Azerbaijan's Economic Trajectory: Short-Term Constraints, Medium-Term Vulnerabilities, and Long-Term Structural Risks

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Abstract

This analytical paper provides a comprehensive assessment of Azerbaijan's economic trajectory over the past three decades, situating the discussion within a context of escalating global volatility, regional uncertainty, and domestic structural imbalances. It investigates the interplay between short-term fiscal constraints, medium-term macroeconomic vulnerabilities, and long-term structural risks, each of which continues to shape the country's developmental outlook and policy space. The analysis foregrounds several persistent challenges, including overreliance on hydrocarbon revenues, diminishing foreign direct investment (FDI) inflows, limited progress in economic diversification, and institutional weaknesses in fiscal governance that impede the efficiency and credibility of public policy implementation beyond the oil sector.

The findings reveal that fiscal fragility—rooted in the volatility of oil revenues and the rigid structure of public expenditures—has become a defining feature of Azerbaijan's macroeconomic landscape. The underperformance of non-oil growth strategies, compounded by declining hydrocarbon production and price volatility, undermines the sustainability of growth and threatens the long-term stability of public finances. The paper further examines the complex relationship between state finances, the State Oil Fund of Azerbaijan (SOFAZ), and the national budget, identifying systemic governance challenges, including the misalignment of fiscal priorities, limited transparency in inter-budgetary transfers, and risks of inefficiency and corruption in public spending. Moreover, the continuation of an over-militarized expenditure structure constrains the fiscal space available for social, environmental, and innovation-driven investments critical to long-term competitiveness.

This paper examines the complex interplay between declining hydrocarbon revenues, rising developmental expenditure commitments, and structural inefficiencies that threaten Azerbaijan's fiscal sustainability. It draws on recent data and analyses from international institutions and independent researchers to assess both the macroeconomic trajectory and the political economy implications of these evolving dynamics.

According to World Bank projections (2022), in the absence of comprehensive structural reform, Azerbaijan's GDP growth is expected to average only 0.5 percent annually between 2024 and 2050. At this pace, the country would require nearly a century to achieve high-income status, defined in 2024 as a gross national income (GNI) per capita of USD 13,935. This stagnation scenario underscores the urgent need for fiscal consolidation, institutional modernization, and policy reorientation toward productivity-enhancing and inclusive growth drivers.

The paper also undertakes a sector-specific assessment of non-oil development, critically evaluating the implementation gaps and policy failures of state programs and strategic roadmaps designed to stimulate diversification. It identifies structural impediments stemming from entrenched governance practices, limited institutional autonomy, and weak private-sector engagement, which collectively inhibit the emergence of competitive non-oil industries.

A comparative analysis with other South Caucasus economies—particularly Georgia and Armenia—demonstrates Azerbaijan's relative strength in aggregate fiscal capacity and external buffers, largely due to SOFAZ and hydrocarbon income. However, the analysis also reveals that the country lags behind its regional peers in human capital development, institutional quality, and economic diversification, factors that are central to sustainable long-term growth.

Overall, the findings suggest that, without fundamental fiscal and structural reforms, Azerbaijan risks entering a protracted period of economic stagnation, marked by declining productivity, growing inequality, and increased exposure to external shocks.

Keywords: Azerbaijan; economic diversification; hydrocarbon dependence; structural reforms; fiscal fragility; foreign direct investment; World Bank projections; Eurasian economies

