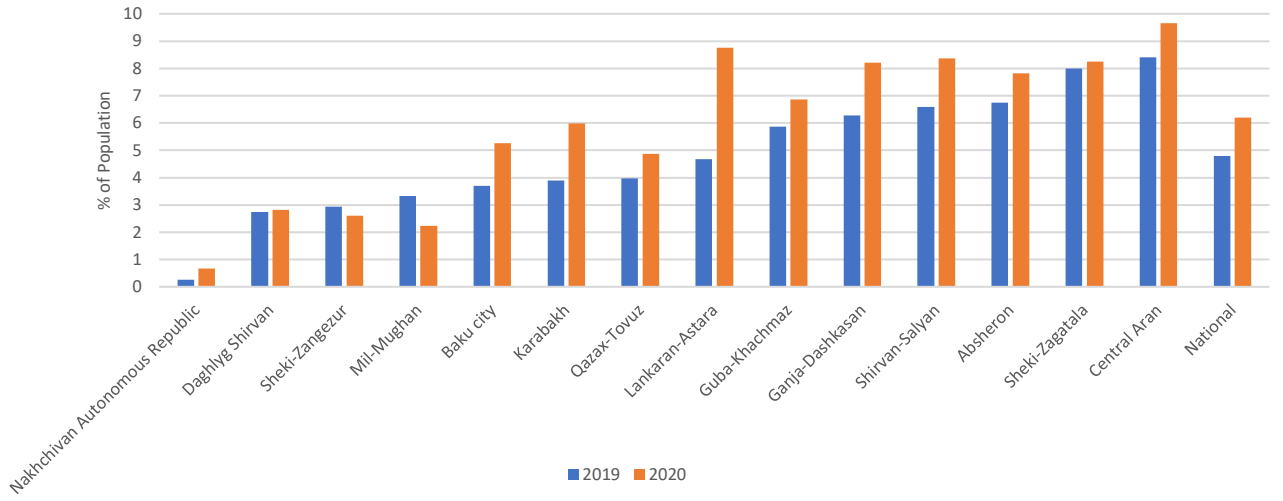


Source: Data of SSCRA.

Gaps are also evident across economic regions. Poverty rates increased in many regions in 2020, but by varying degrees. Regional poverty rates and rankings have fluctuated widely over the years. However, the poverty

rate was consistently the lowest in Nakhchivan Autonomous Republic, at around or below 1 percent, between 2010 and 2020. The triple shock in 2020 also seems to have had a differential impact across regions. Although poverty rates in 2019 were below the national average in Baku, Karabakh, and Lakaran-Astara, these regions were hit hard in 2020, raising the poverty rate by more than 40 percent (Figure 15).

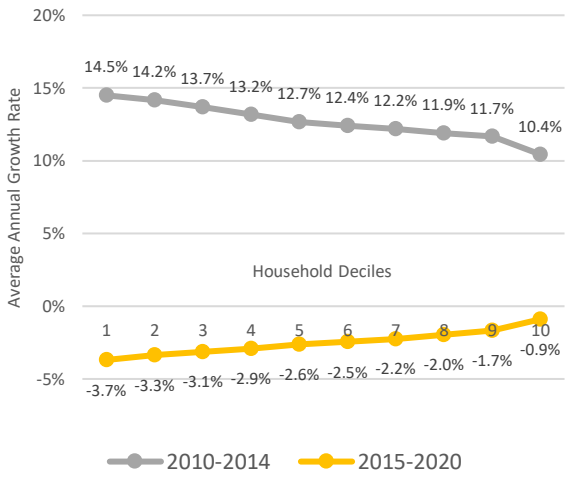
Figure 15: Poverty headcount ratio, by administrative region



Source: Data of SSCRA.

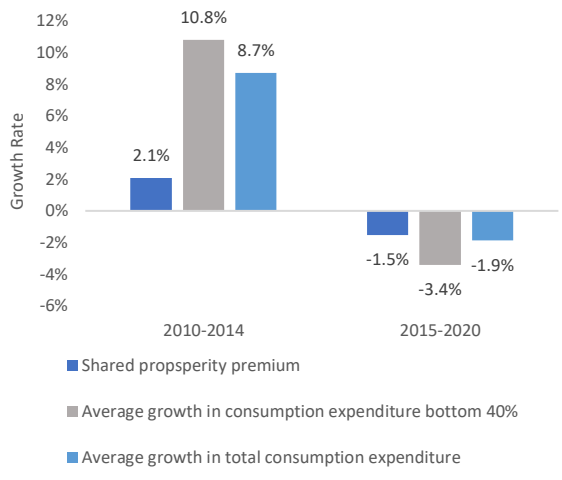
The performance in shared prosperity has been negative since 2015, indicating growing inequality in the country. While the whole population experienced negative growth during this period (Figure 16), consumption dropped almost two times more among the bottom 40 percent of the household welfare distribution than among the top 60 percent (Figure 17). This contrasts sharply with the stronger mean consumption growth at the lower end of the distribution during the years preceding the oil price shock in 2014. The trend in shared prosperity is also consistent with the trend in inequality measured by the cumulative share of consumption: the data show that inequality decreased slightly between 2010 and 2015 but rose in 2020 back to a level equivalent to the level in 2010 (Figure 18).

Figure 16: Growth incidence curves, 2010–14 and 2015–20



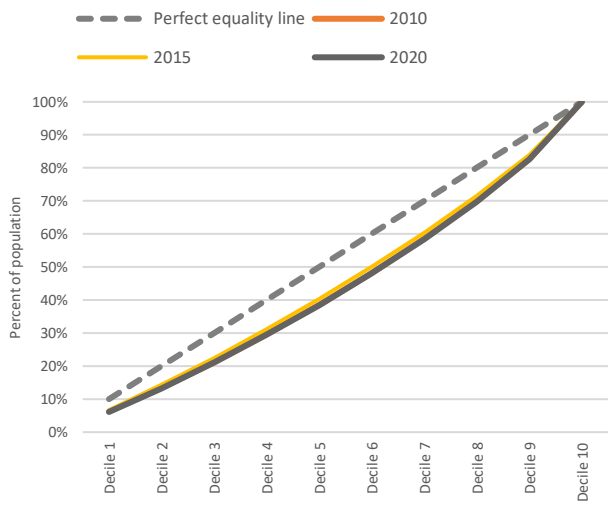
Source: World Bank calculations based on SSCRA data.
Note: Estimates are based on per capita consumption aggregates averaged over the households in each decile.

Figure 17: Shared prosperity premium, 2010–14 and 2015–20



Source: World Bank calculations based on SSCRA data.
Note: Estimates are based on per capita consumption aggregates averaged over the households in each decile.

Figure 18: Inequality measured by consumption per capita



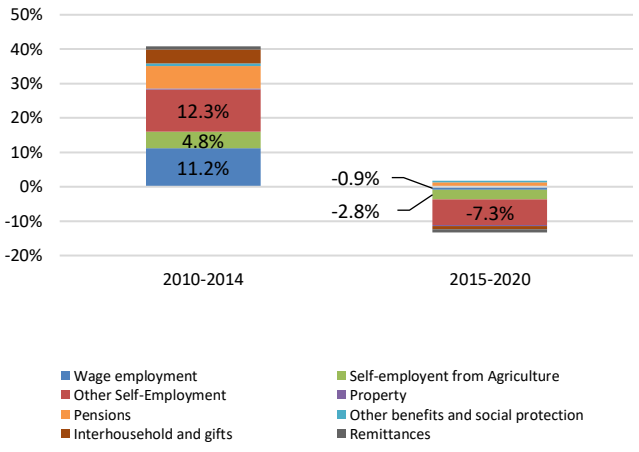
Source: Data of SSCRA.
Note: In the figure, 2010 and 2020 lines are overlapping.

The decline in household consumption in 2015–20 reflected the loss in incomes in the labor market. Meanwhile, the impact of public transfers on income growth was negligible. Labor market incomes, including incomes from wage employment and self-employment, remained the major source of income, comprising around 70 percent of total income across all years during 2005–20. The top 20 received the highest share of income from wage employment, while the largest share of income from self-employment, including self-employment in agriculture, was observed among the bottom 40 (Figure 19). A diagnostic of income growth highlights the large magnitude of the contributions from labor income and the stark contract between the rapid growth of 2010–14 and the sluggish growth in 2015–20 (Figure 20). The findings emphasize the relevance of labor market outcomes in lifting people out of poverty. Public transfers through pensions and other benefits from social protection helped raise incomes during 2015–20, but with limited impact. (See Box 3 for a summary of the social protection system in Azerbaijan.)

Figure 19: Sources of household income, by quintile, 2020

Source: Data of SSCRA.
Note: Quintiles are based on per capita consumption expenditure and are defined at the household-level.

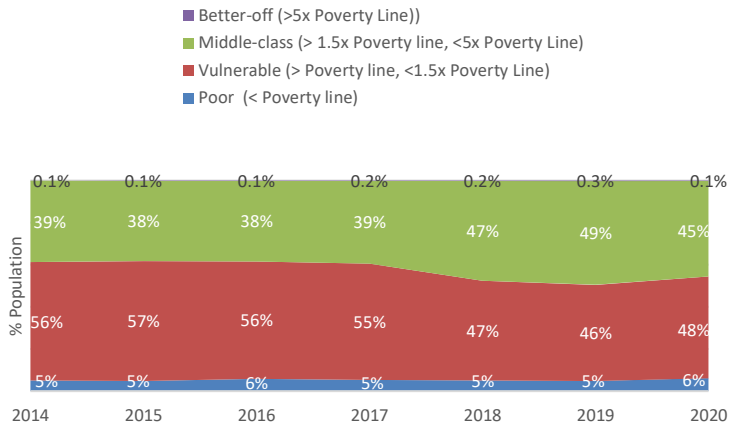
Figure 20: Contributions to household income growth, 2010–14 and 2015–20



Source: World Bank calculations based on data of SSCRA.

Households are highly vulnerable to shocks. The size of the middle class increased to 47 percent in 2018 when the economy was recovering from the recession, after remaining stable at around 38 percent–39 percent of the population in 2014–17 during the recession (Figure 21). However, in 2020, the size of the middle class narrowed by 4 percentage points, raising the share of the vulnerable and the poor. This trend highlights that, although most of the bottom 40 in Azerbaijan are among the nonpoor, households are still vulnerable and can fall back from middle-class status in the face of shocks.

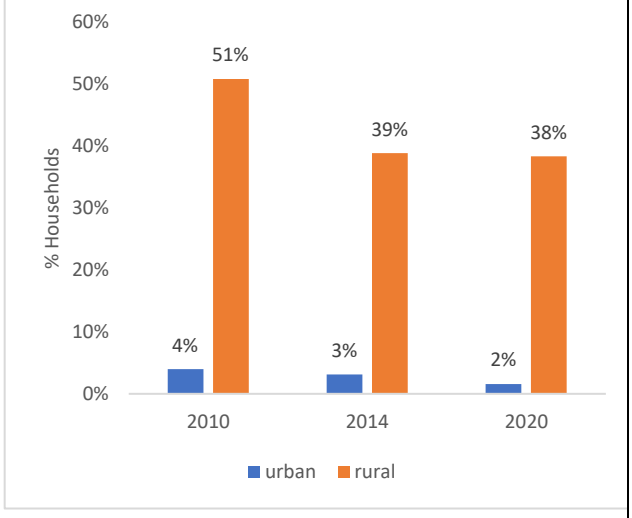
Figure 21: Evolution of the middle class



Source: World Bank calculations based on data of SSCRA.
Note: The middle class is defined as households with a monthly per capita consumption expenditure between 150 percent and 500 percent of the official poverty line.

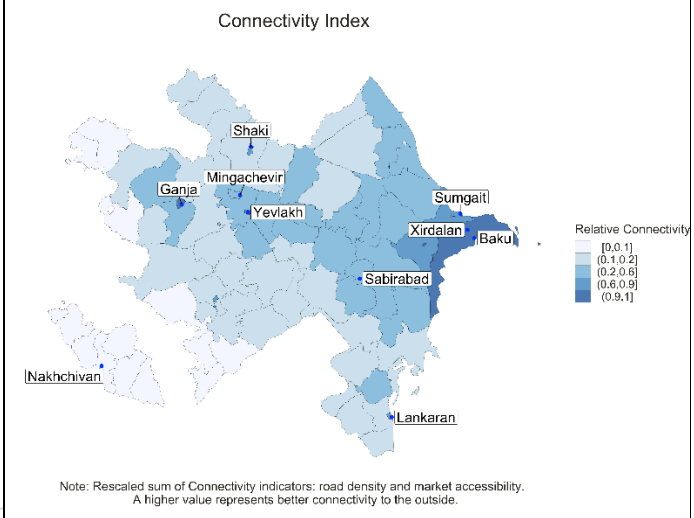
Closing the gap in access to services and infrastructure is necessary to enhance geographic inclusion. For example, despite improvements over past years, there are still significant gaps between rural and urban areas in access to piped water (Figure 22). The gap is also observed in connectivity measured, for example, by road density and market accessibility (Map 1). Access to health services also varies across districts (see Map 4 and Map 5).

Figure 22: Share of households without piped water, by urban and rural location



Source: Data of SSCRA.

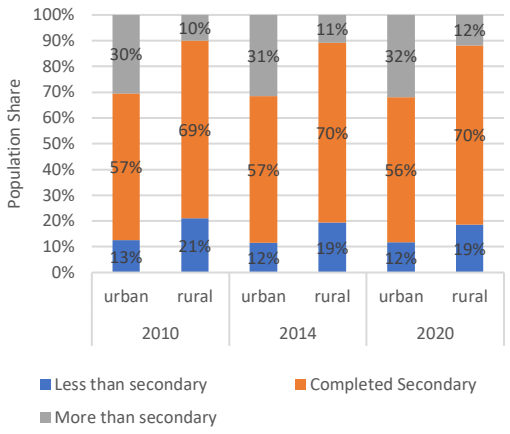
Map 1: Connectivity index, measured by road density and market accessibility



Source: World Bank, forthcoming, Regional Development and Vulnerability in Azerbaijan.

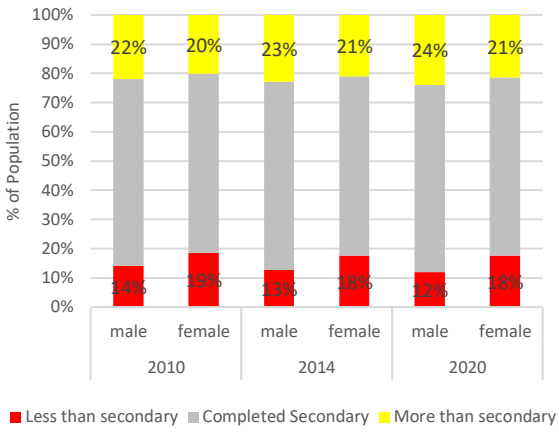
The gap in human capital accumulation across location and socioeconomic status is a critical challenge in achieving greater inclusion. Higher education is associated with a lower poverty rate, which emphasizes the importance of education to enhance equity (Annex D). However, educational attainment is lower among population in rural areas, demonstrated by the much larger share of the population with less than secondary education and the much smaller share with more than secondary education (Figure 23). This pattern is almost unchanged over time. The gender gap has also been constant, which is shown by the larger share of women with less than secondary education and the slightly lower share of women with tertiary education (Figure 24).

Figure 23: Educational attainment among the population ages 15+, by urban and rural location



Source: Data of SSCRA.

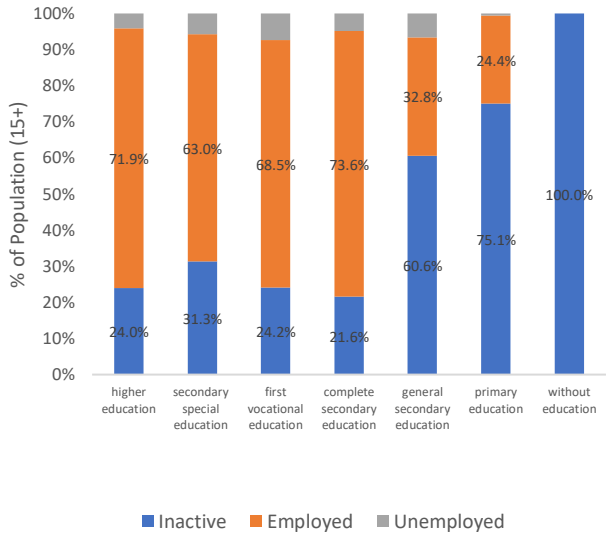
Figure 24: Educational attainment among the population ages 15+, by sex



Source: Data of SSCRA.

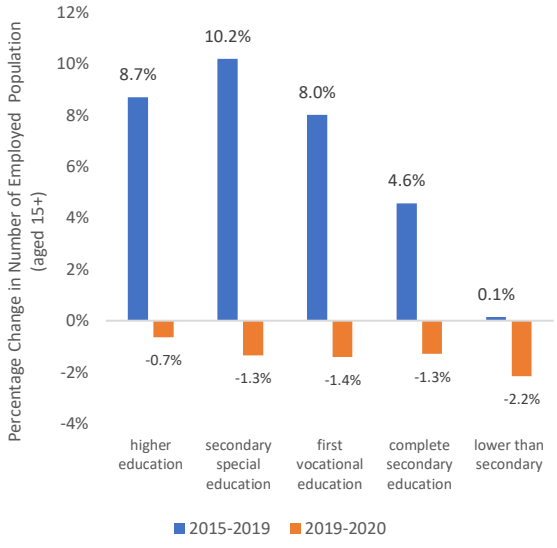
Education and skills are critical determinants of labor market outcomes and therefore of earnings and socioeconomic outcomes. If labor market gains are to be inclusive, equal access to higher education and vocational training is essential. Gaps in human capital translate into unequal labor market outcomes, whereby a significantly larger share of the inactive population is among those individuals with lower than secondary education (Figure 25). Furthermore, employment grew more among individuals with higher, secondary, and vocational education in 2015–19. Although workers at all levels of educational attainment suffered job losses in 2019–20, workers with higher education were significantly less vulnerable compared with others (Figure 26). Given that income from employment has been the major driver of income growth, boosting educational attainment to enhance readiness for higher-quality, higher paying, and more stable jobs is critical to improving economic inclusiveness.

Figure 25: Labor market status, by educational attainment, 2020



Source: Data of SSCRA.

Figure 26: Change in employment, by educational attainment, 2015–19 and 2019–20



Source: World Bank calculations based on SSCRA data.
Note: The growth rate of the employed population is calculated by computing the increase in the employed population as a share of the employed in the base year.

Box 3: Social protection in Azerbaijan

Azerbaijan's social protection system includes contributory pensions, unemployment benefits, and multiple social assistance programs, but is dominated by social insurance programs, particularly the pension system. Social insurance programs dominate social protection spending, accounting for over 85 percent of the spending, on average,

over the last decade, while social assistance programs accounted for around 14 percent.[a] Meanwhile, the share of labor market programs was low, at an average of less than 1 percent of overall social protection spending in 2011–19.[a]

The government has initiated a series of reforms in the social protection system since 2015. These reforms include: approval of Employment Strategy of the Republic of Azerbaijan for 2019-2030, adoption of the new Law of the Republic of Azerbaijan on Employment, establishment of the Labor and Employment Subsystem, and approval of the National Qualifications Framework for Lifelong Learning of the Republic of Azerbaijan.

As a result of these reforms, there has been a significant improvement in the coverage and generosity of the social protection system. According to the estimates provided by the Ministry of Labor and Social Protection, annual coverage of the social protection increased by 3.4 million people in 2022, the number of labor contracts increased to 1.7 million contracts in the past four years, the ratio of the minimum wage to the average monthly wage increased from 2.5 percent in 2018 to 4.1 percent in 2020, and pension payments increased by 5.1 times in the past four years to 473 manats in 2020. In addition, as a result of measures taken under the new law on employment, in 2018-2022, 340,000 additional people were provided with jobs, 49,000 families were involved in self-employment, 8,500 people participated in vocational training, and 125,000 people were employed in social work.

Effective social protection has been crucial to safeguarding the poor and vulnerable in Azerbaijan, especially during the COVID-19 pandemic. According to the Ministry of Labor and Social Protection, the government has supported 4.8 million people (48 percent of the population) during the pandemic through employment and social welfare programs, such as the expanded and targeted social assistance program and the existing unemployment benefit scheme, as well as one-off payments (as of April 2020).[b]

As proposed in subsection 3.2, enhancing public access to official data may deepen the understanding of the effectiveness of the social protection system. Although social protection programs have been effective in mitigating the negative effects of COVID-19, the magnitude of the impact of having such programs is unclear. In order to assess the impacts of social protection programs on the welfare of the population, rigorous econometric analysis is required. Going forward, granting access to micro-level data to academia, think tanks, and international organizations may be useful in conducting impact evaluations of social protection programs as well as other policy reforms and development projects.[c]

a. World Bank, forthcoming, CEM. b. NEWS AZ, 2020. c. World Bank, 2021k.

Section 2. Core Development Challenges

Subsection 2.1 Challenge 1: Rebalancing the Economy toward the New Growth Model

2.1.1 What Is the New Growth Model?

The recession and slow recovery triggered by the oil price drop in 2014 revealed structural rigidities and inefficiencies in the economy. A key challenge in Azerbaijan is to transform the economy toward a new growth model with more inclusive and sustainable growth that builds a secure middle class. Economic diversification must be accelerated in Azerbaijan because of the changing economic and geopolitical environments that have emerged since 2015, such as the increased global shift toward the green transition, combined with declining oil reserves; uncertainties arising because of heightened political tensions in the wider region; and the need for recovery and reconstruction in post-conflict areas. The new growth model would emphasize rebalancing the economy in multiple dimensions, including the composition of the asset base; a productivity shift, especially in agriculture; regional development; digital development; and improvements in fiscal management by safeguarding revenue. A dynamic private sector, increasing investment in human capital, and an accelerated transition to climate resilient and greener growth are critical components of the shift to the new growth model, which will be the focus of subsections 2.2, 2.3 and 2.4.

2.1.2 Rebalancing Assets: Increasing the Household Asset Base

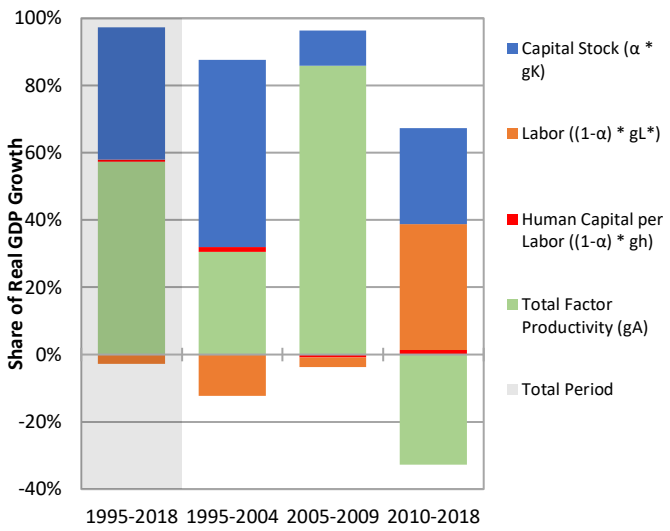
Azerbaijan is resource dependent and is characterized by limited asset diversification. Regional and international experience highlights the importance of diversifying a country's asset base to sustain growth in the long run and diversify the economy away from natural resources. However, successful diversification in terms of production and exports in resource-rich countries takes time.[12] Rather than targeting the diversification of products

[12] Between the 1990s and mid-2010s, only 8 oil-rich countries out of 50 countries were able to diversify exports (World Bank, forthcoming, CEM).

and exports directly, a focus on the diversification of assets is suggested as feasible and effective in the shorter term. Experience shows that a balanced mix of capital assets is associated with higher labor productivity and lower output volatility, which are both critical to achieving sustainable growth (World Bank, forthcoming, CEM).