List of Abbreviations

Abbreviation	Full Form
ACG	Azeri–Chirag–Guneshli
ADB	Asian Development Bank
AZN	Azerbaijani Manat
bcm	Billion Cubic Meters
BP	BP Azerbaijan (and BTC Co., where relevant)
BTC	Baku–Tbilisi–Ceyhan Pipeline
CIS	Commonwealth of Independent States
CPI	Consumer Price Index
EBRD	European Bank for Reconstruction and Development
EIA	U.S. Energy Information Administration
EU	European Union
EVN	EVN Report (Armenia)
FDI	Foreign Direct Investment
FX	Foreign Exchange
GDP	Gross Domestic Product
GII	Global Innovation Index
IFI	International Financial Institution
IMF	International Monetary Fund
ICT	Information and Communication Technologies
IISS	International Institute for Strategic Studies
LTGM	Long-Term Growth Model (World Bank)
MoE	Ministry of Economy of the Republic of Azerbaijan
MoF	Ministry of Finance of the Republic of Azerbaijan
OECD	Organisation for Economic Co-operation and Development
PSA	Production Sharing Agreement
REER / NEER	Real / Nominal Effective Exchange Rate
SEDS	Strategy for the Socio-Economic Development of Azerbaijan (2022–2026)
SOFAZ	State Oil Fund of Azerbaijan
SSC / SSCA	State Statistical Committee of Azerbaijan
USD	United States Dollar
WB	World Bank
WEO	World Economic Outlook (IMF)
WIPO	World Intellectual Property Organization

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Introduction

Since gaining independence, Azerbaijan's economic development has been overwhelmingly shaped by its hydrocarbon wealth. Revenues from oil and gas exports have long underpinned the state budget and the State Oil Fund of Azerbaijan (SOFAZ), financing large-scale social programs, infrastructure projects, and public investments. However, this dependence has also entrenched deep structural vulnerabilities. Declining oil production, volatility in global energy markets, weak economic diversification, and opaque fiscal governance—compounded by pervasive political corruption—have left Azerbaijan increasingly exposed to both domestic and external risks. These internal fragilities are further amplified by global economic shocks, trade disruptions, and escalating regional conflicts.

Geopolitical instability continues to reinforce these economic challenges. Strained political relations with Russia—Azerbaijan's primary trading partner—have constrained market access for non-oil exports. Moreover, more than five years after the 44-day war with Armenia in 2020, the absence of a comprehensive peace treaty sustains heightened military expenditures and geopolitical uncertainty across the South Caucasus. Against this backdrop, the imperatives of durable peace, regional economic integration, restoration of transport and communication corridors, internal market liberalization, and rationalization of public spending have become particularly pressing.

The legacy of the 2015 double devaluation[1] continues to weigh heavily on Azerbaijan's financial and monetary systems. Although the Azerbaijani manat has remained administratively stabilized against the U.S. dollar, currency misalignments with trading partners have generated competitive pressures. Since then, both the nominal and real effective exchange rates—weighted by non-oil trade—have appreciated, reflecting inflation differentials and the rigidity of the exchange-rate regime. In 2024, the nominal effective exchange rate strengthened by 9 percent, while the real effective exchange rate rose by 2.2 percent[2]. Although domestic inflation remained below the average rate of partner economies, this appreciation has eroded the competitiveness of

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[1] Ibadoghlu, Gubad (2018) : Financial inclusion, financial literacy, and financial education in Azerbaijan, ADBI Working Paper, No. 842, Asian Development Bank Institute (ADBI), Tokyo, https://www.econstor.eu/bitstream/10419/190263/1/adbi-wp842.pdf

[2] Central Bank of the Republic of Azerbaijan, Financial Stability Report, 2024, page 12, https://cbar.az/page-798/financial-stability-report

Azerbaijan's non-oil exports, while persistent import dependence continues to expose the economy to external shocks.

Macroeconomic balances, while still positive, offer only a temporary buffer. In 2024, Azerbaijan recorded a current-account surplus of 6.3 percent of GDP (USD 4.7 billion) and a foreign-trade surplus of 7.4 percent of GDP (USD 5.5 billion)[3]. However, the Central Bank's foreign-exchange reserves declined by 5.6 percent, to USD 11 billion, raising questions about long-term sustainability[4]. Declining foreign-exchange inflows have heightened the probability of emerging balance-of-payments risks in the short to medium term. For a heavily import-dependent economy, such surpluses may ease inflationary pressures in the near term but simultaneously weaken the competitiveness of non-oil exports in global markets. Notably, Azerbaijan remains the only country[5] in the world expected to keep its land borders closed until 2026[6]—an additional constraint on trade, tourism, and cross-border economic activity.