Middle-income countries, such as Azerbaijan, often fail to sustain total factor productivity (TFP) growth, which leads to stagnation in economic growth. The literature shows that countries successfully transitioning from middle-income to high-income status find new sources of TFP growth (World Bank 2017). Indeed, 85 percent of growth slowdowns among middle-income countries can be explained by TFP slowdowns. Azerbaijan is no exception. Between 2010 and 2018, the contribution of TFP to growth was negative (Figure 27). TFP gains that contributed significantly to growth during the commodity boom of 2005–08 were replaced by capital stock and labor during the last decade.[13]

Figure 27: Contributions of labor, physical capital, human capital, and TFP to growth



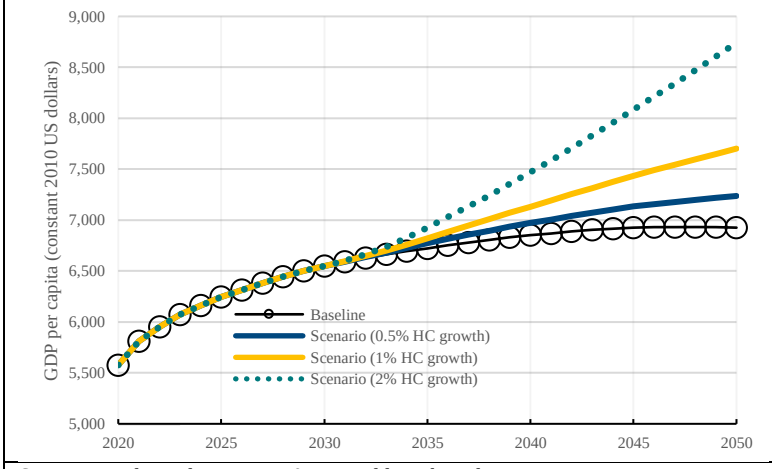
Source: World Bank, forthcoming, CEM.

Asset diversification, with a particular focus on human capital accumulation, is one of the key drivers of growth that can enhance TFP expansion in Azerbaijan. However, the contribution of human capital accumulation to growth has been negligible. During the last three decades, the contribution of human capital accumulation to Azerbaijan's economic growth was close to zero, lagging regional comparators. This result was driven by underperformance in learning outcomes (World Bank, forthcoming, CEM). Moreover, Azerbaijan's human capital accounted for only 23 percent of the country's overall asset portfolio in 2018, compared with the average of 66 percent in upper-middle-income countries and the average of 37 percent in low- and middle-income countries in Europe and Central Asia (World Bank, forthcoming, CEM). Human capital constraints—indicated, for example, by the low human capital index (HCI)—translated into the shortages in skilled labor faced by the private sector and the low productivity in the nonhydrocarbon sectors. The low contribution of human capital to growth is alarming and presents a greater challenge to the future growth of the country. The COVID-19 pandemic may have aggravated the situation, slowing the pace of human capital accumulation and potentially exerting longer-term impacts on labor productivity.

[13] The 1995–2004 period was capital intensive, coinciding with huge FDI inflows into the hydrocarbon sector. The years 2005–09 were the period of the commodity boom, with huge productivity gains in the extractive industry fueled by large investments during the preceding period. The baby boom during this period led to an increase in the labor force in 2010–18. New labor entrants were mostly absorbed in the services sector. Yet, because of the persistently large share of labor in low productivity agriculture and the informal sector, TFP dropped in the last decade. (See World Bank, forthcoming, CEM.)

Human capital accumulation could boost GDP per capita by between 4 percent and 26 percent in 2050, compared with a baseline scenario of the continuation of the current trend (Figure 28). Combined with its positive effect on productivity, human capital accumulation may potentially increase GDP per capita to US$8,741, compared with US$6,927 (constant 2010 US dollars) under the baseline scenario in 2050.[14] Because of the positive spillover of human capital on TFP, the contribution of human capital accumulation to GDP appears to be greater than the contribution of public and private investment and female labor force participation.[15]

Figure 28: Projected impact of human capital accumulation

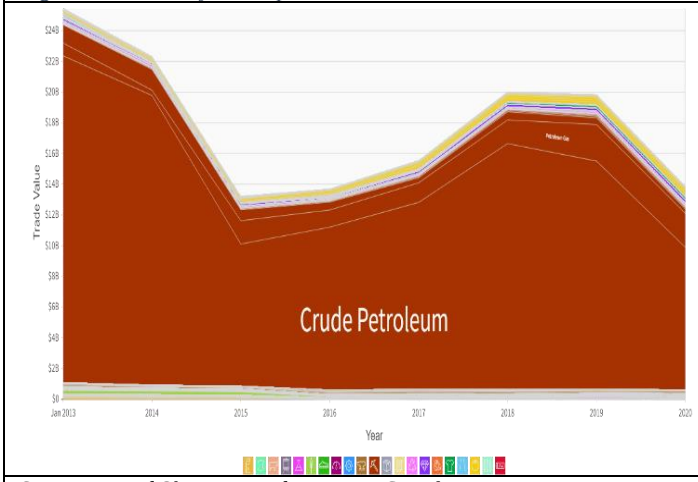


Source: Mendes and Pennings 2021; World Bank analysis.

2.1.3 Enhancing Connectivity: Integration through Trade and the Role as a Regional Hub

Azerbaijan's geographical location offers important trade opportunities. Because of the country's relatively small domestic market, the government and stakeholders should exploit this potential to accelerate growth. For example, the Trans-Caucasus Transit Corridor may serve as a key passage for traffic and trade across the Caspian Sea between China, Kazakhstan, and other landlocked Central Asian countries in the east, and Georgia, Türkiye, and Europe in the west. However, it has been difficult to expand exports beyond the hydrocarbon sector, and commodity exports are destined for a small group of developed markets, which makes Azerbaijan susceptible to concentrated price and market fluctuations.[16] Efforts to diversify export products are under way, demonstrated by the slight increase in the share of agriculture in exports[17] (Figure 29), but challenges remain. For example, Azerbaijan has been involved in the accession process of the World Trade Organization since 1997 to reach a wider variety of markets, but, as of April 2022, the process is still ongoing despite some progress (WTO 2022). A new set of tariffs on imports was adopted in 2018 to simplify the regime and increase trade volume (ITA 2021). Further progress in addressing monopolies, conflicts of interest

Figure 29: Azerbaijan's export structure, 2013–20



Source: Data of Observatory of Economic Complexity.
Note: The yellow component corresponds to agricultural products.

[14] The baseline case assumes 0.1 percent annual growth in human capital in 2035–36 and 0.2 percent annual growth in 2037–50. This assumption on human capital growth is based on two estimates. One is a United Nations estimate that predicts human capital growth at close to 0 percent. The other is a World Bank HCI estimate, assuming an extra 1.4 years of children's schooling in 2006–18. Assuming that it takes until 2035 for today's preschoolers to join the labor force, human capital growth will only start to show a positive trend in 2034, slowly increasing to 0.2 percent by around 2038 (Mendes and Pennings 2021).

[15] The impact of public and private investment becomes negligible in 2050 because of the gradual decline in the marginal product of capital, assuming 6–8 percent of GDP in public investment and 15 percent of GDP in private investment in 2020–50. Female labor force participation was assumed at 70 percent. These assumptions were chosen based on the current trend. For details on the model, assumptions, and simulation results, see Mendes and Pennings (2021).

[16] Azerbaijan's trade is highly concentrated in primary goods. Approximately 95 percent of exports consist of oil and gas products. Nonenergy exports are distributed across only a few sectors, mostly primary goods (fresh fruits and vegetables, cotton, and aluminum).

[17] This is a reflection of the government's effort in targeting four nonhydrocarbon sectors to diversify the economy: agriculture, tourism, information and communication technology, and transportation.

in regulatory and commercial matters, corruption, and judiciary may reduce trade barriers and promote trade (ITA 2021, World Bank, forthcoming, CPSD).[18]

Azerbaijan's unique location also offers opportunities for the country to become established as a regional transit and transport hub. The development of international transport and transit corridors passing through Azerbaijan is seen as one of the competitive advantages of the country and an opportunity for diversification of the economy and greater spatial and social inclusiveness. For example, the north-south corridor constitutes an important link along the 7,200 kilometer multimodal corridor from India, Iran, and other Asian countries to Russia and Northern Europe (named the International North-South Transport Corridor). The realization of these corridors is expected to improve the country's competitiveness, resilience, and access to international markets. Emerging factors, such as the disruption of global supply chains because of the COVID-19 pandemic and the invasion of Ukraine, have increased the importance of the transport and logistics sector in Azerbaijan. The tripartite armistice statement of Armenia, Azerbaijan, and Russia increased the possibilities of opening the regional transport and communication corridor connecting Armenia and Azerbaijan, and post-conflict reconstruction has enhanced the opportunities for regional connectivity and integration.

The government has prioritized investments in hard and soft infrastructure and embarked on institutional and regulatory reforms to leverage the country's geographical position as a land bridge between Asia and Europe and advance the aspiration of the government to turn the country into a regional logistics hub. Progress has been made in areas such as: (1) transport facilitation, (2) supply chain digitalization and border management improvements, (3) institutional and operational reforms among state-owned enterprises (SOEs) in railways and shipping, (4) capital investments to expand corridor capacity and reliability and government sponsorship of strategic projects, (5) increased private sector presence in ports and warehousing, and (6) legal reforms to improve the investment climate and the quality and availability of logistics services.

Investing further in physical capital will also be critical if Azerbaijan is to become established as a regional hub. A significant part of the physical infrastructure of the key east-west, north-south, and south-west transportation corridors (such as railway tracks on the north-south and south-west corridors, power supply and signaling systems along most of the railway network, some parts of the motorways in the north-south corridor and other corridors, and so on) have still not been rehabilitated and need large-scale investment. Meanwhile, the successful development and performance of transit corridors require that logistics issues and intermodal bottlenecks be addressed, including improved efficiencies through capacity building, digitalization, and the automation of systems. Rebuilding the infrastructure of the conflict-affected areas and restoring the connectivity of these areas with the rest of the country as well as the reconstruction of communication lines with Armenia are paramount tasks for the government and will absorb a large portion of the country's resources in the years to come. Increased private capital mobilization, including through public-private partnership modalities may be critical to building modern, sustainable, and reliable infrastructure, although further efforts are required to design a comprehensive public-private partnership framework and equip professionals who work on such partnerships with essential skills in assessing the associated fiscal implications and managing fiscal risks (World Bank 2022b).

2.1.4 Increasing Productivity, Especially in Agriculture

Agriculture is a major contributor to the country's non-oil economy. It offers significant development opportunities and great potential for stimulating and diversifying future growth, job creation, and food security. Overall, the sector has shown considerable resilience to economic turbulence. While the share of GDP represented by nonenergy sectors declined by 13.0 percent in April 2020, agriculture output recorded a robust growth of 3.8 percent (World Bank 2020a).

However, the sector lags in productivity and there are several challenges in realizing the country's agricultural potential. Food safety compliance, which is fundamental in driving agricultural compliance through high-value agri-food chains and the diversification of export markets, is one of the main challenges. The value chain links are fragmented and there is an overreliance on a few markets for the main export commodities. The

[18] Progress has been made to ensure transparency in the judiciary system and to reduce corruption. This is reflected, for example, by the implementation of the Decree on "Deepening Judicial and Legal System Reforms" signed in 2019 as well as the "Action Plan of the Development of Justice in Azerbaijan for 2019-2023" approved in 2018, and the "National Action Plan to Strengthen Anti-Corruption 2022-2026" approved in 2022.

sector's exposure to production risks, particularly weather variability, is also increasing. Climate change is already impacting Azerbaijan and is expected to cause yield reductions in major agricultural regions in the absence of adaptation measures. Although most agricultural production is irrigated, the irrigation systems are characterized by inadequate water delivery, high water losses, and salinization. Climate change–related risks are substantial particularly among the rural population, which depends directly or indirectly on agriculture for livelihoods.

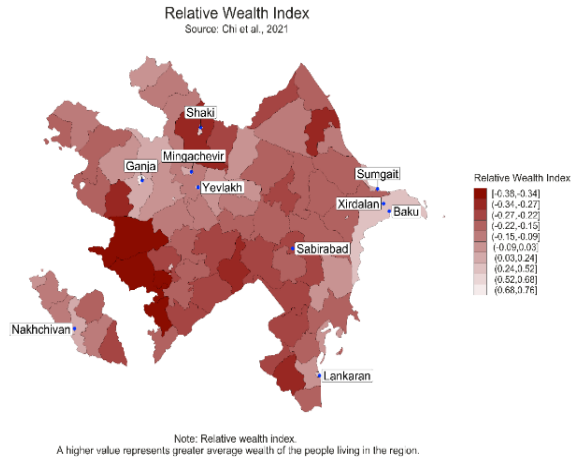
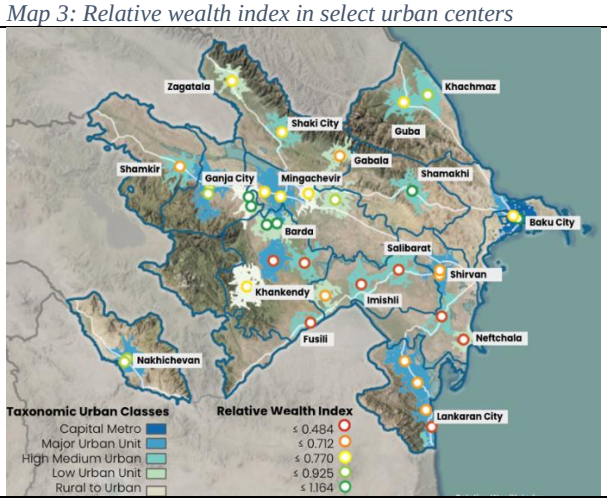
Russia has been the largest export market for Azerbaijan accounting for 86.5 percent of the total exports of fruits and vegetables in 2021.[19] Because of the war in Ukraine and the international sanctions on Russia, the countries in the region, including Azerbaijan, need to diversify their import and export trade to cover other markets. This will require greater competitiveness in agricultural products, which amplifies the importance of ongoing efforts by the government to enhance food security compliance and productivity. Until the war in Ukraine, Russia was a readily accessible market that generated good returns for exporters. Transport and logistics links are well established. Exporters were well connected with Russian wholesale markets. Quality and safety requirements were more easily satisfied than in other markets, and most Azerbaijani products enjoyed high market share. In contrast, access to export markets in Europe, Asia, Central Asia, and the Middle East is constrained by more complex transport and logistics and more stringent quality and safety regulations. The absence of formal trade agreements with many of these alternative markets limits the ability to establish a strong trade presence. The government has established AzPromo to lead in the quest for alternative export markets. It has made some progress through support for trade missions, participation in international trade fairs, and the promotion of the Made in Azerbaijan brand. Scaling up such initiatives should be a priority of the government in light of the constraint affecting trade with Russia.

To achieve greater commercialization in farming and increase productivity and value addition in the agriculture sector in a sustainable manner, the following actions need to be undertaken: strengthening the link between farmers, especially small holder farmers, and producers to companies and hence into the value chains, support knowledge and technology transfers, facilitate public and private logistics capacity, promote improved soil management, invest in irrigation infrastructure and water-saving technologies, increase public investments in rural roads, facilitate private investment financing, build capacity to meet international food safety standards, and promote diversification in export markets. Developing smart agriculture that uses water efficiently, green fertilizers, and clean energy may also help the sector to increase productivity while enhancing resilience to climate-related risks and reducing emissions.

2.1.5 Rebalancing Spatial Development

Poverty remained low following the publication of the first SCD in 2015, but spatial disparities persisted. Increasing the competitiveness of urban centers while boosting access to good-quality services, such as education, health care, and employment opportunities, are the foundation of spatially inclusive growth. Disparities in welfare persist across regions and rayons (Map 2). The gap in poverty rates between rural and urban areas that had been narrowing after 2015 widened again in 2020 to the level observed in 2015.[20] Development in the capital and in secondary cities was also unbalanced, which is demonstrated by a substantial concentration of population and economic activities in Baku.[21] Experience from comparator countries such as Türkiye shows that urbanization can be a strong driver of regional growth by fostering growth in lagging regions (World Bank, forthcoming, "Prosperous Places").

[19] UN Comtrade Database (dashboard) https://comtrade.un.org/ .
[20] In this case, the poverty rates are compared between rural areas and urban areas excluding Baku.
[21] The population in Baku is close to seven times the population in Sumgayit, the second largest city. This is a huge contrast with the international average whereby the second-largest city in a country is one-third the size of the largest city (World Bank, forthcoming, CEM). Moreover, while 64.6 percent of economic output was produced in Baku in 2020, the share of Sumgavit was only 5.4 percent (data of SSCRA). The concentration of economic activities in Baku is also problematic because earthquakes are a major risk to the country, with estimated economic losses of US$40 billion, equivalent to 71 percent of the country's GDP (World Bank, forthcoming, CEM).

Map 2: Relative wealth index, by rayon	*Map 3: Relative wealth index in select urban centers*
	
Source: Calculations based on Chi et al. 2022. *Note:* The darker shade is associated with a higher poverty rate.	*Source*: 2020 data of GeoAdaptive, Boston.

To understand the potential benefits of urbanization in Azerbaijan, geospatial analysis was conducted using the latest remote-sensing, machine learning, and geographic information technologies available. Analysis reveals that, despite the dominance of agglomeration in Baku and Ganja, urban centers are also growing in less well-off regions such as Shaki-Zagatala. Because of differences in structures, initial conditions, and landscapes, there are variations in the speed of urbanization measured by area expansion and population growth.[22] However, there are signs that urban centers are also expanding in small and moderate urban clusters. The growth rate by population and area between 2010 and 2020 was exceptionally high in Gabala which is classified as small town and was associated with relatively high wealth (Table E 1).[23] In this area, economic transformation is expected to deliver the benefits of agglomeration.

In Azerbaijan, urbanization has a U-shaped relationship with wealth. Large and established urban agglomerations, as well as small and growing city centers, are associated with relatively high wealth, while medium urban agglomerations are relatively less well off. Additionally, the analysis found that urban areas in southern Azerbaijan along highways M3 and M6 tend to be less well off, while those along highways M1 and M2 are relatively well off (see Map 3). Urbanization rate was also exceptionally high in Astara which is classified as medium urban agglomeration located in southern Azerbaijan but associated with one of the lowest relative wealth index scores among 28 urban areas. Analysis shows that this area may not have reached a mature stage of development and may be associated with relatively low level of employment and low access to services, such as education and health care. Further analysis is needed to uncover the underlying causes of the spatial welfare gap between urban centers in the north and urban centers in the south.

The analysis also confirms that road access is still a challenge in all areas and that investments in local road networks have been insufficient to meet the country's needs. Better connectivity to agricultural areas and improved logistics are expected to boost opportunities for rural development by reducing the transportation cost and time and road disruption risks facing agriculture supply chains. Despite significant improvements in highways and intercity roads, investments are required in the local road network; almost 50 percent of the core network is not maintained. Local roads under the administration of municipalities are also in poorer condition (World Bank 2022b). Ongoing efforts include (1) strengthen the road asset management practices and a performance-based

[22] Between 2010 and 2020, urban areas grew by around 444 square kilometers, over half of which occurred in Baku. Other urban areas that grew relatively quickly were the cities of Ganja, Shaki, and Sumgait.

[23] Wealth was estimated by using the relative wealth index constructed by the team from UC Berkeley's Center for Effective Global Action and Facebook's Data for Good. The index predicts the relative standard of living within a country using nontraditional data sources, including satellite imagery and deidentified Facebook connectivity data. The index is validated using ground-truth measurements from the Demographic and Health Surveys. The data are provided for over 130 low- and middle-income countries at 2.4 km resolution, including Azerbaijan. The datasets have been used, for example, in World Bank projects in Nigeria and Togo. See Relative Wealth Index (dashboard), Humanitarian Data Exchange, United Nations Office for the Coordination of Humanitarian Affairs, New York, https://data.humdata.org/dataset/relative-wealth-index.

road maintenance system, (2) introduction of enhanced institutional mechanisms to ensure financial and physical sustainability, (3) reducing dependence on public financing in the sector and introduction of toll systems, (4) effective road asset protection and axle load control mechanisms through the introduction of a networkwide weigh-in-motion system, and (5) provision of enhanced road user information services, including real-time information to travelers.

2.1.6 Digital Development

Economy-wide digital transformation is a key contributor to economic diversification, growth, human capital development, transparency, and inclusive development in Azerbaijan. Digital development is also featured in Azerbaijan 2030 as a driver of sustainable growth and global competitiveness. As the economy becomes more diversified, the digital economy not only offers an avenue to develop a new industry in digital services, but also enables the traditional sectors of the economy (including the public sector) to deliver better services, drive efficiency and productivity, and gain greater access to markets, inputs, information, and innovation.

The government has recently focused on reforms to stimulate digital economy development. The Ministry of Digital Development and Transport has been given the responsibility to coordinate digital transformation initiatives. The new management of the ministry declared that broadband development was a key priority, setting a target for universal broadband access by 2024, which follows the inclusion of broadband connectivity under the universal service obligation (Trend News Agency 2021a). The government also announced reforms to improve the enabling environment and market structure by establishing a telecommunication sector regulator and merging the two SOEs operating in the fixed broadband market to mobilize private investment in the sector (*Azernews* 2021; *Daily News* 2022).[24] In addition to initiating reforms in telecommunications to improve market outcomes such as in digital access, affordability, and the quality of connectivity, the government has undertaken steps to improve the use of digital connectivity and services across the economy, for example, by expanding the mandate of the Ministry of Digital Development and Transport to include digital economy development and establishing the Agency for Innovation and Digital Development to catalyze progress toward economy-wide digitalization, with the goal of fostering a digital society (Trend News Agency 2021b).

However, the development of the telecommunication sector, which provides the infrastructural foundation of the digital economy, has not kept pace with regional and income comparators, curtailing the country's potential to realize digital dividends. The absence of separation between sectoral policy making, service provision, and regulation and market structure dominated by SOEs is a long-standing barrier to telecommunication sector development in Azerbaijan. Combined with an outdated enabling environment, the lack of competition has contributed to limited investment in the expansion and upgrade of digital connectivity infrastructure, resulting in an urban-rural digital divide in access, affordability, and quality in digital connectivity. This digital divide risks increasing spatial inequities in access to economic opportunity, which is compounded by the ongoing COVID-19 pandemic and the significance of digital connectivity in the COVID-19 response.