Beyond the macroeconomic sphere, Azerbaijan's institutional environment has deteriorated sharply over the past decade. By 2014, most international development agencies and UN institutions had withdrawn from the country[7], citing systemic restrictions crackdown on civil society, restricted media landscape[8] and the erosion of judicial independence[9]. Azerbaijan ranks among the poorest performers in implementing ECtHR judgments[10]. Since 2023, repression has intensified, with nearly 400 individuals recognized as political prisoners[11] and extensive

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[3] Central Bank of the Republic of Azerbaijan, Financial Stability Report, 2024, page 12-13, https://cbar.az/page-798/financial-stability-report

[4] Central Bank of the Republic of Azerbaijan, Official foreign exchange reserves, 2024, https://cbar.az/infoblocks/money_reserve_usd

[5] Goodbye to post-COVID normality—Azerbaijan will be the only country in the world to keep its land borders closed until 2026, by Victoria Flores October 6, 2025, https://www.blanquivioletas.com/en/azerbaijan-borders-closed-until-2026/

[6] On the extension of the special quarantine regime in the territory of the Republic of Azerbaijan, Decision of the Cabinet of Ministers of the Republic of Azerbaijan, 22 September 2025, https://e-qanun.az/framework/60546

[7] Azerbaijan closes 6 UN offices, 05 March 2025, https://hamamtimes.tv/az%C9%99rbaycan-bmt-nin-6-ofisini-baglayir/

[8] Human Rights Crisis in Azerbaijan in the shadows of COP29, 07 November 2024, https://www.nhc.nl/human-rights-crisis-in-azerbaijan-in-the-shadows-of-cop29/

[9] Azerbaijan: Human rights groups urge International Association of Judges to act, 30 September 2025, https://www.freedom-now.org/azerbaijan-human-rights-groups-urge-international-association-of-judges-to-act/

[10] Azerbaijan: ICJ joins call to address deepening crisis of judicial independence, 29 September 2025, https://www.icj.org/azerbaijan-icj-joins-call-to-address-deepening-crisis-of-judicial-independence/

[11] New list of political prisoners announced: 392 people, 07 October 2025, https://www.meydan.tv/en/article/new-list-of-political-prisoners-announced-392-people/

politically motivated travel bans on them not by the court, but by the investigative authority[12]. Moreover, authorities have engaged in selective enforcement of financial regulations and imposed travel bans on entrepreneurs accused of economic offenses [13]. These developments have weakened institutional capacity, undermined accountability, and diminished the credibility of anti-corruption reforms—further compounding Azerbaijan's long-term economic vulnerabilities.

This paper contributes to the broader literature on post-Soviet political economy by integrating macroeconomic, institutional, and geopolitical perspectives into a unified framework. It examines how fiscal fragility, hydrocarbon dependency, weak diversification, and governance challenges intersect to shape Azerbaijan's contemporary development trajectory. By situating these dynamics within regional and global contexts, the study provides a multidimensional assessment of Azerbaijan's short-term pressures, mid-term vulnerabilities, and long-term structural risks. The findings offer new insights into the country's prospects for sustainable, inclusive, and innovation-driven growth in an increasingly uncertain global environment.

This study synthesizes national statistics, forecasts by international institutions (World Bank, IMF, EBRD, ADB, Moody's, S&P, Fitch), and sectoral evidence on oil production, agriculture, and investment. The analysis covers 1996–2025 historical trends and 2024–2050 long-term projections, with comparative evaluation of strategic targets and actual outcomes.