Effectively realizing the benefits of digital economy development will require the improvement of digital access and the promotion of digital adoption by individuals, businesses, and the government. Barriers to digital development include a divide in accessibility, a skills and usage gap, and low digital adoption by private firms, such as in financial services. Ensuring that digital opportunities are available for all individuals, businesses, and levels of government requires the availability of high-speed broadband across the country. Yet, in Azerbaijan, the broadband market exhibits an urban bias.[25] The quality of digital infrastructure and broadband services needs to be upgraded, with significant investment in modern technologies such as fiber-optic networks and 4G and 5G.[26] The government can also support digital literacy and digital skill development programs, particularly in rural areas, to build familiarity and comfort with broadband connectivity and digitally delivered services. Given the low digital

[24] As of May 2022, there were still two SOEs operating in geographically separated areas: Baktelecom, which operates in Baku and neighboring towns, and AzTelekom, which operates in other areas. By merging these two, the government is expecting to attract more private investors and increase efficiency in the market.

[25] According to estimates, fewer than half of rural households subscribe to fixed broadband services compared with over 70 percent of urban households. The number of rural households is estimated at 929,250. Because only Aztelekom serves areas outside of Baku, its subscriber base (444,359 subscribers) is assumed to be the number of rural fixed broadband subscriptions. This results in an estimated rural fixed broadband penetration of 40.6 percent (World Bank 2022e).

[26] Fewer than 10 percent of households in Azerbaijan subscribe to fiber optic–based internet compared with over 70 percent in Georgia (World Bank 2022e).

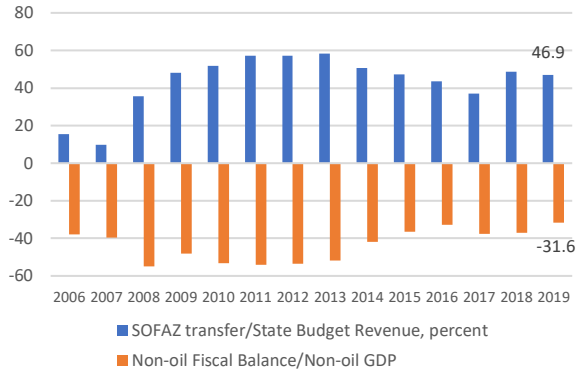
adaptation of private firms, there is a role for the public sector in raising awareness and building trust in the online environment to drive digital adoption.[27]

2.1.7 Safeguarding Fiscal Revenue

Oil revenues are exhaustible and thus need to be managed to promote intergenerational equity and ensure that future generations can also benefit from the resource windfall. To achieve this, fiscal policy needs to address two questions: (1) How much should be saved from oil revenues? and (2) How should these savings be managed?

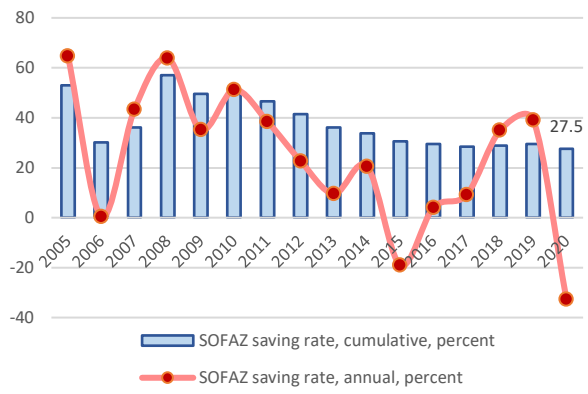
Given their exhaustibility, oil revenues need to be spent and saved by balancing current needs with the needs of future generations. In Azerbaijan, the balance has been highly volatile, tilting toward current spending. Higher spending is also not sustainable, as reflected in the significant non-oil fiscal deficit (Figure 30). Strengthening enforcement and transparency of fiscal policies are critical in enhancing the credibility of fiscal policies (World Bank, forthcoming, CEM). A new fiscal rule was introduced in 2019 to address procyclicality and stabilize the revenue from natural resources, which helped reduce the non-oil fiscal balance to 32 percent of non-oil GDP in 2019 (Figure 30). However, this level of non-oil fiscal deficit is still large relative to other countries (World Bank, forthcoming, CEM).[28] Fiscal tightening and the new rule allowed the SOFAZ saving rate to reach 27.5 percent in 2020, despite the suspension of the new fiscal rule because of the oil price drop and the COVID-19 crisis (Figure 31). Given the high oil price in 2022, the sizable sovereign wealth funds, and the low government debt before the pandemic, Azerbaijan may be able to shoulder the debt burden in the short term. However, to achieve longer-term fiscal sustainability, there should be clear longer-term benchmarks, such as targeted debt-to-GDP ratios and the government's net fiscal position (debt stock minus the sovereign wealth fund balance) (World Bank, forthcoming, CEM).

Figure 30: Oil revenues and non-oil fiscal balance



Sources: World Bank estimates; SOFAZ; Ministry of Finance.
Note: Non-oil fiscal balance to non-oil GDP is calculated as the difference between consolidated non-oil revenues and consolidated non-oil spending divided by the non-oil sector GDP at factor prices.

Figure 31: Saving rates out of SOFAZ revenues



Sources: SOFAZ; World Bank estimates.
Note: Annual SOFAZ saving rate is calculated as the difference between annual SOFAZ revenue and annual SOFAZ spending divided by the annual SOFAZ revenue.

In addition, tax policy and administration reforms can be critical to increasing the fiscal space in the longer term. In Azerbaijan 2030, the government acknowledges the need to improve tax policies. Reforms are under way, including the recent twinning project to support the SSCRA and the State Tax Service to strengthen business statistics (SSCRA 2021). However, the government still needs to advance the reform process to improve non-oil and gas revenue mobilization to strengthen fiscal sustainability and enhance fiscal space (World Bank, forthcoming, CEM). Monitoring tax incentives and exemptions, reforming the tax regime for small businesses, and increasing the quality of taxpayer services are among the policy actions recommended.

[27] Prior to the pandemic, while nearly half the enterprises surveyed had access to the internet, fewer than 5 percent used internet to receive or place orders. The underdeveloped digital payments and financial services market likely also contributes to lower digital adoption (World Bank 2022e).
[28] There has been progresses to assure fiscal sustainability. For example, the upper limit of the ratio of the non-oil fiscal balance over non-oil GDP was set at 27.5 percent by the end of 2022 (Decree No. 1637) in 2022.

Reform in public procurement may further support fiscal transparency because a large share of the annual budget is utilized through public procurement. According to official figures, manat 6.6 billion in public funds were spent on public procurement contracts in Azerbaijan in 2020 (SAI 2020), which represents almost 25 percent of state expenditures (the approved state budget in 2020 was manat 26.4 billion) (World Bank 2022f). The public procurement law was amended in 2018, strengthening the link between procurement planning and the budgeting process and introducing e-procurement and a code of conduct for procurement staff. The State Procurement Agency that was tasked with the implementation of the law was abolished in January 2016, and, since then, implementation is controlled by the State Service for Antimonopoly Policy and Consumer Market Control in the Ministry of Economy. However, there are still challenges, such as (1) the large number of single sourced and direct contracts, (2) the large number of failing bidders during the evaluation of open tenders, (3) the limitations and lack of flexibility of the current e-procurement system, (4) the lack of adequate public oversight and access to procurement-related information, and (5) the need for professionalization among public procurement experts. The COVID-19 outbreak led to an increased rate of direct contracting. The new public procurement law has been drafted and is awaiting review and approval by the Cabinet of Ministers.

Subsection 2.2 Challenge 2: Fostering Private Sector Growth

Traditional drivers of growth will likely become less effective given that global energy market developments point to a shift toward renewables over the medium to long term. Oil and gas production is expected to propel growth in 2022 because of the sanctions against Russia, but the increase is expected to subside after 2023 (World Bank 2022d). These risks to public revenues through hydrocarbon receipts could significantly constrain the government's ability to support the economy through fiscal policy and could aggravate existing macroeconomic vulnerabilities. In the past, growing revenue from the hydrocarbon sector supported the growth in the nonhydrocarbon sectors and increased labor income and social spending, which led to substantial poverty reduction and growth. However, oil and gas are exhaustible resources and, because of global acceleration toward renewables, revenue from the hydrocarbon sector is expected to decline in the medium term. Still, the nonenergy sector is, to some extent, dependent on funding from oil and gas revenues.[29] The challenge is to develop self-sufficient nonhydrocarbon sectors capable of providing a sustainable source of growth and employment, even if revenues from the hydrocarbon sector drop.

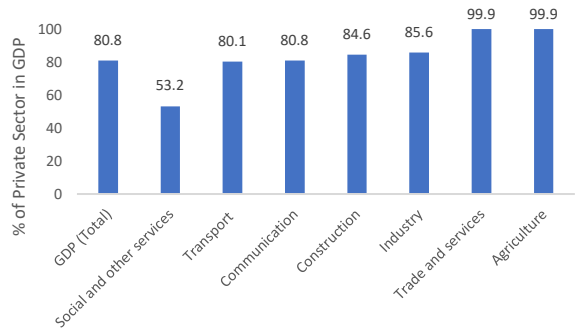
Azerbaijan should shift from growth driven by public sector spending to growth led by private sector competitiveness and productivity to achieve greater economic diversification and unlock growth that creates good jobs. Economic growth led by the dynamic and innovative private sector is one of the focus areas in Azerbaijan 2030. The new growth model allows for greater diversification, which should be accompanied by a rebalance in the roles of the public and private sectors; the former should become a facilitator rather than the main driver of growth. The public sector should enable, not compete with, the private sector to support economic diversification. This can be accomplished by developing a stronger regulatory and institutional framework for competition, embedding competition principles in regulations, and supporting the effective implementation of these regulations to level the playing field.[30] Mainstreaming competitive neutrality could foster better market dynamics and efficiency, especially given the inefficiencies and dominant role of SOEs in some of the sectors. The government might also encourage innovation and entrepreneurship to increase the capacity of firms and individuals to adopt new business models, design sophisticated technologies, and create new and improved products and services by increasing the state budget allocated to research and development, establishing incentives and mechanisms to encourage firms to invest in the development of the knowledge and skills of employees, and creating a national innovation and entrepreneurship strategy to facilitate the effective and coordinated use of public funds (World Bank, forthcoming, CPSD). The transition of the private sector to a position of greater importance will be an important component of the new growth model.

[29] Spillovers from the invasion of Ukraine and associated sanctions on Russia are expected to affect export-oriented nonenergy sectors, especially agriculture and tourism. Other sectors, such as manufacturing, will likely face difficulties in accessing critical imports, such as wood, steel, and fertilizers (World Bank 2022d).

[30] For example, the Law on Antimonopoly Activity has been subject to important reforms, but further efforts are needed in the legal framework and in improving enforcement (World Bank, forthcoming, CPSD).

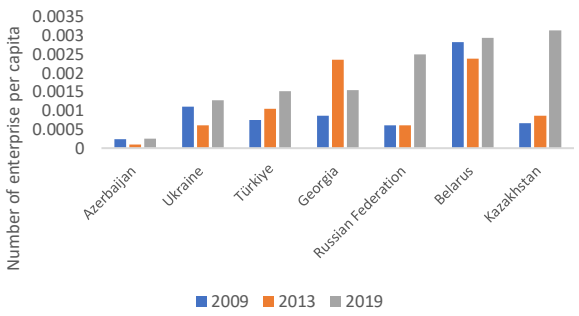
The development of the private sector has been slow.[31] Excluding hydrocarbons, the private sector currently consists mostly of small firms that are domestically owned, not export-oriented, and engaged in low–value added activities such as agriculture, followed by industrial activities centered mainly on hydrocarbons (World Bank, forthcoming, CPSD) (Figure 32).[32] In addition, while the number of private enterprises exceeds the number of state entities, the number of registered private enterprises is extremely low in Azerbaijan relative to comparator countries (Figure 33). Moreover, the seemingly high contribution of the private sector to GDP may need to be interpreted with caution as a notable subset of enterprises appears to be SOEs or firms owned by individuals connected to politically exposed persons.[33] Private investment is also low, accounting for only 10.5 percent of non-oil, non-gas GDP in 2019, a rate significantly lower than the regional and upper-middle-income-country averages (World Bank, forthcoming, CPSD). This reflects a weak investment climate.

Figure 32: The private sector, by economic activity, 2020



Source: SSCRA 2021.

Figure 33: Registered private enterprises per capita



Source: Enterprise Surveys (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys.
Note: The survey years refer to Azerbaijan and Kazakhstan. For Belarus, Georgia, and Ukraine, the year of the first round is 2008.

2.2.1 Improve Investment and the Business Climate in the Private Sector

Although some companies in Azerbaijan have demonstrated the ability to compete in global arenas, the overall private sector is small and globally uncompetitive, often hampered by a difficult business environment. Attracting more FDI in the nonhydrocarbon sectors could foster the emergence of a dynamic private sector. Progress is being made, but challenges remain. The share of FDI in the nonhydrocarbon sectors is limited, amounting to around 10 percent of total FDI in 2020. The government has drafted an investment law and an investment promotion strategy, both of which are awaiting approval and adoption. However, the remaining challenges that lead to low FDI inflows to the non-oil sectors include (1) the country's weak image as an investment destination, (2) a lack of a dedicated investment or FDI law that could signal the government's prioritization of FDI, (3) the lack of a robust investment promotion strategy, (4) the lack of value propositions to attract new investors, (5) a lack of key performance indicators on FDI and monitoring and evaluation to measure progress, and (6) a well-coordinated and concerted national effort within the government and with the private sector to develop and implement the FDI strategy (World Bank 2022g).

The government has made notable progress in recent years in improving the investment climate through broad-based reforms, but there is more to do. In recent years, the government has ushered in legislative and institutional measures to restructure and modernize public administration, reform tax and customs practices, and promote labor and social protection. Particularly, the simplification of tax procedures, a lower tax burden, a reduction in tax rates on small and medium enterprises (SMEs) (from 4 percent to 2 percent), and the introduction of tax incentives for the non-oil private sector have stimulated foreign business interest (AHK and KPMG 2020). Institutional support for export diversification is at the center of many initiatives (for example, the one-stop shop Export Support Center, Azexport portal, AzPromo) (AHK and EU 2019). However, according to the Business

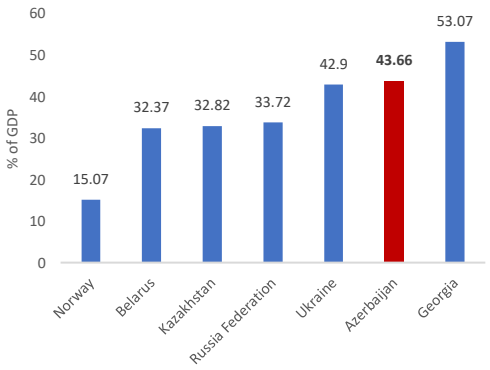
[31] The high business failure rate, the lack of willingness to engage in entrepreneurial activity, and the low density at firm entry are some of the features associated with the slow development of the private sector in Azerbaijan **(**Kintsurashvili and Kresic 2019).
[32] Only 6 percent of all enterprises were completely foreign owned in 2018, and these were concentrated in oil and gas sectors.
[33] SOEs may account for a large share of output (World Bank, forthcoming, CPSD). Another source indicates that major local private companies tend to be owned by individuals connected to politically exposed persons (Bertelsmann Stiftung 2020).

Climate Survey 2020, a third of businesses in the European Union (EU) were not well informed about such initiatives, and close to 40 percent rated these as having poor to average effectiveness (AHK and KPMG 2020). Industrial parks currently provide enhanced conditions for the creation of business clusters; however, the government could further incentivize large firms to establish vendor development initiatives with local suppliers. Policy reforms have also aimed to improve the efficiency and transparency of the judiciary, most notably the e-court system, which significantly improved case management and court proceedings.

There is scope for further improvements in the area of customs procedures, export certifications, and commercial and investment dispute resolution. According to the US Department of State (2021), some of the measures taken in recent years by the government of Azerbaijan to improve the business climate include eliminating redundant business license categories, empowering the popular government service centers of the Azerbaijan Service and Assessment Network (ASAN) with licensing authority, simplifying customs procedures, suspending certain business inspections, and reforming the tax regime. Policy reforms have also aimed at enhancing the efficiency and transparency of the judiciary, most notably the e-court system. Despite the generally attractive legal framework for the protection of foreign investments, institutional bottlenecks still hamper business confidence and economic diversification, for example, in the rule of law, property rights, and market competitivity. Furthermore, a special license to conduct business is required for foreign or domestic companies operating in telecommunication, sea and air transportation, insurance, and other regulated industries (World Bank 2022g, 2022i; US Department of State 2021). There is also scope for improving the commercial and investment resolution system. According to estimates derived from the Business Climate Survey 2020, the current state of the legal-judicial system is one of the principal concerns discouraging FDI (AHK and KPMG 2020; World Bank, forthcoming, CPSD).

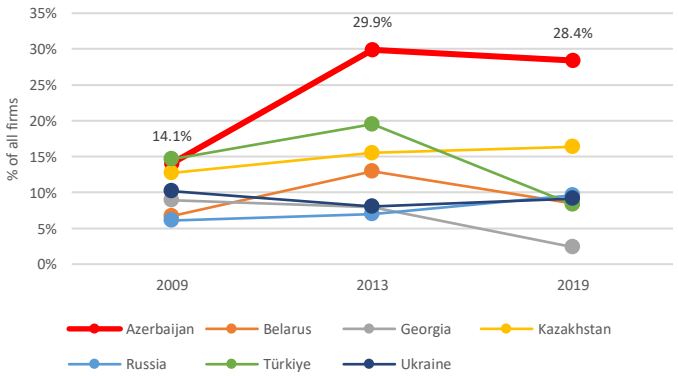
Widespread informality is one of the factors weakening the incentives for private sector growth and thwarting competition, especially in the case of small firms. The Ministry of Labor has undertaken a concerted effort to formalize labor contracts over the past several years[34]; yet, more can be done (World Bank 2022g). According to estimates, the informal economy in Azerbaijan accounted for over 40 percent of GDP in 2015 (Figure 34), one of the highest rates in the region. It also accounts for almost two-thirds of total employment and is reportedly the key obstacle to business across the last three Enterprise Surveys (World Bank, forthcoming, CPSD) (Figure 35). Among the key factors behind the large informal sector are (1) monopolistic structure of the economy, (2) complicated SME tax administration and the need for a simpler graduation regime for small taxpayers, (3) the need to introduce an amnesty for capital investments to enable businesses to reflect their financial situation accurately, and (4) the limited corporate implementation of accounting standards.

Figure 34: Estimated size of informal employment, 2015



Sources: Medina and Schneider 2018.

Figure 35: The informal sector is reportedly the biggest obstacle affecting the operations of private sector firms



Source: 2009, 2013, and 2019 data, Enterprise Surveys (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys.

[34] These efforts include the approval of "On Prevention of Informal Employment in the Republic of Azerbaijan Action Plan" in 2017 by a presidential decree. According to the estimates provided by the Ministry of Labor and Social Protection, as a result of this reform, the number of formal employment contracts increased by 30 percent, or about 400, 000 contracts between 2018 and 2022.

2.2.2 Enhancing Equitable Access to Financial Services

Financial development is critical to private sector growth and inclusion. Given the importance of the sector, numerous reforms and measures were undertaken after the 2014 crisis, with positive outcomes. The latest Findex data show low levels of financial inclusion compared with regional and income group benchmarks.[35] The CBA has made significant efforts to expand digital payments since the crisis. The initial evidence points to increased levels of financial inclusion. According to data of the CBA, the number of customers exhibited a compound annual growth rate of 29 percent in 2018–20. The number of debit and credit cards saw a compound annual growth rate of 20 percent in the same period. The usage of cards has become more robust and vibrant. In the same period, the number of card transactions increased by 93 percent, the volume by 64 percent, and the use of cards for noncash payments (through ATMs, point-of-sale terminals, and e-commerce) surpassed cash withdrawals. As of March 2021, roughly 64 percent of transactions with debit and credit cards were related to noncash payments, and e-commerce accounted for more than half of these transactions. The use of cards for noncash payments observed a compound annual growth rate of 58 percent in 2018–20, compared with a rate of 12 percent for cash withdrawals in the same period (World Bank 2021a). According to the CBA, the number and volume of customer transfers from current accounts via e-banking services rose by 79 percent and 55 percent in 2020, respectively (CBA 2020).

Microenterprises, SMEs, and agricultural firms were among the particularly underserved groups.[36] **Access to financial services by entrepreneurs should be enhanced because it enables businesses to expand, manage finances, and create more jobs.** The banking sector crisis triggered by the decline in oil prices in 2014 had a profound impact on financial sector development. Despite recent improvements and signs of recovery, the sector remains small and bank-centric, still playing a limited role in supporting the financing needs of the economy. The cost of financing and collateral requirements because of risk aversion continue to represent significant financing challenges for firms, many of which rely on internal funds and other sources of funding outside the banking sector. Recent reforms are expected to increase lending in other sectors, but it may take more time for the reforms to translate into tangible outcomes. Several measures were introduced to provide financial support to SMEs and the agriculture sector in recent years.[37] More time and data are needed to ascertain the effectiveness and impact of these programs.

2.2.3 Continued Efforts to Stabilize the Banking Sector

Despite progress, the banking sector still faces structural challenges in the effort to become more dynamic and competitive in supporting private sector growth, and it continues to be vulnerable to shocks, which could have been exacerbated by the COVID-19 pandemic. The authorities have taken significant steps to stabilize the sector and address gaps exposed by the 2014 crisis. This has translated into improvements in the soundness of the banking sector. The sector was better prepared to face the challenges of the COVID-19 pandemic and the oil price shock in 2020. Despite these improvements, the macro-financial risks continue to be substantial, and the sector is still exposed to significant credit and foreign currency risks. In particular, the number of nonperforming loans has decreased substantially since the crisis, though the data may not be fully capturing the actual risks. There is also a need to advance insolvency rights and creditor rights. Although capital adequacy appears to be high in Azerbaijan relative to regional comparators, the ratios are not comparable because Azerbaijan

[35] Only 28.6 percent of adults had an account in 2017, compared with 65.3 percent for the Europe and Central Asia region and 73.1 percent in upper-middle-income countries. See 2017 data of Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, https://globalfindex.worldbank.org/#data_sec_focus. The next release of the Findex data is scheduled for 2022.

[36] Larger firms seem to have better access to financial services as reflected in the larger share of firms with bank loans in the 2019 Enterprise Survey: 37 percent of large firms with bank loan versus 9 percent of small firms. See Enterprise Surveys (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys.

[37] Examples include a public partial credit guarantee program for SMEs with subsequent restructuring of the State Mortgage Fund into the Mortgage Credit Guarantee Fund in 2017; the establishment of the Innovation Agency under the Ministry of Transport, Communications, and High Technologies in 2018; and the establishment of the Small and Medium Business Development Agency. This agency plans to launch a SME Fund with private capital to provide venture capital. Other entities offering services to the agency are AzPromo, Azerbaijan Investment Company, Azerbaijan Industrial Corporation, and Aqrolizing. The instruments offered range from subsidies to concessional loans, guarantees, grants, training, and advisory services. In the agriculture sector, the Agency for Agro Credit and Development has developed a new tool that aims to help financial institutions evaluate loan applications more effectively. In 2019, the government enacted the Law on Agricultural Insurance, and the Agricultural Insurance Fund was established by a presidential decree to help address the sectoral risks.

is not fully aligned with Basel II and III requirements, and issues involved in the recognition of nonperforming loans may be distorting the ratios (World Bank, forthcoming, CEM).