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[12] Human Right Watch, World Report 2025: Azerbaijan, https://www.hrw.org/world-report/2025/country-chapters/azerbaijan

[13] Ministry of Justice, Information on temporary restriction of the debtor's right to leave the countryhttps://exidmet.justice.gov.az:8284/Icra/QuitLimitation

Literature Review

The dynamics of resource dependence and the so-called resource curse have been extensively explored in the literature on economic development, particularly in relation to emerging and resource-rich economies (Auty, 2001; Sachs & Warner, 2001). Foundational research underscores how heavy reliance on natural-resource revenues can generate fiscal volatility, institutional fragility, and persistent structural under-diversification (Gelb, 1988; Ross, 2012). In the case of Azerbaijan, a growing body of scholarship emphasizes the complex interaction between hydrocarbon wealth, governance, and long-term development outcomes (World Bank, 2023; IMF, 2024). Analyses of policy frameworks, such as the Strategic Roadmaps for the National Economy and Key Sectors (Asian Development Bank, 2023), reveal substantial discrepancies between declared policy objectives and achieved results, particularly in areas related to non-oil exports, innovation, and investment attraction.

Azerbaijan's economy remains profoundly dependent on its hydrocarbon sector—a structural feature that has historically generated substantial fiscal revenue while simultaneously embedding systemic vulnerabilities (Das et al., 2022; Anna & Shishkova, 2021). This dependence has perpetuated a recurrent boom-and-bust cycle, closely linking economic performance to global oil-price fluctuations and constraining the emergence of a resilient and diversified economic base (Rookwood, 2021).

Recent retrospective analyses reinforce these findings. Ibadoghlu and Niftiyev (2022a), in *A Retrospective Analysis of the Azerbaijani Economy during 30 Years of Independence* (*Post-Soviet Issues*), argue that Azerbaijan's post-Soviet economic trajectory has been shaped by a paradox of resource abundance—achieving fiscal stability and rapid growth during high oil-price periods, yet failing to institutionalize sustainable diversification mechanisms. Similarly, in *An Assessment of the Thirty-Year Post-Soviet Transition Quality in Azerbaijan from an Economic and Social Liberalization Perspective* (*Journal of Life Economics*), Ibadoghlu and Niftiyev (2022b) demonstrate that the country's liberalization process has been uneven, with economic reforms outpacing social and institutional transformation. Together, these studies provide critical empirical evidence that Azerbaijan's growth model remains heavily resource-dependent, with weak linkages between extractive industries and non-oil sectors.

Recognizing the urgency of this structural vulnerability, the government has prioritized non-oil sector development as a central pillar of national economic policy, articulated in the Strategy for the Socio-Economic Development of the Republic of Azerbaijan for 2022–2026 (Ibadoghlu, 2022; Huseynov et al., 2023). However, despite these strategic commitments, implementation outcomes remain limited. Persistent deficiencies in fiscal governance, coupled with underdeveloped financial markets and weak innovation ecosystems, have constrained the mobilization of capital and technology necessary for structural transformation (Seyfullayev, 2023).

This sustained dependence on hydrocarbon exports continues to shape both macroeconomic performance and institutional design, influencing the interaction between financial and real sectors (Seyfullayev, 2023). The magnitude of this imbalance remains significant: in 2022, the oil and gas sector accounted for approximately 47.8% of GDP, while more than half of total state budget revenues were derived from oil income (Mahmudova, 2023). Such figures underscore the enduring nature of Azerbaijan's resource dependence and the continued urgency of fostering inclusive, innovation-driven, and institutionally grounded economic diversification.

Building upon this literature, the present study seeks to bridge the gap between retrospective analyses and forward-looking risk assessments. By integrating macroeconomic indicators, policy-performance evaluations, and scenario-based projections, the paper provides a multi-horizon assessment of Azerbaijan's economic trajectory—focusing on short-term pressures, mid-term exposure to structural risks, and long-term sustainability challenges. In doing so, it contributes to the broader debate on post-resource transition strategies in hydrocarbon-dependent economies and offers evidence-based insights into the prerequisites for a resilient, diversified, and innovation-oriented development model.