The remaining challenges include (1) gaps in the regulatory and supervisory framework; amendments are needed to bring key financial sector laws in line with international standards to strengthen the powers, governance and independence of the CBA; (2) the influence of the state through direct ownership, concessionary financing programs, or policies that affect the operating environment of banks; (3) inadequate corporate governance practices; (4) the need to strengthen legal, supervisory, and regulatory frameworks for risk-based supervision, including consolidated supervision; and (5) improvements in prudential requirements and in their enforcement (World Bank, forthcoming, FSAP).

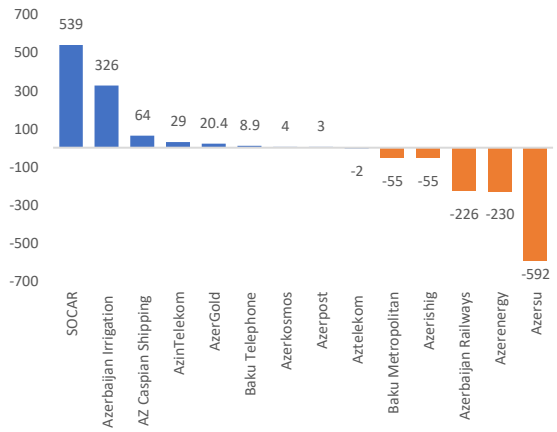
2.2.4 Developing Better Links between Education and the Labor Market

Skills mismatches in the labor market are identified as one of the major constraints for private sector growth. For almost 15 percent of enterprises, an inadequately skilled workforce is the biggest obstacle in business operations.[38] Skills mismatches affect the employability of young people, as reflected in the relatively large groups of young people not in education, employment, or training (NEET).[39] The scope and capacity of higher education institutions to develop knowledge and innovation in society are also limited, reflected by the small share in GDP of public expenditure on research and development (at approximately 0.2 percent of GPD in 2018) compared with regional comparators such as Georgia (0.3), Ukraine (0,5) and regional averages such as ECA (excluding high income) (0.8) and EU (2.2) in 2018.[40] To accelerate structural reform and achieve the intended outcomes through a new growth model, the government and stakeholders in Azerbaijan need to invest more in developing the technical skills of the workforce as well as noncognitive and socioemotional skills through a life-cycle approach to education and skills development.

2.2.5 SOE Dominance and Increasing Inefficiency

While SOEs continue to dominate the economy, an increasing number of SOEs are taking losses and incurring debt, suggesting that the state-led growth model is reaching its limits.[41] There are over 5,000 active SOEs in the country operating in at least 29 sectors, including manufacturing, hospitality, and banking. Many of the larger SOEs enjoy monopoly or near-monopoly status in their areas of operation. However, many SOEs are now taking losses (Figure 36), only marginally contributing to budget revenues, while receiving considerable subsidies from the budget. The fiscal risks associated with SOEs are rising, and yet, the assessment of the fiscal impact of SOEs is limited by the availability of data on fiscal inflows and outflows and on the guarantees provided (World Bank, forthcoming, CEM).

Figure 36: SOE portfolio net results, 2019



Source: World Bank, forthcoming, CEM.

The government recognizes the need to address the inefficiency and strengthen the governance of the SOEs that will remain in state ownership. Promoting SOE privatization has also been discussed. However, this

[38] According to the World Bank (World Bank, forthcoming, CEM), inadequately skilled labor was particularly critical for larger firms (of which over 47 percent cited this as the main obstacle), while access to finance was a more pervasive problem among smaller firms.

[39] The share of youth ages 15–24 not in education, employment, or training (NEET) in Azerbaijan was 18 percent in 2019. This rate was higher than regional comparators, such as Kazakhstan (9 percent), Belarus (13 percent), and Russia (14 percent) and the Europe and Central Asia regional average of 14 percent. See Youth Labour Statistics (dashboard), ILOSTAT, International Labour Organization, Geneva, https://ilostat.ilo.org/topics/youth/.

[40] WDI (World Development Indicators) (dashboard) World Bank, Washington, DC, https://datatopics.worldbank.org/world-development-indicators/.

[41] SOE debt has increased quickly, reaching 26.8 percent of GDP in 2019 from 17.9 percent in 2015. In 2019, the stock of debt (interest bearing loans and bonds) of Azerbaijan's top 14 SOEs reached manat 21.9 billion (US$12.9 billion), equal to 26.8 percent of GDP, and 12.5 percent of GDP if the debt of the State Oil Company of Azerbaijan (SOCAR) is excluded (World Bank, forthcoming, CEM).

process entails a sequenced number of reforms, and progress appears to be slow.[42] The need for structural reform of SOEs is acknowledged, for example, in a statement of President Aliyev on August 6, 2020,[43] stressing the need for the privatization and liberalization of the SOEs, including the State Oil Company of Azerbaijan (SOCAR), AzerEnergy, the Caspian Shipping Company, Azerbaijan Railways, AZAL, and the flag carrier Azerbaijan Airlines.[44] It is also reflected in the changes to the governing structure of the SOCAR in July–August 2021 and in February 2022 by order of the President.[45] Several other steps have been taken to improve the governance and operations of large-scale enterprises. For example, the Azerbaijan Investment Holding (AIH), established in August 2020, has, as of May 2022, taken over the shareholder functions on the portfolio of the 14 largest SOEs and has initiated a broad reform process. The government is committed to maximizing the efficiency and strengthening the governance of the strategic SOEs that will remain in state ownership. This process will require the following: (1) a sequenced set of reforms addressing the rationale for continued state ownership; (2) separation of the state's role in regulatory, policy-making, and operational functions in SOE dominant sectors; (3) strengthening incentives and accountability to raise the efficiency of SOE operations; (4) the state's exit from some SOEs to permit the entry of private investors into competitive and contestable sectors; and (5) implementing necessary safety nets and other support in the form of training, reskilling, and job search support for the workforce that may be released from such SOEs (World Bank, forthcoming, CEM).

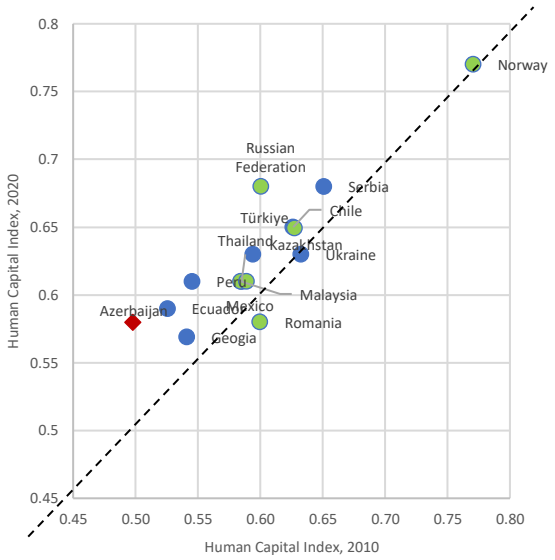
Subsection 2.3 Challenge 3: Enhancing Human Capital Modernization

Human capital is the main asset of the population. For Azerbaijan to achieve more rapid, sustainable, and inclusive growth, human capital accumulation is the key. The transition to the new growth model should be accompanied by an increase in human capital that enhances productivity and enables workers and citizens to adapt to rapidly changing economic, social, and technological conditions. Human capital needs modernization, not merely increasing investment through the traditional system, but also augmenting human capital so people can anticipate and respond to changing and challenging environments and adapt to the new normal while Azerbaijan undergoes the transition to a new growth model. This includes investing in digital literacy and skills development for all.

[42] The discussion on privatizing SOCAR began in the late 1990s. However, the idea has not developed beyond a public discussion (Aliyev 2020).
[43] Statement was made in the meeting with the Supervisory Board of the Azerbaijan Investment Holding.
[44] See Cohen (2020); Eurasianet (2020). The former refers to a study of Gubad Ibadoglu, an Azerbaijan economist at Rutgers University, predicting that, without serious structural changes, the SOCAR could go bankrupt as early as 2023.
[45] See Jdsupra June 3, 2021. https://www.jdsupra.com/legalnews/significant-changes-to-the-governing-2476045/, APA AZ July 19, 2021 , https://apa.az/en/xeber/azerbaijan_energy_and_industry/four-vice-presidents-of-socar-dismissed-updated-354194, and APA AZ August 11, 2021, https://apa.az/en/xeber/official-news/zaur-gurbanov-was-appointed-vice-president-of-socar-355592.

However, human capital accumulation—comprising knowledge, skills, and health that people accumulate over their lives—has been limited in Azerbaijan. The contribution of human capital accumulation to growth has been negligible in the past two decades. Progress has been made as reflected in the improvement in the HCI, which monitored the health and learning trajectory in 174 countries in 2020. Yet, the level of the index in 2020 is lower than the low- and middle-income regional average of 63 percent as well as regional comparators, such as Kazakhstan (60 percent) and Russia (68 percent) (Figure 37). The perception survey also confirms that education and health care are the sectors in most need of institutional reform.[46]

Figure 37: Level and progress: human capital index



Source: HCI Database, World Bank. *Note*: The dashed line is a 45-degree line. The points above represent improvements in the HCI between 2010 and 2020. Countries in blue are regional and global structural comparators and those in green are aspirational comparators.

2.3.1 Education for Better Lives and Better Labor Market Outcomes

The education sector has seen significant reforms in the past two decades, encompassing general education, vocational education and training (VET), higher education, early childhood education, and preschool. Changes to increase the quality of basic education have included improvement of the school-based assessment system, teachers' professional development, and modernization of curricula and infrastructure, including in VET. Azerbaijan has also strived to increase equity by focusing on increasing enrollment and access to quality education for children in vulnerable households.

However, the quality of education at the secondary level is still relatively low compared with regional comparators as reflected in harmonized test scores. Azerbaijan scores 416 out of 625, lower than the low- and middle-income regional average of 460 and the EU average of 506. Moreover, a substantial and widening socioeconomic gradient in learning outcomes persists, with children in wealthy households scoring substantially higher than those in poorer households. The enrollment rates at the primary and secondary levels are almost universal, but the quality may be low as indicated by the low Trends in International Mathematics and Science Study (TIMSS) test scores compared with regional comparators.[47] After the completion of basic education, enrollment also drops significantly, down to 69 percent in upper-secondary education, which is below regional averages. Relatively few students continue on to higher levels of education. Although gross enrollment rates in tertiary education increased from 19 percent in 2008 to 28 percent in 2018, they remain low, below most of the comparators and much below (about half) the regional averages (World Bank 2022h). Public expenditures increased in 2019 by 14 percent and by 40 percent in 2020. Yet, with a projected expenditure of 3.8 percent of GDP on education, the government proportionally spends less than the regional average excluding high income countries (4.5 percent) and the EU average (4.6 percent).[48]

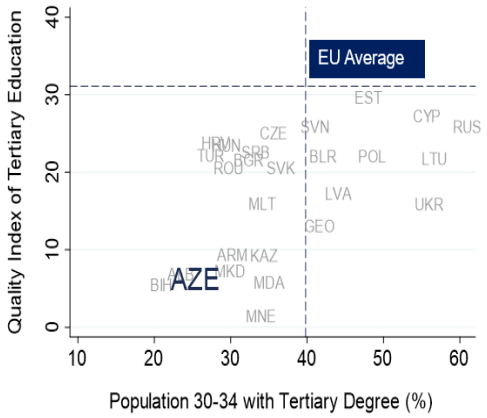
An educational reform that improves learning outcomes implemented today may increase GDP per capita by 5 percent in 2050, and the government is rightly targeting teacher availability and teachers' skills as critical aspects for improving education outcomes in basic education. Continued efforts to improve teacher qualification, teacher practices, and the systematic measurement of the professionalism of teachers are the key. Modernization of the curriculum should also be considered as a complementary policy intervention. Azerbaijan is already among the countries with relatively high average years of schooling (World Bank, forthcoming, CEM). However, learning-adjusted years of schooling is low, at 8.3 years, compared with the regional median of around 11 years, and the country can do more by improving the quality of education at the basic level, including primary and secondary school. Assuming that a major educational reform focused both on quantity and quality enacted

[46] World Bank survey, Governance 2019. See World Bank (2022c).
[47] TIMSS assess students in their final year of secondary school.
[48] The data for the regional and EU average are from 2018 (WDI).

today would reach its full impact quickly, allowing the harmonized test scores to reach the Europe and Central Asia regional average of 479 out of 625, this impact alone will increase GDP per capita to US$7,275 in 2050 compared with the baseline projection of US$6,927 without an improvement in learning outcomes.[49]

The quality of tertiary education is low as measured by the aggregate higher education quality score (Figure 38**)**. Strengthening the academic and financial autonomy of higher education intuitions should be considered as a policy option to provide higher education institutions with flexibility to adapt curricula and staff rapidly to changing demands in the labor market. In Azerbaijan, having a good basic education will not be enough to be productively included in the labor market. Good-quality higher education is essential for a productive labor force. However, the quality of higher education is low in Azerbaijan, and is one of the few countries in the region in which quality-adjusted years of higher education are higher among men than among women.[50]

Figure 38: Quality and attainment in tertiary education, 2019



Source: World Bank 2020b.
Note: The EU average is population weighted.

Enrollment in preprimary education is also low, at 40 percent in 2018, far below the goal set by the Ministry of Education, at 90 percent (for example, see UNICEF 2016). The significance of early childhood education and care for a child's holistic development is well recognized (for example, see UNICEF 2019; Walker 2011). To enhance preschool enrollment, the government has undertaken ongoing efforts, including the launch of preschool preparation groups in 89 general education institutions in 2014 and a joint project with the EU to increase access in remote areas. However, the latest data show that the gross enrollment ratio in preprimary education in Azerbaijan is low, at 40 percent (2018), significantly lower than the regional average (85 percent), the average among countries in Azerbaijan's income group (63 percent), and the EU average (98 percent).

Boosting educational attainment is critical to addressing the skills mismatch in the labor market and creating opportunities for higher-quality, higher-paying jobs. **Limited collaboration with the private sector prevents education and training systems from equipping students with the skills needed for labor markets.** The share of good jobs is extremely low in Azerbaijan compared with regional comparators. This is partially due to the disconnect between the skills offered at schools and the skills demanded by employers. There is little collaboration with the private sector to identify trends in the skills demanded. Similarly, vocational training centers (VTCs) have hitherto not established robust collaborations with the private sector to realign training offerings with labor market and skills demand, identify adequate training methods, and facilitate workplace training opportunities.[51] In other countries, higher education institutions often serve as drivers of research and innovation, but, in Azerbaijan, higher education institutions lack strong links to industry and sufficient means and capacity to work with other actors in the economy to drive entrepreneurship and business development.

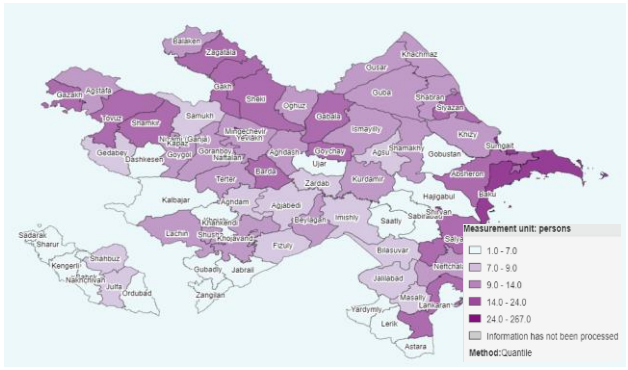
2.3.2 Health Care for Better Quality Life

Despite recent reforms in the health sector, including the introduction of mandatory health insurance, streamlining the delivery network, and increased investment in hospital infrastructure, gaps in health outcomes persist. Policies to address the high dual burden of malnutrition among children and the burden of noncommunicable disease among adults are critical. Moreover, the gaps in health outcomes are, at least

[49] Azerbaijan's latest test score was 416 out of 625. The scenario thus assumes a 10 percentage point increase in the harmonized test score. For details on the model, assumptions, and simulation results, see Mendes and Pennings (2021).
[50] Azerbaijan was among the four countries in the region in which women fared worse than men (the others were Tajikistan, Türkiye, and Uzbekistan). See World Bank (2020b).
[51] Progress is underway. For example, one of the main goals of the Employment Strategy of the Republic of Azerbaijan for 2019-2030 adopted by a presidential decree in 2018 is to establish close relationship between employers and the vocational training system.

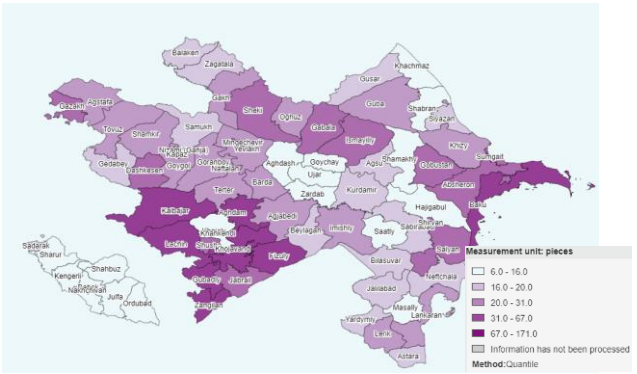
partially, attributed to unequal access to services (Map 4 and Map 5)[52] and underfunding.[53] Azerbaijan lags in early childhood development which has longer-term impact on individual's productivity and livelihoods. For example, under-5 mortality among children under age 5 was 2 percent, one of the highest in the region and above the regional low and middle-income country average of 1.3 percent.[54] Prevalence of stunting among children under age 5 is also high at 18 percent, well above the regional comparators such as Kazakhstan (8 percent) and Türkiye (6 percent). The prevalence of obesity is also high among adults at 20 percent and children under age 5 at 14 percent in Azerbaijan compared with the EU average of 15 percent and 4 percent respectively (World Bank 2020f). The probability of dying between ages 30 and 70 from noncommunicable diseases, such as cardiovascular disease, cancer, diabetes, or chronic respiratory diseases, is also higher in Azerbaijan (22 percent) compared with the regional average (17 percent) and the average of upper-middle-income countries (20 percent) (World Bank 2020f). Public health spending did increase by 58 percent in 2020 compared with 2019, but this was mainly associated with the transition to mandatory health insurance (World Bank 2020e).

Map 4: Physicians per 10,000 population across districts, 2020



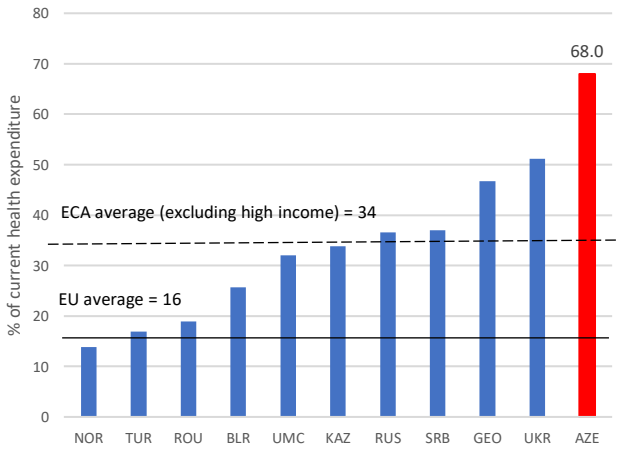
Source: SSCRA.

Map 5: Hospitals per 1000 people across districts, 2020



Source: SSCRA.

Figure 39: Out-of-pocket health expenditure, 2019



Source: WDI.
Note: EU average is population weighted. ECA = Europe and Central Asia region. LIC = low-income countries. MIC = middle-income countries. Data for countries other than Azerbaijan and averages are from 2017.

The data presented may not reflect the impact of mandatory health insurance that was fully introduced in 2020. However, based on the latest available data (2017), the coverage of health care services was among the lowest in the region, and the out-of-pocket (OOP) spending as a share of health care spending was high, well above the recommendation of the World Health Organization (WHO) of 20 percent (Figure 39). More data and time are needed to assess the full impact of mandatory health insurance. However, if heavy reliance on OOP persists, households will continue to be exposed to the risk of impoverishment. Addressing health sector challenges may be even more critical in supporting a resilient recovery from the COVID-19 pandemic.

[52] According to the information provided by the State Agency for Compulsory Medical Insurance, one of the main reasons for the unequal distribution of health care services is the existence of areas affected by conflict. Progress is underway to increase access to quality services in all areas.
[53] According to the latest data available in the World Development Indicators (World Bank, dashboard), government's health expenditure as a share of GDP in 2019 was around 4 percent, which is relatively low compared with other regional comparators, such as Türkiye (4.3 percent), Russia (5.6 percent), Georgia (6.7 percent), Ukraine (7.1 percent) as well as ECA average (9.4 percent).
[54] Human Capital Index 2020 (dashboard) https://www.worldbank.org/en/publication/human-capital#Index .

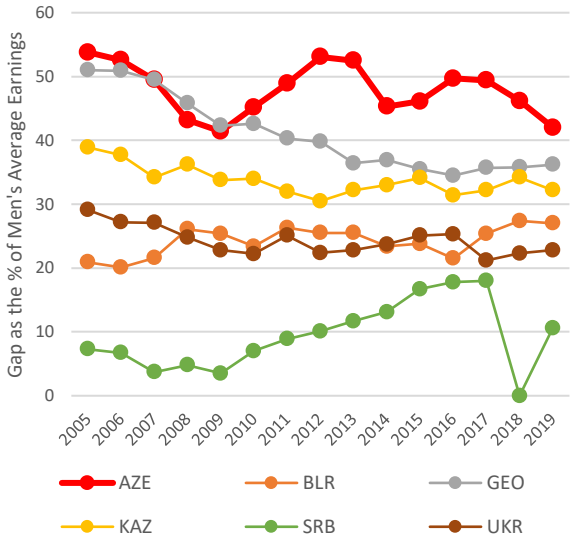
2.3.3 Enhancing Human Capital and Opportunities to Use Them among the Vulnerable Groups

There are some groups that face barriers that prevent them from fully participating in political, economic, and social life. Promoting greater inclusion and thus enhancing equity have socioeconomic benefits to the country, such as an increase in human capital that leads to higher productivity and growth and to social stability by reducing poverty and vulnerability and reducing tension.

Women and Girls

Despite efforts of the government, women still experience exclusion and vulnerability.[55] The level of admission to higher education is almost the same for women and men (48.6 percent for women, 51.4 percent among men), but fields of study are segregated by gender resulting in women mainly preparing for careers in lower-paid fields of education, health, and social services.[56] This results in a large earning gap—compared with the regional average, men earn 42 percent more than women, which is the highest reported gender gap in the region (World Bank 2021c) (Figure 40). In addition, in 74 economies around the world, women are legally barred from working in certain industries, and Azerbaijan is one of these countries. In Azerbaijan, 674 occupations are reserved for men only, without explicit evidence-based justification[57] (World Bank 2020c). There is also the traditional norm of favoring sons in sex-selection abortions. According to the estimate, the ratio of males to females at birth is alarming, at 1.12, ranked as the worst among 170 countries included in the women, peace, and security index (GIWPS and PRIO 2021).[58] Women are also underrepresented in leadership roles as reflected in their low share among business owners (21.5 percent are women) and parliamentarians (18.2 percent are women) (GIWPS and PRIO 2021).[59]

Figure 40: Gender pay gap in monthly earnings



Source: Gender Pay Gap in Monthly Earning (dashboard), United Nations Economic Commission for Europe, Geneva, https://w3.unece.org/PXWeb/en/Table?IndicatorCode=21.