I. Macroeconomic Performance

Following the collapse of the Soviet political system—built upon the administrative command model and governed through five-year plans—the ensuing economic disintegration inevitably affected Azerbaijan, along with other newly independent states. The country entered a profound transformation crisis. The economic downturn that had already begun in 1989, prior to the dissolution of the USSR, deepened significantly during the first three years of independence. Between 1989 and 1991, Azerbaijan's GDP contracted by an average of 5.7 percent annually. In the subsequent period of 1992–1995, the rate of decline intensified by a factor of 3.4, reaching an average of 19.4 percent per year[14]. For comparison, the corresponding average decline among other CIS countries was approximately 13 percent annually and 43 percent cumulatively over the same period. Consequently, by 1995 Azerbaijan's national income had fallen by 58 percent compared to its 1991 level[15].

While GDP across post-Soviet economies decreased by an average of 42 percent between 1989 and 1995, Azerbaijan experienced a considerably sharper contraction of 63 percent[16]. In the three years following independence, industrial production declined more steeply than in the preceding years, the budget deficit expanded rapidly, and price and foreign-trade liberalization amplified inflationary pressures. Simultaneously, the result of recession, hyperinflation, and nationalization of property contributed to widespread unemployment and poverty[17]. The most severe declines occurred in the production sectors, where the average annual reduction exceeded 20 percent. During the recession, agricultural output fell by 43 percent, while industrial production plummeted by 60 percent. The state-budget deficit reached 15.3 percent of GDP in 1993 and remained high at 10.9 percent in 1994[18].

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[14] World Bank. (1999). Azerbaijan - Country Assistance Strategy (English). Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/283601468002971842

[15] Aliyev Gambar (2022), Statistical analysis of the main trends in the development of the Azerbaijani economy after the second Karabakh war. https://unec.edu.az/application/uploads/2023/10/liyev-Q-mb-r-Adil1.pdf

[16] World Bank. (2003). Memorandum of the President of the International Bank for Reconstruction and Development and the International Development Association to the Executive Directors on a Country Assistance Strategy of the World Bank Group for the Azerbaijan Republic, No. 25790-A2, DOI: https://doi.org/10.1596/978-1-4648-0484-7

[17] Transition Economics Two Decades On by Gerard Turley, Peter J. Luke Published 2010. ISBN-13: 978-0-203-84291-1, ISBN: 0-203-84291-X. Transition and Development

[18] World Bank. (1996). Memorandum of the President of the International Bank for Reconstruction and Development and the International Development Association to the Executive Directors on a Country Assistance

Inflationary pressures during this period were extreme. Azerbaijan experienced four-digit hyperinflation in 1993 and 1994, reaching 1,129.1 percent and 1,663.5 percent, respectively. Although inflation declined to a three-digit rate of 411.8 percent in 1995, it remained a major macroeconomic challenge. In 1996 and 1997, inflation was finally brought down to double-digit levels—19.9 percent and 13.7 percent, respectively—reflecting the initial impact of stabilization policies. However, in the subsequent two years, the national economy encountered deflationary pressures, indicating the fragility of the post-crisis adjustment process[19].

The social impact of the economic collapse was equally severe. In 1989, 33.6 percent of Azerbaijan's population lived below the poverty line—approximately three times higher than the average poverty rate in the Soviet Union[20]. By 1995, according to a World Bank household survey, the poverty rate had escalated to 61.5 percent, with the poorest quintile comprising 20.5 percent of the total population. These figures underscore the depth of the socioeconomic crisis that accompanied Azerbaijan's transition from a centrally planned to a market-oriented economy.

During the 1990s, Azerbaijan undertook a series of market-oriented reforms: the national currency was introduced, prices and foreign trade were liberalized, and comprehensive privatization of state assets and land—alongside agrarian restructuring—was implemented. In the first stage of land reform (1997–1999)**,** 2,032 collective farms were dissolved and their arable land was distributed to the rural population. In total, more than 1.35 million hectares were transferred free of charge to rural residents, replacing collective and state farms with individual and family farms**.**

Almost thirty one years ago, on September 20, 1994, Azerbaijan signed a Production Sharing Agreement (PSA) with foreign companies for the development of the Azeri–Chirag–Guneshli (ACG) oil fields in the Caspian Sea. This agreement holds a significant place in Azerbaijan's history, shaping the nation's economy and garnering respect and appreciation. The PSA—initially set for 30 years—was extended on September 14, 2017, until the end of 2049, commencing the second phase of this contract. Since that time, Azerbaijan's economy has been shaped by its hydrocarbon wealth.

Strategy of the World Bank Group for the Azerbaijan Republic, No. 15948-AZ, DOI: https://doi.org/10.1596/978-1-4648-0484-7

[19] Ibadoghlu, Gubad, Azerbaijan's Economic Model and Its Development since Independence (January 25, 2012). Available at SSRN: https://ssrn.com/abstract=3110219 or http://dx.doi.org/10.2139/ssrn.3110219

[20] Asian Development Bank, Country Partnership Strategy: Azerbaijan, 2014–2018, https://www.adb.org/sites/default/files/linked-documents/cps-aze-2014-2018-pa-az.pdf

Specifically, within the ACG development project, Azerbaijan generated over USD 174.4 billion in net profits from 2001 until September 1, 2024. This income played a significant role in shaping the state financial system, particularly SOFAZ and the state budget. During the 25 years of the Fund's operation, its revenues amounted to USD 202.1 billion, of which USD 189 billion derived from oil and gas contracts. Through transfers of USD 128.9 billion to the state budget, the Fund achieved financial balance and financed important projects[21].

GDP production in Azerbaijan decreased by an average of -6.3 percent in 1990–2000 and increased by 12.7 percent in 2000–2005[22]. Between 2006 and 2015, GDP grew by nearly 9.5 percent annually on average, driven by energy exports. Yet reliance on hydrocarbons has generated structural fragilities. Declining production, volatility in global oil markets, and weak diversification expose Azerbaijan to mounting risks. Growth has slowed dramatically since 2016, reflecting both declining energy output and weak diversification.

Examining Azerbaijan's main economic parameters over the three decades following the transformation crisis (1992–1995) reveals the pronounced impact of oil-export and revenue dynamics on macroeconomic performance. Accordingly, we delineate three subperiods—pre–oil boom, oil boom, and post–oil boom—and report the corresponding indicators in Table 1.

Table 1. Macroeconomic Indicators by Period (1996–2025)

Period	Avg. GDP Growth (%)	GDP (mln USD)	GDP per capita (USD)	Inflation (%)	FDI inflows (% of GDP)
1996–2005 (pre-oil boom)	10.23	6,258.3	772.7	3.89	27.45
2006–2015 (oil boom)	9.49	53,812.4	5,926.6	6.98	8.77
2016–2025 (post-oil boom)	1.46	57,644.2	5,730.4	7.02	2.00

Source: Author's calculations based on data from the State Statistical Committee of the Republic of Azerbaijan (SSC)

As shown in Table 1, the highest average annual GDP growth occurred in the pre–oil boom decade. Between 1996 and 2005, national income expanded by an average of 10.23 percent per year. The principal driver was exceptionally large FDI inflows, which averaged 27.45 percent of

[21] Ibadoghlu, Gubad, Orthodox View on the 30th Anniversary of the Azerbaijan's "Contract of the Century", (September 20, 2024). Available at
SSRN: https://ssrn.com/abstract=4962993 or http://dx.doi.org/10.2139/ssrn.4962993

[22] Transition Economics Two Decades On by Gerard Turley, Peter J. Luke Published 2010. ISBN-13: 978-0-203-84291-1, ISBN: 0-203-84291-X. Transition and Development

GDP—roughly four times the share recorded during the subsequent oil-boom decade and more than fourteen times the share in the most recent decade.