Internally Displaced Persons

Protracted displacement triggered by the 1988–94 conflict with Armenia is still an unresolved issue affecting the lives of approximately 650,000 persons, according to the estimate provided by the Ministry of Foreign Affairs. The conflict in 2020, resulted in the displacement of 130,000 people, including approximately 40,000 temporarily settled in regions close to the line of contact on the Azerbaijan side. It has also resulted in agricultural losses, including significant crop and livestock loss and damage to farms and stables in Aghstafa, Gadabay, Gazakh, and Tovuz regions. These regions had accounted for 7 percent of the country's agricultural

[55] Since 1995, Azerbaijan has been an active member of global gender equality agendas. This is reflected in the State Committee for Family, Women and Children Affairs (since 2006) and the National Action Plan on Gender Equality 2020–24 (ADB 2019).
[56] Women tend to work in lower-wage careers, such as in health care and education, while men dominate the more well-remunerated fields, such as transport and storage, electricity and gas, and construction (ADB 2019).
[57] Reforms are underway. For example, draft amendments to the legislation have been prepared to expand women's employment opportunities to ensure gender equality and eliminate wage inequality. Under this legislation, 674 prohibited occupation and jobs is expected to be reduced to 204 and the restriction will be applied only to pregnant women or women with children under one year of age.
[58] The United Nations Population Fund reported an even higher rate of 1.14–1.16 in 2014–17. In response to this highly skewed ratio at birth, the government has approved the "Action Plan for 2020-2025 to prevent gender selection before birth" in 2020 and working closely with the United Nations Population Fund (UNFPA) to prevent gender selection at birth.
[59] There has been a progress in gender equality. For example, the shares of women in Milli Majlis and municipal elections have increased based on the numbers recently provided by the State Committee on Family, Women and Children's Problems of the Republic of Azerbaijan.

production in 2019, leaving many households with a major or complete loss of income.[60] A rapid needs assessment highlighted that, after the conflict, social assistance provided by the government was the main or the only income among 52 percent of the respondents in the survey (OCHA 2020).

The government of Azerbaijan has initiated recovery and reconstruction programming including development of new institutional arrangements, investments in physical reconstruction, and engagement with internally displaced persons (IDPs) and the business sector for rehabilitation and recovery in the conflict-affected areas. Some specific initiatives include: (1) the establishment of a central coordination unit under the Office of the President tasked with providing socioeconomic, humanitarian, administrative, and other urgent postcrisis response solutions within the conflict-affected areas and (2) the State Program on Rehabilitation and Sustainable Development (2022–26) has been drafted that identifies priorities, such as infrastructure, rebuilding the economy, social development, and environmentally balanced development. Over 22,722 hectares of land have been cleared of mines; master plans have been developed; the construction of roads has been initiated (101.5 kilometers completed and over 1,441 kilometers are under construction); rail links have been refurbished (over 157 kilometers are under reconstruction); and eight electricity substations have been completed.

The government is preparing to invest in opportunities to allow people to return to the conflict-affected areas as conditions permit. Investment in the living conditions and the protection of the rights of IDPs have led to a significant reduction in the vulnerabilities of IDPs over the years (UNHCR 2019). Yet, the challenges involved in returning IDPs are complex. For example, the pace of resettlement and development in the districts depends on the pace of demining, which is highly unpredictable. Appropriately sequencing planning, financing, and implementation of the return of IDPs and of community development will also be a complex task. In addition to exploring incentives for the sustainable return of IDPs, resettlement will need to be voluntary and sequenced with available services and immediate jobs, livelihoods, and economic opportunities. Operationalizing the zero emissions goal in Karabakh is also a challenge. As expressed by the government during COP26 in Glasgow, this requires integrating pathways for net-zero emissions from the design stage and exploring technological options for government, businesses, industries, service providers and citizens themselves.

People with Disabilities

The inclusion of people with disabilities is another challenge. However, due to the lack of a unified approach to collecting disability-related data, the magnitude of the challenge is unclear. Progress is underway. The government has initiated a reform of the disability assessment system that integrates the registry information and the new disability criteria that are in alignment with the international standards. Since the ratification of the UN Convention on the Rights of Persons with Disabilities, the government has also introduced several progressive changes, including deinstitutionalization and inclusive education strategies. However, implementation remains to be a challenge. In addition, the general public regards persons with disabilities as a charity issue rather than an equality and rights-based issue. Employment, inaccessibility of public infrastructure, segregated education and living arrangements in institutions, lack of good-quality disability statistics, and negative public attitudes toward persons with disabilities are some of the major challenges that persons with disabilities encounter in the country (Khalilov and Salamova 2020). According to the estimates provided by the Ministry of Labor and Social Protection, there were 614,731 persons with disabilities at the beginning of 2021, including 52,645 children under the age of 18. However, a discrepancy exists across the data collected by various organizations, preventing the accurate assessment of the incidence of disability (World Bank, forthcoming, Country Profile). Given that persons with disabilities are more likely to experience adverse socioeconomic outcomes, such as less education, poorer health outcomes, and lower levels of employment, greater inclusion of people with disabilities by recognizing the need to invest in human capital for all will lead to lower poverty and greater equality.

Subsection 2.4 Challenge 4: Supporting Climate Resilient and Green Transition

Given the renewed sense of urgency to move toward climate-resilient and greener growth, longer-term prosperity requires a strategy to increase environmental sustainability and accelerate the country's adaptation to climate change and preparations for greater green growth. The government acknowledges the urgency and highlights green growth as one of the core priorities in Azerbaijan 2030. A global shift

[60] Although these regions are located outside of post-conflict areas, they were severely affected because of their proximity to the conflict areas (OCHA 2020).

toward lowering emissions is under way, driven by changes in market preferences and supported by policies involving incentives and penalties. As a signal of imminent change, the EU has embarked on ambitious and long-term plans and policies for green transition embodied in the European Green Deal, including the introduction of border tariffs on imports of carbon-intensive products, or carbon border adjustment mechanisms, to begin as early as 2023 and go into full force by 2026. The Paris Agreement calls for global greenhouse gas (GHG) emissions to attain net-zero as early as 2050, which implies that up to 60 percent of the planet's remaining oil and natural gas and 90 percent of its coal reserves must remain in the ground. These global efforts to support the green transition have important implications for Azerbaijan's economy as they may reduce the revenues from the hydrocarbon and nonhydrocarbon sectors. Azerbaijan is also recognized as a country vulnerable to climate change, affecting sectors such as agriculture and water. The recognition of the need for an energy transition—moving away from oil and gas to clean energy—has also gained ground as uncertainty and vulnerability from dependence on these resources were revealed by the invasion of Ukraine and are pushing countries in the EU to accelerate the clean energy transition (European Commission 2022).

A major challenge in the transition to climate-resilient and green growth is ensuring a just transition and making sure that climate action reduces poverty and inequality and enhances the competitiveness of the economy. The policy and investment choices to be made in the next decade will determine the resilience of the economy. This encompasses reform in a wide array of sectors, ranging from the energy sector, including an offshore wind roadmap, electricity sector reforms, and energy efficiency policy, to irrigation and wastewater management (World Bank 2022a; World Bank, forthcoming, CEM). The government will need to consider a wide range of viable and sustainable alternatives that support both the climate and sustainable development and that would reduce the impact on the poor and vulnerable. Identifying national climate targets based on evidence and translating them into an investment plan that is low-carbon and climate-resilient will be the crucial first step in the transition to green growth (World Bank 2022a).

2.4.1 Preparation for a Green Transition

Progress has been made in recent years in preparing for the green transition in multiple sectors. In the energy sector, the Law on Renewable Energy and Energy Efficiency was adopted in 2021 and the draft Electricity Market Law has reached the final stages of enactment (World Bank 2021f).[61] The government has set a target of increasing the share of the installed capacity of renewable energy to 30 percent by 2030 (MIE 2022). The government is currently working on the establishment and operationalization of the Energy Efficiency Fund as described in the Energy Efficiency Law.

However, Azerbaijan is less prepared for a green transition due to its high dependence on fossil fuel exports and the high value of resource rents placing it in a position of high exposure and low resilience to impacts and challenges associated with a structural transformation required for a green transition[62] (Figure 41). Low resilience is also driven by Azerbaijan's underdeveloped infrastructure in renewable energy and climate resilient infrastructure, a lack of investments in non-oil sectors, and limited human capital.[63] Azerbaijan's oil exports to the EU will decline over the medium term as the EU continues to cut carbon emissions in line with its Nationally Determined Contributions (NDCs), which will affect both oil and gas exports from Azerbaijan. Estimates show that Azerbaijan's oil exports to the EU may drop by US$2.5 billion by 2035.[64] If border measures are eventually extended to include petroleum products under the second phase of the carbon border adjustment mechanism (the expanded carbon border adjustment mechanism), the export revenue of the nonhydrocarbon

[61] The establishment of the regulator in 2017 was also a major step in electricity market reform.

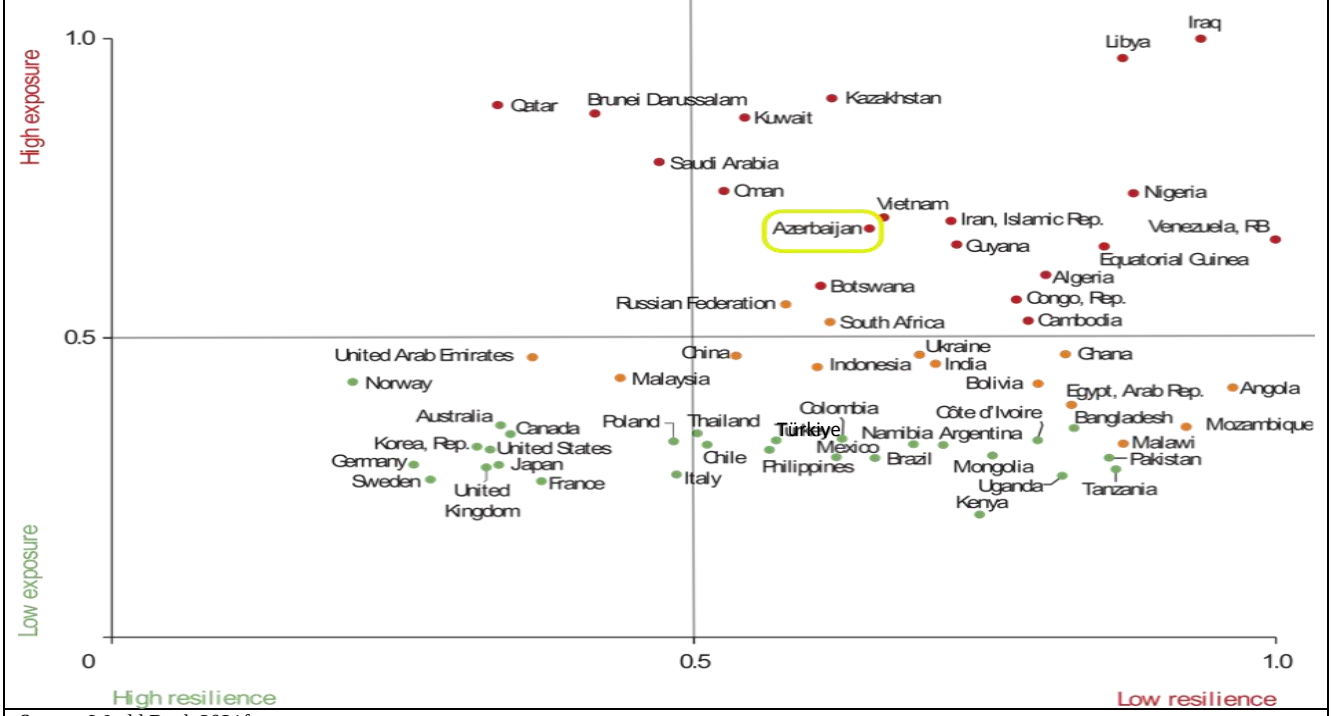
[62] For example, countries with relatively flexible economic structures are able to respond to economic change relatively quickly and efficiently. This flexibility enables countries to minimize the costs of adjustment and harness the new opportunities during a transition period (Peszko et al., 2020).

[63] The index to measure low resilience consists of 11 indicators from five dimensions: (1) built, human, and institutional assets; (2) macroeconomic and financial flexibility , (3) economic performance and complexity, (4) business environment, and (5) position in the global supply curve (Peszko et al. 2020; Physical and Transition Risk Indicators, IMF Climate Change Dashboard, International Monetary Fund, Washington, DC, https://climatedata.imf.org/pages/fi-indicators#fr2.).

[64] This is because, although oil exports are not directly regulated under the first phase of the carbon border adjustment mechanism, oil demand will experience a large drop as the EU cuts its emissions under the NDCs.

sectors to the EU may drop by US$200 million in 2030.[65] In addition, in the medium to long term, investments in fossil fuels will increasingly tend to become stranded assets.[66]

Figure 41: Azerbaijan's preparedness for a low-carbon transition versus other countries



Source: World Bank 2021f.
Note: Red dotted countries are those with high exposure to low-carbon transition risks; orange dotted countries are those with moderate risks; and green dots indicate those well prepared for the risks. For details, see Peszko et al. (2020); Physical and Transition Risk Indicators, IMF Climate Change Dashboard, International Monetary Fund, Washington, DC, https://climatedata.imf.org/pages/fi-indicators#fr2; World Bank (2021f).

Diversification from the hydrocarbon sector has begun, but the full benefits of diversification will only be visible in the longer run, and it will take time and resources to grow them to a scale comparable with the hydrocarbon sector (World Bank 2021f). However, international experience shows that the combination of asset diversification and climate policies may offset the short-term losses from border adjustments and falling oil and gas revenues (World Bank 2021f). In addition, in the short term, the impact of border measures can be mitigated if Azerbaijan applies national climate policies and carbon abatement measures to reduce the national emissions footprint according to the country's NDCs (World Bank 2021f; World Bank, forthcoming, Green Growth Issues Note). Given the time lag between the investments and policy reforms and the resulting impact on economic growth, policies to support the transition should be taken now.

The carbon-based trade barriers at the EU border, known as carbon border adjustment mechanism, which is expected to begin as early as 2023 and go into full force by 2026, may substantially decrease Azerbaijan's non-oil exports. To mitigate the potential short-term losses incurred in transitioning to a greener economy, the government and stakeholders need to enhance the effort to meet the GHG emissions target. Significant progress has been made. In October 2016, the Parliament of Azerbaijan ratified the Paris Agreement with the commitment to reduce GHG emissions by 35 percent by 2030 over the base year, 1990. Furthermore, at the COP26 conference in Glasgow, the government adopted a new commitment to reduce emissions by 40 percent by 2050 as a voluntary commitment and to create a "Netto Zero Emission" zone in the post-conflict areas. According to the estimates provided by the Ministry of Energy, Azerbaijan has reduced the GHG emissions by 32 percent in 2016 compared to the base year of 1990. However, given the heightened target of 40 percent reduction by 2050,

[65] For example, exports of nonferrous (mostly aluminum) and ferrous metals could fall by 35 and 40 percent by 2030, respectively.
[66] Many global oil companies, such as BP and Shell, have identified this risk and are shifting toward commitments to reaching carbon neutrality by 2050. For example, see BP (2020); Shell (2022).

it is vital for the government to track the progress toward achieving the NDC target and ensure that all sectors are complying with policies to accelerate reduction in GHG emissions.[67]

Sectors that may be critical to achieving the GHG emissions target include energy, transportation, and digital development, supported by the financial sector mobilizing investments and managing risks. The transition toward a greener economy may also create new sectoral growth opportunities for Azerbaijan. Embedding policy actions to support resilience to climate change in sectors such as renewable energy, the blue economy, water management, and tourism will mitigate low-carbon transition risks and pave the way for diversification. Due to its geographical location, the Caspian Sea, and its diverse landscape of plains and mountains, Azerbaijan has significant renewable energy sources. The highest technical potential belongs to solar (23 GW) and wind (3 GW), but the country also has good potential for small hydro (0.5 GW) and biomass (0.4 GW). Offshore wind likewise represents a significant opportunity for the country's energy diversification strategy (World Bank 2021f).[68] Investments in the transport sector, including electrification and railways, may also be critical for decarbonization and reducing the environmental footprint, as the sector accounted for almost a quarter of total air pollutant emissions in 2018.[69] Digital services also have the potential to reduce the use of energy and materials, enabling a large share of emissions reductions (Ekholm and Rockström 2019). Investing in untapped resources, such as the blue economy, may also increase Azerbaijan's resilience during the green transition by expanding job market opportunities. There is great potential in investment in low-carbon hydrogen as a means to decarbonize hard-to-abate sectors (such as the industrial and transport sectors) and enhance innovation in renewable energy by producing green hydrogen and its derivates, such as green ammonia for fertilizers that can help decarbonize agriculture value chains.[70] As the transition to a low-carbon economy presents sizable investment opportunities, the financial sector has an important role to play by ensuring that financial sector policies are in alignment with incentives for climate and environmental goals as well as monitoring and assessing the climate-related risks associated with investment decisions.[71] The current tariff system, which includes cross-subsidies between consumers and energy carriers as well as direct subsidies from the state budget, requires reform to encourage residential and industrial consumers to use energy more efficiently.

2.4.2 Environmental Sustainability and Adaptation to Climate Change

Environmental sustainability was identified as a priority area in the first SCD, especially in water quality, land degradation, and solid waste management. Positive steps have been taken. For example, to increase water security, the government has doubled the sewage treatment capacity and increased investments in irrigation systems over the past decade. The government has embarked on water security assessments and sector performance assessments to inform the priorities in the water sector. In April 2020, the Water Commission was also created by a presidential decree to ensure the efficient use of water resources in the country by coordinating all water sector management activities.[72]

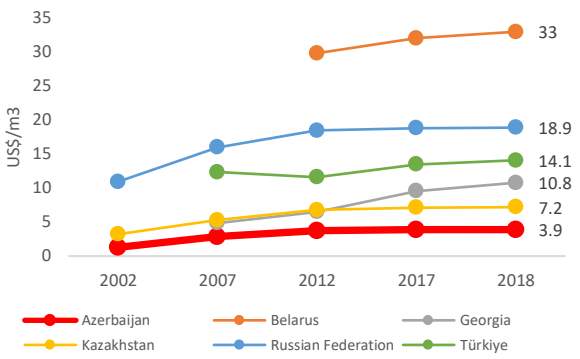
However, Azerbaijan is still recognized as highly vulnerable to climate change, particularly environmental changes that threaten water security. Azerbaijan is ranked 18th among the 33 most water-stressed countries in the world.[73] This is because the water resources available in Azerbaijan originate predominantly from outside the country's borders, making Azerbaijan heavily dependent on other countries for water sources, which contributes to water insecurity. Hydrological variability, which is already high, is expected to increase with climate change. The country is struggling with water deficits, partly because of uneven seasonal and geographical distribution.

[67] In many countries of the Organisation for Economic Co-operation and Development, this is done through an intersectoral entity within the ministry of finance or the economy to ensure that budgeting is aligned with climate policy to meet NDC commitments.
[68] Azerbaijan could develop up to 7.2 GW of offshore wind capacity by 2036, out of a total estimated technical potential of 35 GW for fixed foundation and 122 GW for floating foundation offshore wind technologies (World Bank 2021f).
[69] In 2018, Azerbaijan recorded a total of 172,400 tons of air pollutant emissions, of which 16,700 tons were carbon dioxide (CO_2) emissions. The transport and communication sectors accounted for 23.7 percent of total air pollutant emissions and 4.7 percent of total CO_2 emissions in the same year. Azerbaijan can also improve on the share of electric vehicles in the market. See World Bank (2022b).
[70] Chile, Saudi Arabia, and the United Arab Emirates are already exploring the use of low-carbon hydrogen as a means to accelerate green transition (IRENA 2022).
[71] Greening the financial system has become increasingly important due to urgent need for green transition. The World Bank (2021h) provides toolkits for policy makers for greening the financial system.
[72] The commission is tasked to analyze water resource use and water management, as well as to increase efficiency, improve accounting and management, and provide operational coordination.
[73] Aqueduct (dashboard), World Resources Institute, Washington, DC, https://www.wri.org/aqueduct.

Channels that affect water security and increase the country's vulnerability to climate change include (1) a temperature rise of 1.4°C–2.8°C by 2050 and 4.7°C by 2090, which is expected to be higher than the global average increase of 3.2°C by 2090, relative to the average baseline over 1986–2005 (UNEP 2019; World Bank and ADB 2021); (2) a decline in precipitation of 5 percent by 2040 in the Lesser Caucasus and Nakhchivan Region and associated threats from droughts;[74] (3) the greater frequency and magnitude of flood events because of the increased intensity of single rainfall events;[75] and (4) a drop in the level of the Caspian Sea of 4–5 meters by the end of the 21st century.[76]

To increase water security, improving the efficiency of the largest water users—irrigated agriculture—is the key. Given the high water abstraction and the large share of the population engaged in agriculture, roughly 3.6 million people, or one person in three in the country will benefit from increased water efficiency in the agricultural sector (World Bank 2022a).[77] Annually, 90 percent of total withdrawn water was used for agriculture (World Bank 2022a). However, the economic productivity of water use in agriculture is estimated at US$3.90 per m^3, which is less than in comparator countries (Figure 42). This is due to the high water stress faced by Azerbaijan's agricultural zones, which is expected to increase by a factor of 1.4 and, in some areas, even double by 2030. This can be attributed to factors such as (1) weak performance of the irrigation subsector, which is hampered by the poor state of major and minor infrastructure; (2) lack of adequate flow control and monitoring structures for improved water management; and (3) rising water levels leading to salinization and the reduction of irrigable land.[78] Improving irrigation systems in the secondary and tertiary distribution and rural drainage systems is expected to improve productivity significantly in agriculture (World Bank 2022a).

Figure 42: Water use efficiency in agriculture



Source: AQUASTAT (Global Information System on Water and Agriculture) (dashboard), Food and Agriculture Organization of the United Nations, Rome, https://www.fao.org/aquastat/en/.

Section 3. Crosscutting Challenge

Subsection 3.1 Governance and Institutions

Managing the economy—from addressing inequality to enhancing productivity—requires strengthening governance and public sector institutions. Reforms in governance and institutions are needed and perhaps most critical as all challenges identified in the SCD are involved. Governance and institutions are important in ensuring citizen engagement and transparency in service delivery and fiscal management, improving the business environment, and supporting green growth.

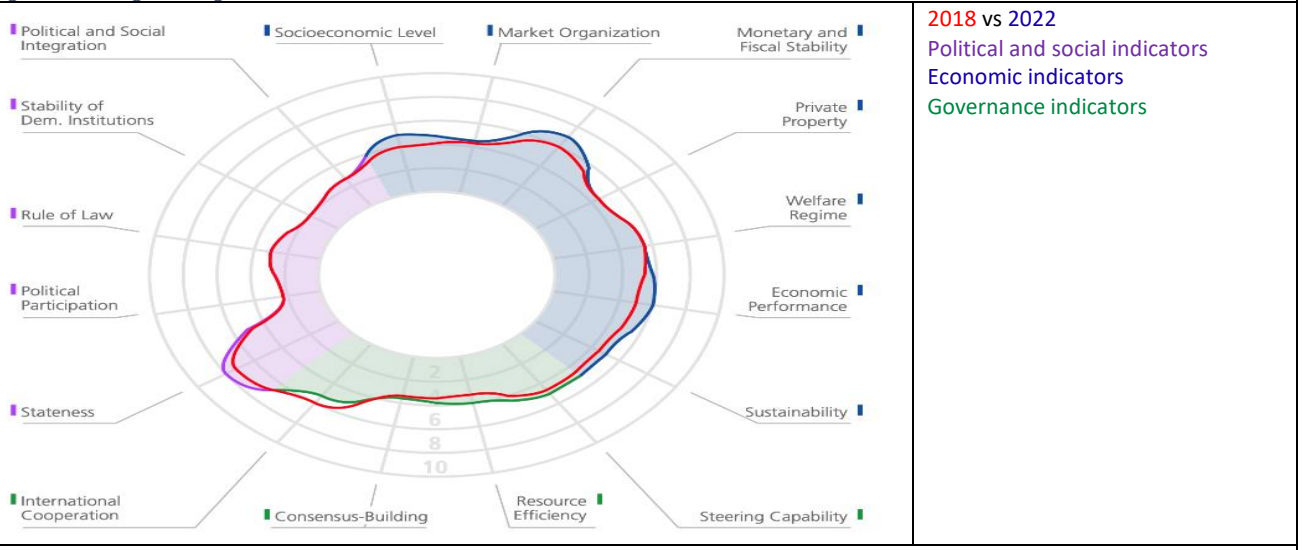
Enhancing governance and institutions is in alignment with the government's development strategy and is recognized as one of the underlying necessary conditions for sustainable and inclusive growth in Azerbaijan 2030. Current and past reforms have had a positive impact on the economy. The country has made progress in establishing legal and institutional frameworks to support transparency and accountability in the public sector. For example, GovTech reforms have been implemented to promote transparency and access to government

[74] Although there are no significant changes in precipitation in other areas, projections for rainfall are less certain and vary greatly depending on the model and scenario (World Bank 2021f). In 2020, because of a multiyear drought, water levels in the city of Mingachevir dropped by 16 meters.
[75] Extreme events, mainly floods, landslides, and mudslides, cost Azerbaijan an estimated US$70 million–US$80 million annually and put millions of lives at risk. An area of 300 km^2 of agricultural land is affected by floods, and soil losses are estimated at 0.5 million m^3 annually.
[76] The scientific community does not have uniform views on the Caspian Sea level, and projections may vary (World Bank, forthcoming, Azerbaijan Green Growth Issues Note).
[77] Approximately 3.6 million people live in the three most water-stressed economic regions, Absheron-Khizi, Mountainous Shirvan, and Nakhchivan.
[78] On the 610,000 hectares of land with drainage systems, about 50 percent of the systems are not operational (World Bank 2022a).

services, and ASAN, the one-stop shop center for public services, has increased efficiency in several areas by reducing mid and low-level bureaucratic corruption (Bertelsmann Stiftung 2022). The government has also undertaken efforts to modernize judicial services in recent years. In addition, important steps were taken to strengthen the corporate governance of SOEs to improve financial performance, which has had important economic and social implications across many industries.[79] Some of the examples of recent policy reforms are listed in Table A 1.

A recent institutional assessment of Azerbaijan carried out by the World Bank confirms that, despite these reforms, there is scope for improvement in institutional quality (World Bank 2022c). The government has undertaken reforms in recent years to improve the quality and effectiveness of institutions. Yet, reforms are often difficult to implement. This is reflected in the differential progress across institutions when comparing indicators in 2018 and 2020 (Figure 43). While economic institutions have shown improvement since 2018 (indicated by the blue line), political and social institutions have remained relatively weak, with no improvement except for stateness (indicated by the purple line).[80] Governance indicators show mixed results (indicated by the green line). The results suggest that successful reforms do not involve only adopting best practice, but also require commitment and coordination across stakeholders.

Figure 43: Progress in governance and institutions, 2018–20



Source: Bertelsmann Stiftung 2022.

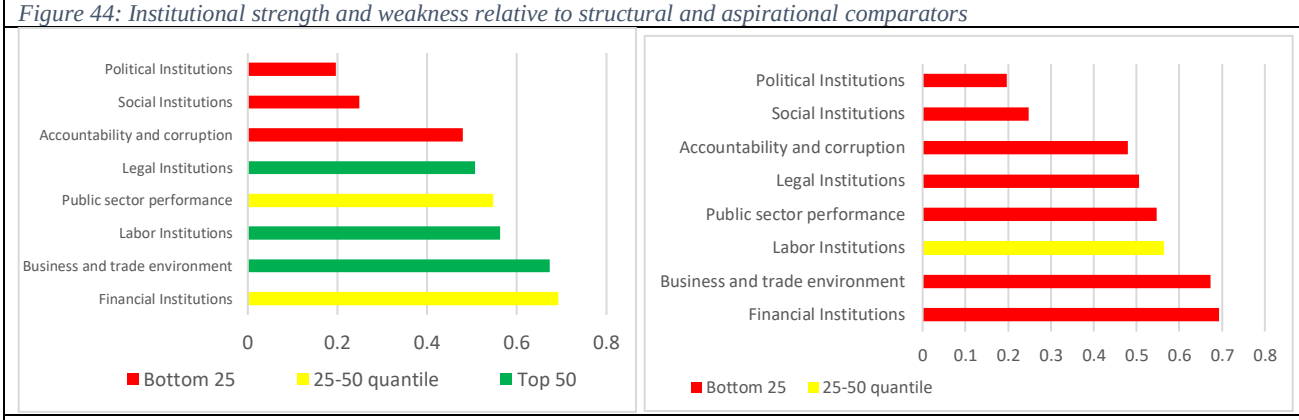
According to the analyses, political and social institutions are relatively weak compared with structural and aspirational comparators (World Bank 2022c) (Figure 44**)**. Despite the government's commitment to strengthening institutions, the gap in practice still exists. According to the Bertelsmann Transformation Index (BTI) and an assessment by the EU (European Commission 2020), the country scores relatively low on political participation. Although the freedoms of assembly and association as well as freedom of expression are guaranteed by the constitution, the sources indicate that they are restricted in reality. Given that improvements in civil liberties, including freedoms of speech and assembly, are shown to have positive correlation with economic growth (Cole 2016; Vavoura et al. 2021), the government may further consider, for instance, easing the registration procedure for the Civil Society Organizations and enhancing media freedom. Other governance challenges affecting political and social institutions are associated with elite capture and high governmental centralization. Data show that, despite recent reforms, Azerbaijan scores relatively low on separation of powers, independence of the judiciary and political participation (Bertelsmann Stiftung 2022). Basic administration is fully functional, though the quality

[79] Reforms have included the privatization and corporatization of SOEs. The implementation of these reforms has been partially successful in terms of privatization of small and medium SOEs.

[80] This indicator comprises four components: (a) monopoly on the user of force, (b) state identity, (c) no interference of religious dogmas, and (d) basic administration. Stateness is seen as a precondition for democracy and is included in the definition of political transformation. See BTI (Transformation Index) (dashboard), Bertelsmann Stiftung, Gütersloh, Germany, https://bti-project.org/en/?&cb=00000; Methodology (dashboard), BTI Transformation Index, Bertelsmann Stiftung, Gütersloh, Germany, https://bti-project.org/en/methodology.

and coverage of services vary. The quality and effectiveness of political and social institutions may further improve, for example, by increasing the capacity of the Commission on Combatting Corruption to more effectively implement the anticorruption legislation (World Bank 2022c).

Figure 44: Institutional strength and weakness relative to structural and aspirational comparators



Sources: Larizza et al. 2022; World Bank 2022c.
Note: Structural comparators: Kazakhstan, Tajikistan, and Türkiye. Aspirational comparators: Chile, Malaysia, Slovenia, and United Arab Emirates. The bars indicate distances to the frontier.

The government has undertaken important efforts to modernize judicial services in recent years with some clear results. Further improvement in rule of law would not only improve the quality of political and social institutions but also the business environment (see Figure 43). The use of e-court technologies, establishment of hotline in the Judicial-Legal Council for Admission, and simplified judicial procedures are concrete examples of recent improvements in the justice sector (World Bank 2021i).[81] The institutional analysis also revealed that basic institutions are in place (World Bank 2022c). Although independence of the judiciary is guaranteed in the law, it is not implemented fully[82]. Rules aimed at regulating the market do not play a significant role in the real economy, and business transparency is an ongoing challenge (Bertelsmann Stiftung 2022). Small businesses, in particular, are constrained due to the preferential treatment of large firms and SOEs (Bertelsmann Stiftung 2022). Public tender procedures show insufficient transparency, and competition is restricted due to the dominance of monopoly firms (Bertelsmann Stiftung 2022).[83] According to a 2019 Enterprise Survey, corruption and bribery are still perceived as one of the major obstacles for firms of all sizes, not only in Azerbaijan but also in structural comparator countries.[84] According the analysis, elite capture also persists in the business environment and through the control of SOEs (World Bank 2022c).

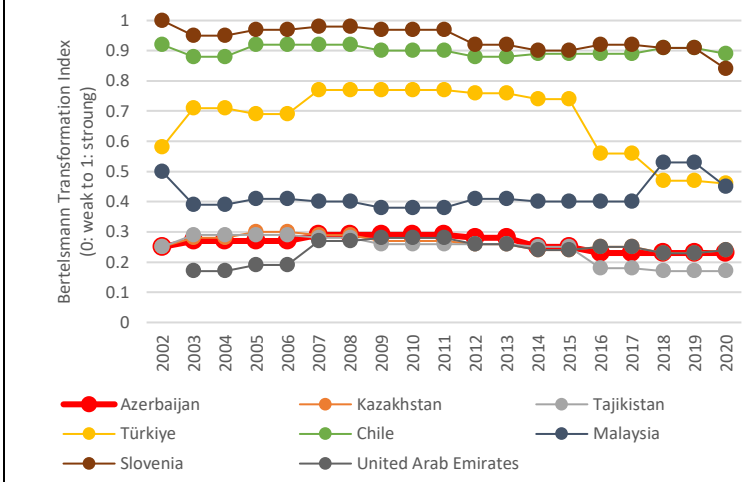
Despite some progress, accountability and integrity in the public sector require improvement, which is shown by comparisons with structural and aspirational comparators (see Figure 44). Anticorruption laws and institutions are in place, [85] but there is scope for improvement to fight corruption effectively as corruption continues to affect the system of checks and balances (World Bank 2022c). While important steps have been taken as demonstrated by the recently approved National Action Plan to Strengthen Anti-Corruption 2022–2026, adequate implementation of the new legislation as well as effective engagement with civil society may further accelerate the progress in improving accountability and integrity in the public sector.

[81] Substantial reforms are underway to ensure the principle of transparency in the activities of the courts and to facilitate people's access to justice. For example, currently, 6096 courts are connected to the "electric court" system and the remaining 4096 courts are expected to join the system by the end of 2022.
[82] Independence of the judiciary is guaranteed in the Law on Courts and Judges and by the Judicial Legal Council. However, analyses by Bertelsmann Stiftung (2022) and by the World Bank (2022c) indicate that these laws are not yet fully implemented in practice.
[83] There has been a progress to enhance transparency in the tender process as reflected, for example, in the approval of the "Regulations on the Single Internet Procurement Portal" by a presidential decree in 2019. Under this regulation, portal has been established allowing users access to tender announcement, submission and exchange of information through the portal electronically.
[84] See Enterprise Surveys (dashboard), World Bank, Washington, DC, https://www.enterprisesurveys.org/en/enterprisesurveys. Corruption is a constraint for the business environment specially to obtain construction permits and water connection and affects firms differently, penalizing especially small firms. For large firms, bribery for construction permit was the most prevalent case (World Bank 2022c).
[85] This is demonstrated by, for example, the creation of the Commission to Fight Corruption and active participation of the Ministry of Justice at the meetings of the Executive Committee of the International Association of Anti-Corruption Bodies according to the Ministry of Justice of the Republic of Azerbaijan.

While the performance of the public sector is moderate in Azerbaijan relative to structural comparators, it is relatively weak compared with aspirational comparators (see Figure 44). Recently, the country has made progress in improving transparency and access to government services. GovTech reforms have been implemented, including the rollout of an important public services portal (which provides information and access to more than 430 digital services), Mobile-ID, digital payments through ASAN Pay, the ASAN Certification Center, the Open Data Portal (which contains data from 42 agencies), the Interactive Monitoring Dashboard, the Automated Tax Information System, and state registries (World Bank 2022c). However, a perception survey indicates that citizen satisfaction with the accessibility to and quality of basic services, especially in education and health care, is poor (World Bank 2022c). The low coverage and low quality of these basic services partially derive from relatively low public expenditure.

The global review by the Independent Evaluation Group shows that increased accountability through citizen engagement in the decision-making process can have a positive effect on public service provision; yet, citizen engagement remains limited in Azerbaijan (IEG 2018).[86] Azerbaijan lags in voice and accountability, exceeding only Tajikistan among the aspirational and structural comparator countries and has not made progress since 2016 (Figure 45). The participation of citizens and civil society organizations in decision-making is critical to raising the effectiveness and adequacy of local public services, potentially improving the living conditions of the poor and vulnerable. Substantial centralization in the decision-making process reflected by limited citizen engagement and limited progress in decentralization is a common challenge among structural comparator countries.[87]

Figure 45: Voice and accountability



Source: BTI (Transformation Index) (dashboard), Bertelsmann Stiftung, Gütersloh, Germany, https://bti-project.org/en/?&cb=00000.

As corruption risks related to managing public fiscal resources tend to distort spending and reduce the quality of services, ensuring accountability of the fiscal system by increasing public engagement in the budget process is critical. Azerbaijan has strengthened fiscal transparency with noticeable improvements in 2020 (Figure 46 and Figure 47). This was due mainly to the increased accessibility to information in the pre-budget statement, mid-year review and year-end report (International Budget Partnership 2022). Given the impressive progress, Azerbaijan's national budget procedures are only few points short of the international threshold of 61 which is considered sufficient to support informed public debate on the budget. Still, public engagement in the budget process is relatively weak in Azerbaijan, scoring only 9 out of 100 which has not changed since 2019.[88] Limited citizen's participation in all phases of the budgeting, including budget formulation, implementation and audits, is the remaining challenge to improve accountability in the fiscal management system (International Budget Partnership 2022). Increasing the availability of government data in a user-friendly way by enhancing open data policy and through meaningful engagement with civil society are some of the policy options to be considered to further improve fiscal management.

[86] A review by the Independent Evaluation Group (IEG 2018) found evidence that strengthened social accountability can lead to (a) reduced corruption, (b) more responsive states, and (c) improved provision of public goods.
[87] Freedom of association, including the legislation on NGOs, freedom of assembly, and freedom of expression and media freedom, is also limited in Azerbaijan (Bertelsmann Stiftung 2022).
[88] The global average is also low at 14 out of 100. Top four countries with adequate scores are South Korea, the United Kingdom, New Zealand, and Georgia in 2021 (International Budget Partnership 2022).

Figure 46: Transparency in the national budget, trend over time

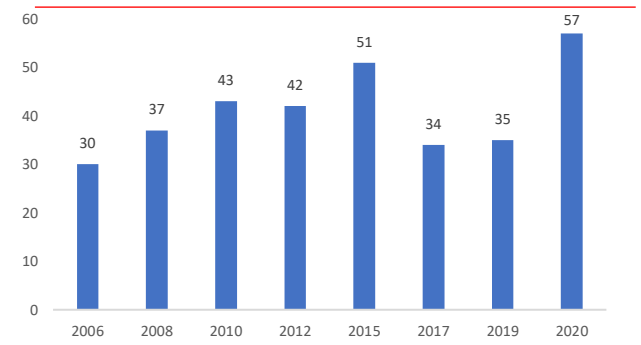
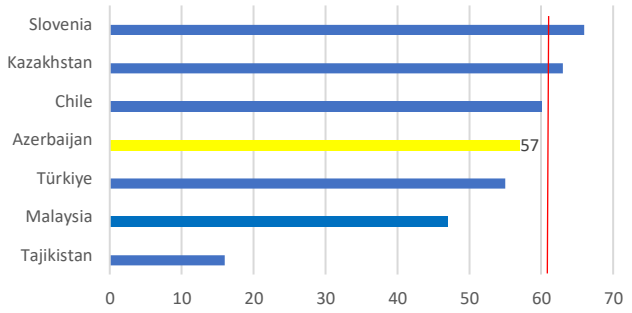


Figure 47: Transparency in the national budget, comparison with structural and aspirational comparators



Source: International Budget Partnership, 2022, *Open Budget Survey 2021*. https://internationalbudget.org/open-budget-survey/country-results/2021/azerbaijan .

Note: The indicator measures public access to information on how the central government raises and spends public resources. It assesses online availability, timeliness, and comprehensiveness of eight key budget documents and scores each country on a scale of 0 to 100. The sufficient threshold is 61 (shown in red).

Subsection 3.2 Untapping Potential of Data and Increasing Data Transparency

Reliable data and indicators are essential to improving lives and monitoring the progress of ongoing reforms. Data can affect the lives of people through multiple channels: (1) the government can use data to improve the design of programs, policies, and the targeting of scarce resources to marginalized people and areas; (2) the government can monitor the progress of various reforms and assess their impact on people; and (3) the private sector may also benefit if granted access to data to develop new products and services to meet changing demands on the market. Artificial intelligence and machine learning are leading to increased demand for data, which stimulates economic activity. However, data could be costly for individual firms to collect and maintain; so data sharing becomes critical.

Data disaggregated at the individual, household, or firm level are central to understanding and addressing conditions that uniquely affect the lives of various segments of the population, for example, women, men, children, adults, the elderly, persons with disabilities, the poor, and the nonpoor. Progress has been made in Azerbaijan in the collection of data and reporting disaggregated data, as demonstrated by the adoption of the State Program for Development of Official Statistics for 2018–25 by the SSCRA, which provides a blueprint for improving official statistics. SSCRA has made great strides, in collaboration with development partners including the World Bank, to improve the quality of the data and enhance dissemination by producing numerous indicators and tables that are publicly available.

Yet, several challenges remain. For instance, although many important indicators are publicly available, they are not consistently reported at a granular level, for example, at the regional or rayon levels or by different socioeconomic groups, which leads to a lack of comprehensiveness and comparability across years. Another important data gap is in the estimates of international poverty rates. In more than 160 countries, international poverty rates, as well as inequality measures, are available publicly from the World Bank's PovcalNet.[89] Yet, these rates have not been estimated in Azerbaijan as the requisite data are not accessible to the World Bank. The accuracy of reported indicators is also a concern if data access is restricted or if the system of verification is not sufficient. Data quality may also be an issue if the information collected is not validated properly.[90] [91]

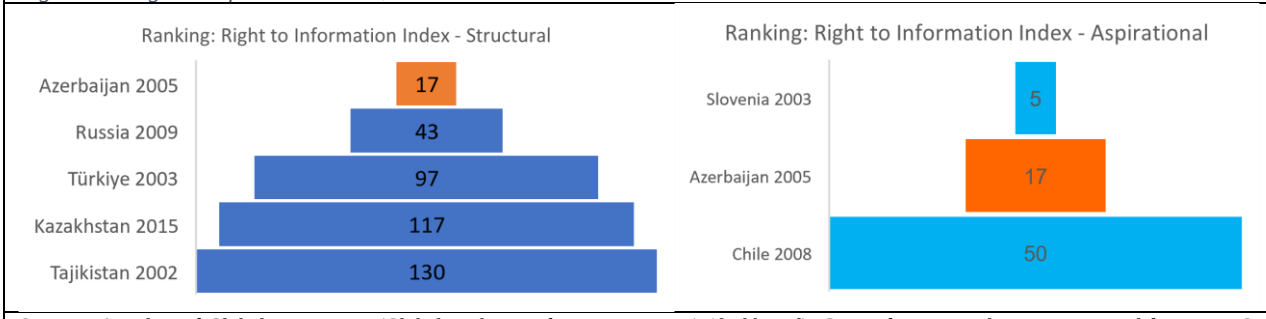
While Azerbaijan has a good law on the right to information, obtaining data can be difficult in practice (World Bank 2022c). Limited public access to official data sources, including access to electronic data, is likely to diminish the potential value and usage of data. The law on access to information is comprehensive (Figure 48); yet, it has gaps in the exemptions to access.

[89] Indicators are available from PovcalNet: Data (database: select economies), World Bank, Washington, DC, http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx.

[90] The SCD identified areas in which additional data will be beneficial to better inform priorities and policy options (Annex I).

[91] There have been recent efforts to increase data disclosure, including the launch of Transparency in the Production Industry Platform and the development of public e-services. However, the system may not be operating effectively (Ibadoghlu 2021).

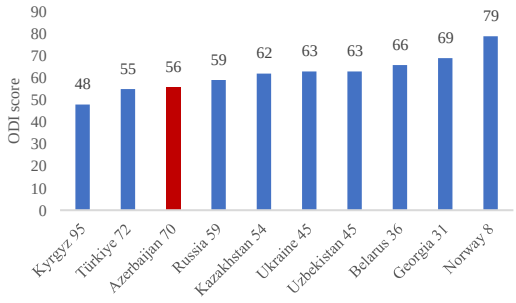
Figure 48: Right to information index, 2022



Source: 2022 data of Global RTI Rating (Global Right to Information Rating) (dashboard), Centre for Law and Democracy, Halifax, Nova Scotia, Canada, https://www.law-democracy.org/live/rti-rating/global/.
Note: Structural and aspirational comparators are selected based on the criteria used to analyze governance and institutions and on data availability.

Promoting open data policies by granting access to data sources may be one way to address this and other challenges. According to the Open Data Inventory, which assesses the coverage and openness of official statistics for 187 countries in 2020, Azerbaijan ranked 70th with an overall score of 56 (Figure 49), indicating that there is room for improvement in data disaggregation and openness in terms of use.[92] Many countries that collect microdata through household and enterprise surveys not only produce and publish aggregated indicators, but also make the anonymized microdata available to the public. This is acknowledged as a best practice as it permits validation of data quality, verification of reported indicators allowing replication, and enhances the potential of the use of data for policy design, monitoring, and evaluation.

Figure 49: Open Data Inventory, 2020



Source: ODIN (Open Data Inventory) (database), Open Data Watch, Washington, DC, https://odin.opendatawatch.com/.
Note: The numbers next to the country labels indicate the overall ranking in 2020.

The production and management of data, including enhanced data sharing through an open data policy, are pivotal to success in the increasingly digitalized environment. However, progress is required in data governance. Digital transformation provides an opportunity to enhance data transparency and availability and to benefit from ever-increasing data availability by facilitating data processing and use. In Azerbaijan, the challenge is to improve online trust and the cybersecurity environment to build the necessary safeguards that enable the increased production, management, and flow of anonymized data (World Bank, forthcoming, CEM). By establishing a data governance framework that is aligned with international good practice, Azerbaijan can not only develop the necessary safeguards to build trust in the online ecosystem, but also create an enabling environment for the growth of digital business. With greater online exposure across the economy, a framework to ensure the security of critical digital assets and infrastructure will also be key, requiring an updated legal and regulatory cybersecurity framework.

Section 4. Prioritization and High-Level Outcomes

Subsection 4.1 Prioritization

Based on the evidence gathered, the SCD conducted a prioritization exercise to identify priority policy areas according to four sets of criteria. The first criterion is based on a benchmarking exercise using a wide range of indicators selected for each policy area. Around 90 indicators were chosen to assess Azerbaijan's performance. Each indicator was compared against the median value of the countries in eight reference groups: (1) world, (2) countries in the Europe and Central Asia region (excluding high-income countries), (3) all countries in the Europe

[92] The Open Data Inventory measures how complete a country's statistical offerings are and whether the data meet international standards of openness. See ODIN (Open Data Inventory) (database), Open Data Watch, Washington, DC, https://odin.opendatawatch.com/.

and Central Asia region, (4) upper-middle-income countries, (5) member countries of the Organisation for Economic Co-operation and Development, (6) regional comparators, (7) aspirational comparators, and (8) structural comparators.[93] The performance of Azerbaijan and the associated level of priority of each indicator are assessed based on a comparison with the median of the referenced group as described in Annex F. The normalized gap was rescaled so that the lower the value, the worse Azerbaijan performs with respect to comparator countries in each reference group. (See Annexes F–H.)

The second and third criteria assess the potential impacts on productivity and equity; the fourth criterion assesses the potential impact on environmental and social sustainability. Enhancing productivity is critical if Azerbaijan is to accelerate growth. However, policies that enhance productivity may not improve equity. Similarly, equity-enhancing policies may not lead to rapid growth. Also, sustainability is the key to a better future, and it is the responsibility of current generations to regenerate, maintain, and improve planetary resources for use by future generations. Wherever relevant, social sustainability is also considered by assessing its impact on expanding opportunities for all people today and tomorrow. To ensure that policies help Azerbaijan achieve rapid, inclusive, and sustainable growth, additional filters were applied to assess the impact on (1) productivity (or growth), (2) equity (or inclusiveness), and (3) sustainability. More prominence is given to policy areas that have a stronger impact in all three dimensions.

Fourteen policy priority areas were identified as critical for reaching the twin goals in Azerbaijan. In addition, two crosscutting areas—governance and institutions as well as tapping into data potential—are identified as critical priority areas that serve as preconditions to implement other policy priority areas to address the four main challenges successfully. These two additional priorities were also identified as priority areas in the first SCD. While much progress has been made, the analysis in the SCD and the prioritization exercise show that the fundamental nature of the challenges facing the country have not changed much, and many areas put forth in the first SCD thus remain valid. However, some of the constraints have become more binding, and new priority policy areas have emerged because of the changing economic and geopolitical environments. Changes to the priority areas encompass the following: (1) greater emphasis on balancing development across locations, including post-conflict areas; (2) digital development as a foundation for a new growth model; (3) more emphasis on improving the business climate to accelerate private sector growth that promotes innovation, entrepreneurship, and competition; (4) enhancing inclusion of the vulnerable, such as women and IDPs, through increased human capital accumulation and opportunities to use them productivity; and (5) more emphasis on the need to accelerate the transition to greener growth and building the resilience to risks stemming from climate change.

Table 1: Summary of policy priorities

1. Rebalancing the Economy Toward the New Growth Model
1.1 Rebalancing Assets - Increasing asset base for households
1.2 Increase productivity especially in agriculture
1.3 Enhancing Connectivity - integration through trade and increasing role as a regional hub
1.4 Rebalancing Spatial Development
1.5 Safeguarding Fiscal Revenue
1.6 Digital Development
2. Fostering Private Sector Growth
2.1 Improve business climate in the formal sector
2.2 Develop a better link between education and the labor market by addressing the skills mismatch
2.3 Enhance equitable access to financial services
3. Enhancing Human Capital Modernization
3.1 Education for Better Lives and Better Labor Market Outcomes
3.2 Health care for Better Quality Life
3.3 Enhancing human capital of vulnerable groups (women, IDPs)
4. Supporting Climate Resilient and Green Transition
4.1 Prepare for the global green shift - Meeting GHG emission target and investing in untapped resources
4.2 Environmental Sustainability and Adaptation to Climate Change - reverse land degradation and water security
5. Governance and Institutions as Pre-Conditions

[93] Countries included among the regional comparators are Kazakhstan, Norway, Romania, Serbia, and Ukraine. The aspirational comparators are Chile, Malaysia, Mexico, Norway, and Romania. The structural comparators are Ecuador, Kazakhstan, Mongolia, Peru, Serbia, Thailand, and Ukraine. For governance and institution indicators, the aspirational comparators are Chile, Malaysia, Slovenia, and the United Arab Emirates, and the structural comparators are Kazakhstan, Tajikistan, and Türkiye.

This includes strengthening rule of law; implementing anti-corruption law; address elite capture in business environment (such as through SOEs); transparency in national budgeting; enhance voice and accountability for better service.
6. Data - as Pre-Conditions
This includes the adoption of open data policy, increasing data transparency, coordination across different stakeholders, establishing data regulation and a framework for personal data protection.
Note: Priorities identified in the first SCD are shaded in blue. One policy area that was identified as a priority but was dropped from the list in this SCD is investing in infrastructure–roads and highways.

Below are the summaries of the policy priority areas.

a. Rebalancing the Economy toward the New Growth Model

Dependence on the hydrocarbon sector will not be sustainable due to the declining oil and gas reserves and increasing global shift to greener growth. Diversification of the economy is needed, supported by increased accumulation of human capital. Greater integration into the global economy through trade in the nonhydrocarbon sectors and unleashing the productivity of the agricultural sector are also critical. This transition should be supported by effective fiscal management as well as by development in digital technology. To reduce spatial inequality and to accelerate recovery and reconstruction of the post-conflict areas, access to services and opportunities is critical. This may require more proactive urban planning policies that support the growth of dynamic and connected cities.

b. Fostering Private Sector Growth

A competitive, dynamic, and innovative private sector would be critical for Azerbaijan to transition toward a new growth model that allows for greater diversification, enhances integration into the global economy, and creates better jobs. This calls for removing barriers to entry and operation of firms and maintaining a level playing field for all companies. A fair legal environment would encourage FDI inflows and private investments. Firms would need broader access to production inputs, including financial resources and a skilled workforce.

c. Enhancing Human Capital Modernization

Upgrading the quality and accessibility of education and health services is critical in increasing human capital, enabling access to better jobs, and improving quality of life. The major challenge in the education sector is to improve the quality of teaching at the primary and secondary levels. Additional efforts and investment may also be needed at the higher, tertiary level to build market-relevant skills that support a smooth transition from school to jobs which would reduce the high share of young people identified as NEETs. Strengthening academic and financial autonomy at the higher level and modernization of the curriculum at all levels should be considered as complementary policy interventions. The major challenge in health is to provide equal access to good quality services and to monitor the impact of mandatory health insurance on the health outcomes and households' well-being. Policies that address the high dual burden of malnutrition among children (stunting and obesity) and burden of noncommunicable diseases among adults are critical. Attention must be paid to vulnerable people for Azerbaijan to enhance equity. Reducing barriers for women to participate in labor markets, for instance by encouraging the development of an entrepreneurial mindset or increasing technological awareness, may help close the huge gender wage gap. Investing in opportunities for IDPs is also critical to ensure that displaced people have a chance to access income generation options that can sustainably lift them out of vulnerable position.

d. Supporting Climate Resilient and Green Transition

A global shift toward low emissions is underway, which may significantly affect all sectors of the economy. A critical challenge in the short run is to meet the GHG emissions target to mitigate the potential short-term loss due to penalties to be imposed by trading partners, such as the EU. Sectors that may be critical to achieving the GHG emissions target include energy, transportation, and digital, supported by the financial sector that mobilizes investments and manages risks. The current tariff system which includes cross and direct subsidies should also be revisited. Investing in untapped resources, such as offshore wind, blue economy, water management, and tourism, may support diversification of the energy base toward clean energy which may also attract investments in low-carbon industries. Upgrading the secondary irrigation and drainage system is crucial to reverse land degradation, increase water security, and to ensure that the agricultural sector becomes more resilient to climate risks.

e. Governance and Institutions

This is one of the areas identified as critical pre-conditions to address all challenges toward sustainable, inclusive, and resilient growth. Progress has been made, but there is still scope for improvement in areas such as: citizen engagement in the decision-making process to enable better service delivery and increase the autonomy of local governments; corruption and elite capture to enhance the institution's capacity to efficiently implement policies and regulations; and rule of law to increase transparency of the judiciary for inclusive growth and to accelerate growth of the dynamic private sector.

f. Tapping into the Potential of Data

Improving systematic data collection and analysis are needed to strengthen the provision of public services, improve the design and effectiveness of policy interventions, and monitor the progress with poverty and shared prosperity. Reliable data is critical for evidence-based policy making which is fundamental to improving bureaucratic capacity and service delivery, facilitating focus on performance, enhancing monitoring and evaluation, and enabling course correction when needed. For Azerbaijan, it is also important to enhance reliability and increase the transparency of the data and statistics. The international best practice is to promote an open data policy—which would enhance the accuracy and impact of the data collected and verify the statistics prepared by the authorities.

Subsection 4.2 High-Level Outcomes

The SCD also specifies high-level outcomes (HLOs) that would contribute to the World Bank's twin goals of ending extreme poverty and promoting shared prosperity. HLOs are critical in identifying the World Bank's engagement with the government of Azerbaijan over the next four to six years in the Country Partnership Framework.

The four HLOs presented below are identified based on the asset-based approach linking the population's well-being to the longer-term goals at the national level. They are also in alignment with the country's strategic goals stated in Azerbaijan 2030. For Azerbaijan to achieve the country's national goals and the World Bank's Twin goals, it is critical to find ways for the population and households, in particular those at the bottom 40 percent of the welfare distribution, to have access to opportunities to use and accumulate their productive assets and to protect them from risks. Each HLO offers insights on how macroeconomic outcomes and policies at the national-level are linked to equitable distribution and accumulation of assets and opportunities to use them at the individual- and household-level: HLO 1 demonstrates how new growth model provides opportunities for individuals and households to increase the efficiency of existing household assets, with particular focus on human capital; HLO 2 and 3 focus on households' capabilities to accumulate human capital assets; and HLO 4 is associated with households' risk management capacity to protect the accumulated assets from risks related to green transition and climate change.

Relevant policy priority areas are assigned to each HLO. In addition, the list below shows possible channels through which these objectives may be achieved.

HLO 1: Azerbaijan will become a dynamic, competitive, more inclusive and sustainable economy that benefits all but in particular the bottom 40% through increased returns to human capital

	Channels through which this HLO will be achieved	*Policy priority areas*
1	Discovering new sources of economic growth based on the increased accumulation of human capital and improvement in labor productivity of the bottom 40%	1.1, 1.2, 1.3, 1.6
2	Accelerating growth based on private sector initiative to improve returns to human capital and thus the living conditions of the bottom 40%	2.1
3	Creating good quality jobs with increased access to these jobs among the bottom 40%	2.1, 2.2, 3.1
4	Building an economy that is resilient to external influences and diversified from dependence on oil and gas which affects poverty, inequality, and vulnerability of the households to shocks	1.1, 1.2, 1.3
5	Supporting SMEs to become the main sources of growth and employment supported by a transparent judicial system, fair competition and increased access to financial resources which affects earning capacity and stability of the living conditions of the population but in particular, the bottom 40%	2.1, 2.3, 5
6	Attracting FDIs into sectors including nonhydrocarbon sector by improving the investment climate which increases number of good jobs accessible by the bottom 40%	2.1

7	Successful transitioning of the informal sector to the formal sector which improves the quality of jobs for all but in particular for the bottom 40%	2.1
8	Developing highly profitable science-intensive and medium- and high-tech firms that enhances incentives to accumulate human capital	1.6, 2.1

HLO 2: Azerbaijan will offer equitable socio-economic opportunities across regions and demographic groups

Channels through which this HLO will be achieved		*Policy priority areas*
1	Closing spatial gaps in welfare by providing equal access to quality services, opportunities, and infrastructure	1.4, 1.6, 3.1, 3.2
2	Providing equal opportunities for women and men	3.3
3	Providing equal access to good jobs, which are full-time, with tenure, and with written contracts	2.1, 2.2, 3.1, 3.3
4	Creating equal opportunities for socially vulnerable groups to participate in society	3.3

HLO3: Azerbaijan will achieve high quality human capital based on modern education and health systems

Channels through which this HLO will be achieved		*Policy priority areas*
1	Modernizing the education system and training teachers to adapt to the changing requirements in the labor market. This includes investing more in the digital skills development.	1.6, 3.1
2	Promoting an environment that enables and encourages innovation	1.6, 3.1
3	Ensuring that higher education institutions meet international competitiveness	3.1
4	Ensuring better learning outcomes are reflected in better international test scores	3.1
5	Ensuring longevity and healthy lifestyles which would affect social well-being and increase productivity	3.2
6	Improving the quality and efficiency of public investment that supports human capital accumulation which will be associated with improved governance and monitored by reliable data that increases access to good quality public services by the bottom 40%	1.5, 5, 6

HLO 4: Azerbaijan will become resilient to risks from climate change and successfully transition to "green growth" by assuring just transition that builds households' resilience to risks and protects productive assets

Channels through which this HLO will be achieved		*Policy priority areas*
1	Decarbonizing power generation by integrating more renewables into the grid and increasing efficiency in production using clean and sustainable energy sources that has positive impacts on health and living conditions	4.1
2	Meeting the GHG emissions target by realizing its large renewable energy potential, particularly wind and solar energy which improves health and living conditions	4.1
3	Reversing the degradation of Azerbaijan's scarce land resources and increasing land productivity which benefits health and productivity of rural population in agricultural sector	4.2
4	Improving water security by efficiently using water resources which improves resilience, health and living conditions	4.2
5	Investing in and adopting climate smart agricultural technologies, including modern irrigation technologies, drought-resistant seeds, and livestock which improves resilience of the households engaged in agriculture, especially in remote areas	4.2

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Annexes

Annex A: List of Some Recent Policy Reforms Referred to in the SCD

Table A 1: List of some recent policy reforms referred to in the SCD

Reform sector	Reform	Year
Fiscal	Amendment of public procurement law	2018
	Introduction of tax incentives for the non-oil private sector	2018
	Reduction of tax rates for SMEs	2018
	Simplification of tax procedure	2018
	New Fiscal Rule	2019
	Strengthen business statistics for the State Tax Service-Twinning project	2021
Macroeconomic Stability	Differentiated interest rate of deposits by currency	2016
	Establishment of Financial Stability Board	2016
	Establishment of Economic Council	2020
Agriculture	Approval of Regulations of Several Subordinate Bodies of the Ministry of Agriculture of the Republic of Azerbaijan	2015
	Strategic Roadmap for Agricultural and Agro-processing Sectors	2017
	Improvement of State Support to Agriculture and Leasing Activities in Agrarian Sector	2018
	Presidential decree on improving the food safety system and establishment of food safety agency	2018
	Establishment of AzPromo	2019
	Establishment of the Agricultural Insurance Fund	2019
	Law on Agricultural Insurance	2019
Trade	Establishment of Azexport	2016
	Expansion of digital trade and electronic commerce	2016
	Lower tariffs with leading trade partners namely, CIS countries, Türkiye, Georgia and Iran	2016
	Simplification of customs procedures	2016
	Investments in logistics centers and warehouse facilities	2016 -2018
	Reforms to tariff system	2018
	Approval of charter and structure of AzPromo	2021
	World Trade Organization accession expert session	2022
Digital Development	Broadband development strategy	2021
	Establishment of the Agency for Innovation and Digital Development	2021
	Ministry of Digital Development and Transport	2021
Business and Investment Climate	Amendment to the Law on Antimonopoly Activity	2016
	Strategic roadmap for the production of consumer goods in Azerbaijan at the level of small and medium entrepreneurship	2016
	Agency for Development of Small and Medium Businesses	2017
	Mortgage and Credit Guarantee Fund of the Republic of Azerbaijan	2017
	Small and Medium Business Development Agency	2018
	Drafted Investment Law and an Investment Promotion Strategy	2020
	Establishment of e-court system	2020
	Amendment of the Labor Code	2021
	Rollout of 16 Azerbaijan Service and Assessment Network (ASAN) service centers	2021
	Strengthen business statistics for the State Tax Service – Twinning Project	2021
	Tax Amendments	2022
Access to Financial Services and Banking Sector	Approval of the Law on Full Deposit Insurance, introducing higher coverage levels and a blanket guarantee	2016
	Creation of the Financial Stability Council and Financial Market Supervisory Authority of Azerbaijan	2016

	Amendments to the Law on Banks and Banking, introducing a new bank resolution framework and streamlining of bank liquidation procedures	2017
	Establishment of the Small and Medium Business Development Agency	2017
	Mortgage Credit Guarantee Fund	2017
	Improvement of State Support to Agriculture and Leasing Activities in Agrarian Sector	2018
	State Program on expansion of digital payments in the Republic of Azerbaijan for 2018-2020	2018
	Launch of Instant Payment System	2020
	Draft Law on Payment Services & Payment Systems	2021
State-Owned Enterprises (SOEs)	Establishment of Azerbaijan Investment Holding (AIH)	2020
	Changes in the structure of the State Oil Company of Azerbaijan (SOCAR)	2021
Labor Market	Approval of Prevention of Informal Employment in the Republic of Azerbaijan Action Plan	2017
	Law of the Republic of Azerbaijan "On Employment"	2018
	Establishment of Labor and Employment Subsystem	2022
Education and Vocational Training	Law on Preschool Education	2017
	Approval of National Qualification Framework for Lifelong Learning of the Republic of Azerbaijan	2018
	Law on Special Education	2018
	Draft law on higher education	2022
	Establishment of the State Agency on Vocational Education (SAVE)	2016
	Law on Vocational Education	2018
Health	Law of the Republic of Azerbaijan on Protection of Population Health	2017
	Mandatory health insurance	2018
	Establishment of the Administration of the Regional Medical Divisions (TABIB)	2020
Vulnerable Groups	Approval of Action Plan for the Prevention of Sexual Choice of Children before Birth for 2020-2025	2020
	Strategy for Socio-Economic Development for 2022-2026	2021
	Approval of the Rules for Maintaining the Register of Persons with Disabilities	2021
Preparation for Green Transition	Ratification of Paris Agreement	2016
	Establishment of the Azerbaijan Energy Regulatory Agency (AERA)	2017
	Law on Regulator in Energy and Public Utility Services	2020
	Amendments to the Laws "On Electrical Power Engineering"	2021
	Law on Renewable Energy and Energy Efficiency	2021
	Law on use of renewable energy sources in the generation of the electricity	2021
	Amendments to the Law on Gas Supply	2022
	Draft Electricity Market Law	2022
Environmental Sustainability and Adaptation to Climate Change	Amendments to the Law on "Industrial and household waste"	2019
	Amendments to the Laws on "Agricultural Cooperation", "Environmental Impact Assessment", "Power and Heating Plants"	2019
	Amendments to the Laws on "Melioration and Irrigation", "Radiation Safety of the Population", "Fishery", "Energy" and "Transport"	2019
	Amendments to the Laws about "Sanitary and epidemiologic wellbeing", "On subsoil", "Environmental protection"	2020
	Creation of the Water Commission	2020
	Amendments to the Laws "On Water Supply and Wastewater"	2021
	Draft Sustainable Finance Action Plan (2022-2025)	2022
Governance and Institutions	GovTech reforms	2010-
	Amendment to the Law on Antimonopoly Activity	2016
	Amendments on Law on freedom of information	2016
	Established Open government Partnership Dialogue Platform,	2016
	Presidential Decree on Deepening Judicial and Legal System Reforms	2019
	Extractive Industries Transparency Commission (EITC)	2019
	Amendment to National Action Plan on Promotion of Open Government	2019

	Establishment of the e-court system	2020
	Broad reform process initiated by Azerbaijan Investment Holding (AIH)	2021
	Rollout of 16 ASAN service centers	2021
	National Action Plan to Strengthen Anti-Corruption 2022-2026	2022
Untapping Data Potential and Increasing Data Transparency	Amendments on Law on freedom of information	2016
	Adoption of the State Program for Development of Official Statistics	2018
	Development of Extractive Industries Transparency Portal	2021
	Launch of Open Data Portal by Ministry of Digital Development and Transport	2022

Note: The list is not exhaustive. It presents only a selection of the reforms implemented in recent years. Some reforms are referred to in the SCD without citing the title of law or reform.

Annex B: Definition of comparison groups

Structural comparators were selected based on six indicators: (1) total natural resources rents and oil rents, both as a percent of GDP; (2) GDP per capita (constant 2010 US dollars); (3) HCI (scale 0–1); (4) control of corruption (estimate); (5) government effectiveness (estimate); and (6) rule of law. GDP per capita was used as an additional indicator to select aspirational comparators. For more details on the methodology, see CEM 2.0 Innovations to the World Bank Group Growth Analysis.

Annex C: Definition of the middle class

There are several approaches to measure the middle class by applying different absolute and relative thresholds to define them. In the absolute definition, the middle class is composed of the share of households with per capita incomes or expenditures between a lower and upper threshold in purchasing power parity US dollars. In the relative approach, the middle class is defined using specific distances from the median household income or expenditure or distance from the poverty line (Reeves, Guyot, and Krause 2018).

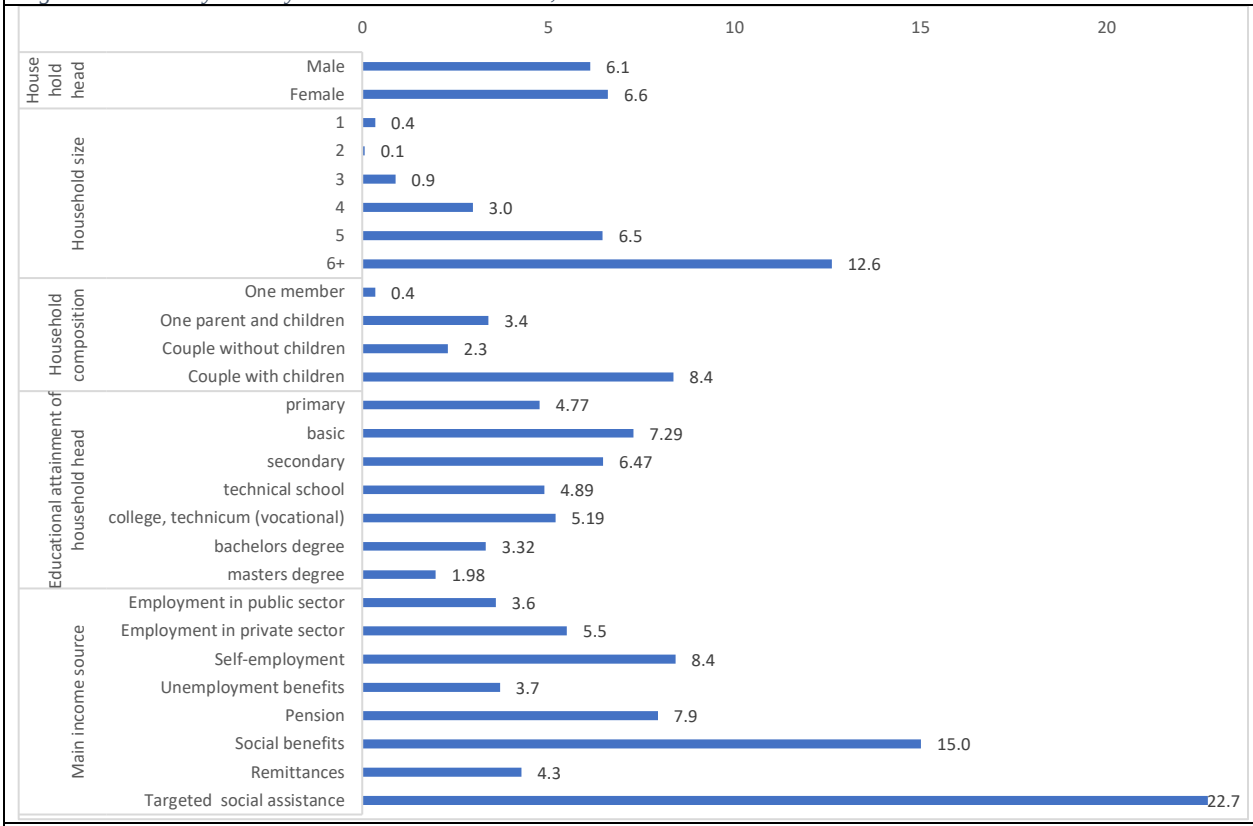
Among the different approaches, the analysis presented in the SCD applies a relative definition, defining welfare groups based on the following thresholds:

- **Poor:** People living in households with monthly consumption expenditure per capita below the national poverty line of Azerbaijan.
- **Vulnerable:** People living in households with monthly consumption expenditure per capita above the national poverty line of Azerbaijan, but below a threshold of 1.5 times the value of the poverty line.
- **Middle-class:** People living in households with monthly consumption expenditure per capita above a threshold of 1.5 times the national poverty line of Azerbaijan, but below a threshold of 5 times the value of the poverty line.
- **More well off:** People living in households with monthly consumption expenditure per capita above the threshold of 5 times the value of the national poverty line of Azerbaijan.

Annex D: Poverty profile

Poverty as measured by consumption aggregate per capita is closely related to the household demographics and the main income source of a household. In 2020, households whose main source of income was targeted social assistance, social benefits, or self-employment were more likely to live in poverty than others. Poverty rate was also high among those with larger household sizes, and low among single member households and those with higher education. The poverty rate was the lowest among two-member households. No significant difference was observed in the gender of the household head.

Figure D 1: Poverty rates by household characteristics, 2020



Source: Data of SSCRA.

Annex E: Classification of urban areas

Table E 1: Functional Urban Area Entity Classification

Functional Urban Area Entity Classification													
	Total Population 3 of inhabitants	**Av. Density** pp/km2	**Av. Footprint** km2	**Ave. RWI**	**RWI** pop weighted	**Entity #**	**Main Urban Entity**	**Population**	**Density Pop/Km2**	**% Pop Growth**	**Area (Km2)**	**% Growth Area**	**RWI** pop weighted
Capital Metro Urban Agglomeration	2 216,794	1997	1110Km2	1.01	296	1	Baku Urban Unit	2 216,794	1997	22	1110	34.59	1.01
Major Urban Agglomeration Above 30K with Functional Area	100,626.86	1287.14	78.14	0.66	78	2	Ganja Urban Unit	246,371	1234	31	200	46.67	0.93
						3	Mingachevir Urban Unit	45,842	935	21	49	17.64	0.77
						4	Nakchivan Unit	68,879	1968	57	35	7.20	0.84
						5	Agdam Urban Unit	42,586	587	43	73	17.33	0.28
						6	Shirvan Urban Unit	58,980	1127	45	52	15.26	0.58
						7	Sumgayit Urban Unit	200,164	2390	18	84	0.01	0.72
						8	Masalli Urban Unit	41,566	769	33	54	15.61	0.52
Medium Urban Agglomerations >10K-30K with no satellite or conurbations Dense urban cluster	15,610.00	577.64	32.73	0.59	49	9	Aghedebi Urban Unit	16,842	396	97	43	133.77	0.48
						10	Astara Urban Unit	11,242	766	134	15	85.81	0.48
						11	Fuzuli Urban Unit	15,812	287	119	55	73.75	0.43
						12	Guba Urban Unit	16,317	643	73	25	64.65	0.73
						13	Imishli Urban Unit	12,484	437	36	29	41.75	0.47
						14	Khachmaz Urban Unit	12,011	732	6	16	-16.02	0.79
						15	Salibarad Urban Unit	20,784	887	40	23	20.70	0.33
						16	Saylan Urban Unit	14,728	368	27	40	22.20	0.22
						17	Seki Urban Unit	23,587	323	84	73	262.59	0.73
						18	Shamakhi Urban Unit	14,844	1040	19	14	-6.61	1.16
						19	Shamkir Urban Unit	13,059	475	-0.34	27	-7.18	0.71
Small Town >5K-10K Semi-dense urban cluster*	7,893.33	448.83	17.67	0.66	18	20	Barda Urban Unit	11,943	415	56	29	39.67	0.99
						21	Beylagan Urban Unit	5,731	477	57	12	58.56	0.49
						22	Gabala Urban Unit	6,076	493	185	12	196.42	0.57
						23	Goychay Urban Unit	8,423	511	46	16	14.73	0.85
						24	Neftchala Urban Unit	5,392	361	-2	15	10.23	0.32
						25	Zagatala Urban Unit	9,795	436	8	22	-0.41	0.73
Rural Cluster Rural to Urban Transition >1K-5K pop.	3,467.00	267.33	13.00	0.81	7	26	Agdash Urban Unit	4,274	329	48	13	38.61	0.72
						27	Naftalan Urban Unit	3,135	260	34	12	57.18	0.94
						28	Khakendi Urban Unit	2,992	213	137	14	97.19	0.76

Source: 2022 data of GeoAdaptive, Boston.
Note: RWI = relative wealth index.

Annex F: Defining a metric for prioritization

To evaluate Azerbaijan's performance in each indicator, a metric that ranks Azerbaijan with respect to other countries in the reference group is calculated. This reference group is comprised of other countries in the world, countries in Europe and Central Asia (excluding high-income countries), all countries in Europe and Central Asia, upper-middle-income countries, member countries of the Organisation for Economic Co-operation and Development, and regional, aspirational, and structural comparators.[94] Each indicator for Azerbaijan was compared against the median value in the latest available year as opposed to the mean to reduce the influence of outliers.

As a first step, all indicators were rescaled so that a higher value corresponds to greater achievement. For instance, while higher value of the indicator correspond to better performance for school enrollment rates, it is the opposite in the case of the under-5 mortality rate or the poverty rate, where higher values correspond to worse performance.

Second, normalized gap with respect to the median of the reference group, γ_{ij}^{s}, was calculated for each country as follows:

$$\gamma_{ij}^{s} = 100 \times \frac{v_{ij} - m_i^s}{m_i^s}$$

where v_{ij} is the value of the indicator i for country j and m_i^s is the median value of indicator i across countries in the reference group s. Countries, including Azerbaijan, were ranked based on this normalized gap.

Third, thresholds were defined to establish a priority criterion – lower threshold at the 33rd percentile and higher threshold at the 66th percentile of the distribution of the normalized gap for each reference group. Thus, if a particular indicator for Azerbaijan is below the percentile 33 of the normalized gap, it will have a high priority as its performance is well below the average of the comparison group.

Table F 1: Level of Priority and Normalized Gap

Level of Priority		Normalized gap (γ_{ij}^{s})
1	**High**	$\gamma_{ij}^{s} \leq p_{33}$
2	**Medium**	$p_{33} < \gamma_{ij}^{s} \leq p_{66}$
3	**Low**	$\gamma_{ij}^{s} > p_{66}$

[94] Azerbaijan's regional comparator countries are Kazakhstan, Serbia, Ukraine, Norway, and Romania; aspirational comparator countries are Chile, Malaysia, Mexico, Norway, and Romania; and structural comparator countries are Kazakhstan, Serbia, Ukraine, Ecuador, Mongolia, Peru, and Thailand.

Annex G: Results of prioritization

Table G 1: Prioritization Results Matrix

Level of Priority: Low | Medium | High

G.1.1. Rebalancing the Economy Toward the New Growth Model

Policy Priority Areas	Indicators	World	ECA	ECA All	MIC	Region	Aspirational	Structural	OECD
Rebalancing Assets - Increasing asset base for households	Human Capital Index	medium	medium	medium	medium	medium	medium	medium	medium
	Standardized test scores (PISA score, mathematics)	high	high	high	high	high	high	low	high
	Standardized test scores (PISA score, reading)	high	high	high	high	high	high	low	high
Increase productivity especially in agriculture	Employment in agriculture (% of total employment)	high	high	high	high	high	high	high	high
	Agricultural productivity	high	high	high	high	high	high	high	high
	Agriculture value added per worker (in constant 2015 US dollars)	high	high	high	high	high	high	high	high
	Agricultural exports (% of exports)	medium	medium	medium	high	medium	medium	low	medium
Infrastructure to Increasing Role as Regional Hub	Road density (Road connectivity 0–100 (best))	medium	medium	medium	medium	medium	medium	medium	medium
	Gross capital formation (% GDP)	low	medium	low	medium	low	low	low	low
	2.04 Quality of port infrastructure, 1-7	low	low	low	low	low	low	low	medium
Enhancing Connectivity - integration through trade and increasing role as regional hub	Value of trade as % GDP	medium	medium	medium	medium	medium	medium	medium	low
	Logistics performance index: Overall (1=low to 5=high)	medium	medium	medium	medium	medium	medium	medium	medium
	Market concentration index (Hirschman-Herfindahl index of exports value destination)	high	high	high	medium	high	high	medium	high
Rebalancing Spatial Development	Internet users (per 100 people)	low	low	low	low	low	medium	low	medium
	Rural population (% of total population)	medium	medium	low	medium	medium	high	medium	high
	Road density (kilometers of road per 100 square kilometers of land area)	medium	medium	medium	medium	medium	medium	medium	medium
Digital Development	Fixed broadband subscriptions (per 100 people)	low	medium	medium	low	medium	low	low	medium
	Fixed Broadband Download Speed (Average Mbps)	high	high	high	high	high	high	high	high
	Mobile Download Speed (Average Mbps)	low	low	medium	low	medium	low	low	medium
	Internet users (per 100 people)	low	low	low	low	low	medium	low	medium
Safeguarding Fiscal Revenue	Tax revenue (% of GDP)	medium	medium	medium	medium	medium	low	medium	medium
	Resource rent as % of GDP	high	high	high	high	high	high	high	high
	Time to prepare and pay taxes (hours)	low	low	low	low	low	low	low	medium
	Public debt as % of GDP	low	low	low	low	low	low	low	low

G.1.2. Fostering Private Sector Growth

Policy Priority Areas	Indicators	World	ECA	ECA All	MIC	Region	Aspirational	Structural	OECD
Address SOE dominance	Government effectiveness	medium	medium	medium	medium	medium	high	medium	high
Improve business climate in the formal sector	Account at a formal financial institution, income, bottom 40 (% ages 15+)	high	high	high	high	high	high	high	high
	Firms competing against unregistered firms (% of firms)	medium	medium	medium	high	medium	low	medium	low
	Domestic credit to private sector (% of GDP)	high	high	high	high	high	high	high	high
	FDI as the % of GDP	high	high	high	high	high	medium	high	medium
Enhance equitable access to financial services	Commercial bank branches (per 100,000 adults)	high	high	high	high	high	medium	low	high
	Share of SMEs with financial access	low	low	low	low	low	low	low	low
	Adults borrowing from a formal fin. Inst. In the past year to total adults (% of 15 years old or above)	low	low	low	medium	medium	medium	medium	medium
	Adults with an account at a formal fin. inst. to total adults (%)	high	high	high	high	high	high	high	high
Develop better link between education and labor market by addressing skills mismatch	Percent of firms choosing inadequately educated workforce as their biggest obstacle	high	high	medium	high	low	medium	high	low
	Research and development expenditure (% of GDP)	high	medium	high	high	high	high	low	high
	Government expenditure on education, total (% of GDP)	high	high	medium	medium	medium	medium	medium	medium

G.1.3. Enhancing Human Capital Modernization

Policy Priority Areas	Indicators	World	ECA	ECA All	MIC	Region	Aspirational	Structural	OECD
3.1 Education for Better Lives and Better Labor Market Outcomes	Gross enrollment ratio, tertiary, both sexes (%) by sex	medium	high	high	high	high	low	high	low
	Research and development expenditure (% of GDP)	high	medium	high	high	high	high	medium	high
	Government expenditure on education, total (% of GDP)	high	high	medium	medium	medium	medium	medium	medium
	Gross enrollment ratio, upper secondary, both sexes (%)	low	medium	medium	medium	medium	low	medium	medium
	Standardized test scores (PISA score, mathematics)	high	high	high	high	high	high	low	high
	Standardized test scores (PISA score, reading)	high	high	high	high	high	high	low	high
	Growth rate of HCI (between 2010 and 2020)	low	low	low	low	low	low	low	low
	HCI (in 2020)	medium	medium	medium	medium	medium	medium	medium	medium
	Gross enrollment ratio, preprimary, both sexes (%)	medium	high	medium	medium	high	low	high	medium
	Average wage growth	low	medium	medium	low	low	low	medium	low
	Labor force participation rate, total (% of total population ages 15+) (modeled)	medium	low	low	low	low	low	low	low
	Labor force participation rate, among youth aged 15-24 (% of total population ages 15+) (modeled)	medium	low	low	low	low	low	medium	medium
	Unemployment rate, total (% of total population ages 15+) (modeled)	medium	low	low	low	medium	medium	low	low
	Unemployment rate, among youth aged 15-24 (% of total population ages 15+) (modeled)	medium	low	low	low	low	medium	medium	low
3.2 Health care for Better Quality Life	Life expectancy at birth, total (years)	medium	medium	medium	medium	medium	medium	low	medium
	Mortality rate, under-5 (per 1,000 live births)	high	high	high	high	high	high	high	high
	Out-of-pocket health expenditure (% of total expenditure on health)	high	high	high	high	high	high	high	high
	Prevalence of stunting	medium	high	high	high	high	high	high	high
	Prevalence of obesity among adult	low	low	low	low	low	low	medium	low
	Prevalence of obesity among children	low	low	low	low	low	low	low	low
	People using safely managed sanitation services (% of population)	high	high	high	high	high	high	high	high
	Government health expenditure (% of GDP)	high	high	high	high	high	high	high	high

3.3 Enhancing human capital of vulnerable groups (women, IDPs)	Average wage growth, female	low	medium	medium	low	medium	low	medium	low
	Male to female ratio at birth	medium	medium	medium	medium	medium	medium	medium	low
	HCI by sex	medium	medium	medium	medium	medium	medium	medium	medium
	Discriminatory norms toward women	high	high	high	high	high	high	high	high
	Women's Parliamentary representation	high	high	medium	high	medium	medium	medium	high
	Number of sectors (or occupations) reserved for men only	low	low	low	low	low	low	low	low
	Internally displaced persons, total displaced by conflict and violence (number of people) (normalized by dividing by total population)	high	high	high	high	high	high	high	high
	Refugee population by country or territory of origin	high	high	high	high	high	high	high	high

G.1.4. Supporting Climate Resilient and Green Transition

Policy Priority Areas	Indicators	World	ECA	ECA All	MIC	Region	Aspirational	Structural	OECD
4.1 Prepare for the global green shift: Meeting GHG emissions target and investing in untapped resources (offshore wind, blue economy, water management, renewable energy, tourism)	Renewable energy consumption (% of total final energy consumption)	high	high	high	high	high	high	high	high
	Emission from transport sector	low	medium	medium	medium	medium	low	medium	low
	CO2 emissions (kilograms per 2011 purchasing power parity US$ of GDP)	high	low	low	medium	low	medium	low	high
	Economic complexity	high	high	low	high	low	low	high	low
	Resource rent as % of GDP	high	high	high	high	high	high	high	high
	Electricity production from renewable sources (kilowatt hours)	high	low	low	medium	medium	high	high	high
	International tourism, number of arrivals	low	high	high	medium	high	high	high	high
	Methane emissions (kt of CO2 equivalent)	high	high	high	high	high	high	high	high
	Resource rent as % of GDP	high	high	high	high	high	high	high	high
4.2 Environmental Sustainability and Adaptation to Climate Change - reverse land degradation and water security	Agricultural productivity	high	high	high	high	high	high	high	high
	Percent change in forest area 2005–10	low	low	low	low	low	low	high	low
	Annual freshwater withdrawals, total (billion cubic meters)	high	high	high	high	high	high	medium	high
	Wastewater treatment	high	medium	medium	high	high	high	high	high
	Water productivity (Constant 2005 US$ by cubic meter of freshwater withdrawal)	high	high	high	high	high	high	high	high
	Water use efficiency US$/m3	high	high	high	high	high	high	high	high
	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	high	high	high	high	high	high	high	high

Note: ECA = Europe and Central Asia region. MIC = middle-income countries. OECD = Organisation for Economic Co-operation and Development.

Annex H: Caveats and complex cases in the prioritization process

Attention is needed when the priority of the indicator varies largely across the reference groups. For example, for many indicators, the performance among upper-middle-income countries, aspirational comparators, and countries of the Organisation for Economic Co-operation and Development is expected to be superior to among structural comparators and all countries in the world. If the priority level of the indicator (indicated by high, medium, and low) is consistent across all reference groups (for example, all cells in the same row are highlighted in red), then the prioritization of the indicator is straightforward. However, the prioritization process becomes more complex when the results are mixed, for example, when Azerbaijan is performing well compared to reference groups with a lower median but worse when compared to reference groups with a higher median.

The rule is set so that the policy area is identified as a priority if one of the following conditions is satisfied:

- If there is an indicator dominated by a "high" level of priority AND the policy simultaneously "enhances productivity", "improves equity", and "improves environmental or social sustainability."
- If there is an indicator identified as "high priority" against some reference groups AND cells associated with "medium priority" either dominate or have an equal number of cells associated with "low priority" AND the policy simultaneously "enhances productivity", "improves equity", and "improves environmental or social sustainability."
- If no indicator includes cells identified as "high priority" but overall, the policy is dominated by cells associated with "medium priority" AND the policy simultaneously "enhances productivity", "improves equity", and "improves environmental or social sustainability."
- If there is an indicator dominated by "high priority" cells, although the policy EITHER "enhances productivity" OR "improves equity" OR "improves environmental or social sustainability."

Additionally, some specific cases and decisions along the prioritization process are worth clarifying.

- **Agricultural exports (percent of GDP)**: Azerbaijan performs below the median of MICs (which are expected to have a high median) and better than structural comparators (which are expected to be associated with a relatively low median). However, either considering or omitting this indicator would not affect the overall result that "Increase productivity, especially in agriculture" should remain a policy priority.
- **Value of trade, percent of GDP:** Azerbaijan's performance is mixed. However, since Azerbaijan's performance in this indicator is classified as "medium" across 6 reference groups, the priority of this indicator is defined as "medium."
- **Average wage growth:** Azerbaijan has mixed performance. Hence, this indicator is not considered in the prioritization. Overall, "Addressing the skills mismatch in the labor" is classified as a priority area, as other indicators result in "high priority" and this policy area is identified as having direct positive impacts on both productivity and equity.
- **Average wage growth among women** and **women's parliamentary representation:** Indicators show mixed results for Azerbaijan. After omitting these indicators from the analysis, women are identified as a policy priority, based on the performance of the remaining indicators: discriminatory norms toward women, male to female ratio at birth, and HCI by sex.
- **CO2 emissions (kilograms per 2011 purchasing power parity US dollars of GDP)** and **Economic Complexity:** Indicators also show mixed results for Azerbaijan. However, dropping these indicators does not affect the conclusion that meeting GHG emissions targets should be a policy priority area.
- **Electricity production from renewable sources**: The indicator shows mixed results. However, even if this indicator is dropped, "Investing in untapped resources" remains a policy priority, as the indicator "resource rent as a percent of GDP" shows high priority relative to all reference groups.

Annex I: Data gaps and knowledge gaps

The SCD identified a few areas in which additional data will be needed to provide timelier and finer-scale policy implications for Azerbaijan. Below are some suggestions.

- To better understand the well-being of the poor and the poorest 40 percent of the population, vulnerable groups such as women, IDPs, disabled people, and of the population in general, access to individual- and household-level data is critical.
- To better understand trends and obstacles to rebalancing toward private sector growth, better and more regularly available data on firm performance, including employment, will be needed.
- To better understand the progress in service delivery and citizen engagement in the decision-making process, disaggregated information on the quality of institutions (such as local authorities), rule of law, and quality of services will be needed. More recent and disaggregated data on corruption and Public Expenditure and Financial Accountability (PEFA) could help identify entry points for additional reforms.[95]

Some potential studies for bridging these knowledge gaps are listed below.

Poverty Assessment	• Poverty profiling at a more granular level, showing poverty and inequality measures across subgroups of a population by region, sector of employment, and educational attainment among others. • In-depth analysis to examine the roots and causality of poverty and vulnerability of the subgroups of the population. • Labor market analysis to uncover the link between skills and jobs; understanding further the characteristics of workers in the informal sector; the difference in productivity across and within each sector; returns to education and human capital by gender.
Governance and Institutions	• Disaggregated information on the quality of institutions (local authorities vs. ministries; local governments across the country) to identify "islands of excellence" that could be replicated. • Disaggregated information (at the dept. level) on access and quality of services that citizens and businesses are receiving. • More recent data on the costs of corruption for firms (by size and by sector). • Rule of law appears weak but more disaggregated data is needed (no data from WJP). • More recent and updated data on the Public Expenditure and Financial Accountability could help identify entry points for additional reforms (last PEFA is 2014).
Green Growth	• Country-specific green growth analysis to develop a prioritization matrix. • To ensure just transition to green growth, access to individual- and household-level data is needed. Distributional impacts of green transition should also be predicted and monitored using the individual- and household-level surveys. • Detailed study of the potential for the development of a hydrogen industry and export opportunities. • Evaluation of the green co-benefits of expanding inland fisheries in the water bodies. • Targeted analytical work about the short-, medium-, and long-term physical and transitional impacts of climate change in Azerbaijan and how they affect economic and social systems. • A comprehensive Green Growth strategy, backed by sectoral analyses and supported by policies, regulations, incentives, and finance will be the first step toward unlocking the potential of the private sector and creating opportunities for spearheading green growth.
Transport	• Analysis of wider economic benefits, feasibility, and impact evaluation of corridor development in Azerbaijan in terms of contribution to economic growth, employment, productivity, trade volume, and inclusiveness, among others. • Assessment of the development of integrated logistics centers in Azerbaijan. • Road safety analysis and recommendations for addressing high pedestrian fatality rates.

[95] The most recent data on PEFA was 2014.

Climate	• Estimating the economic and distributional impact of floods and droughts. • Updates on the accessibility to drinking water, sanitation and hygiene services across space and different socio-economic groups and its impact on poverty and equity.
Urbanization	• Identifying underlying causes of the spatial disparities within Baku. • Identifying the underlying causes of low wealth, specific constraints, and opportunities in the urban settings concentrated in the southern part of Azerbaijan. • Quantifying the impact of harnessing the spatial and economic dynamics of agglomeration, specialization, and mobility to further narrow spatial inequalities across regions.
Disability	• Comprehensive assessment of persons with disabilities based on unified, good quality nationwide statistics.