These inflows were concentrated in the implementation of the Azeri–Chirag–Guneshli (ACG)[23] development under the production-sharing agreement signed on 20 September 1994, managed in consortium form with the participation of SOCAR. During this period, Phase 1 and Phase 2 of ACG were brought to full development, including the construction of offshore platforms, the Sangachal terminal[24] for export operations, and the Baku–Tbilisi–Ceyhan (BTC)[25] main export pipeline.

Concurrently, significant progress was made in the transition to a market economy: private entrepreneurship expanded, monetary and fiscal balances improved, and budget discipline was strengthened.

During the oil-boom decade, foreign investment continued to flow into Azerbaijan; however, despite strong GDP growth, the FDI share averaged only 8.77 percent of GDP. Although the period was officially presented as the completion of the market-transition agenda, in practice governance, privatization, and liberalization reforms remained incomplete. The expanded role of state-owned enterprises further entrenched state dominance and fueled the growth of the shadow economy.

In the post–oil-boom period, which followed the Azerbaijani manat devaluations, the government adopted numerous reform-oriented economic and social programs. Yet implementation was weak, producing limited progress on economic diversification while monopolization and corruption intensified. At the same time, declining oil production and lower investment contributed to a fall in the average annual GDP growth rate. Pandemic-related restrictions compounded these headwinds: since March 2020, land and sea borders have remained closed, creating serious impediments to cross-border trade and constraining the economic development of border regions.

Over the past decades, Azerbaijan’s inflation rate has followed a persistent upward trend.

[23] Bp, Azeri-Chirag-Deepwater Gunashli, https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/acg2.html

[24] Bp, Sangachal terminal, https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/terminals/sangachal_terminal.html

[25] Bp, Baku–Tbilisi–Ceyhan pipeline, https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/pipelines/btc.html

Finally, I draw attention to a salient asymmetry: although real GDP in U.S. dollars increased in the third decade relative to the preceding period, GDP per capita declined. The primary explanation is demographic—the pace of aggregate GDP growth during these ten years lagged behind natural population growth, thereby reducing output per person despite an expanding economy. This divergence underscores the importance of productivity-enhancing, broad-based growth to sustain living-standard gains.

Table 2 presents medium-term growth projections for Azerbaijan—covering the current year and the subsequent two years—compiled from international financial institutions**,** credit-rating and analytical agencies, and official government forecasts. Taken together, these projections indicate that the economy is entering a period of deceleration.

Table 2. Medium-term economic growth projections in Azerbaijan, (%)

	2025	2026	2027
World Bank	2.6	2.4	2.3
The International Monetary Fund	3.0	2.5	2.4
The European Bank for Reconstruction and Development	3.0	2.5	n/a
The Asian Development Bank	3.4	3.3	n/a
Moody’s	2.5	2.5	2.5
S&P Global	2.0	2.0	2.0
Fitch Solutions	3.0	2.4	2.5
ING Group	2.3	2.5	2.0
The Economist	2.9	2.9	3.1
Azerbaijan’s Ministry of Economy	3.7	3.2	3.6

Source: WB, IMF, EBRD, ADB, Moody’s, S&P Global, Fitch Solutions ING Group, The Economist & Ministry of Economy of the Republic of Azerbaijan

Currently, GDP grew by 1.3% in 9M 2025. Despite this, the Ministry of Economy forecasts GDP to grow by 3% in 2025. SSCA data indicate a 1.9% decline in the oil and gas sector and 2.9% growth in the non-oil and gas sector[26].

Table 2 indicates that ING has revised its 2025 GDP growth forecast for Azerbaijan from 2.5% to 2.3%; it keeps 2026 at 2.5% and sets 2027 at 2.0%. The Ministry of Economy projects comparatively higher growth of 3.7% (2025), 3.2% (2026), and 3.6% (2027). Among rating agencies, S&P Global expects 2.0% in 2025–2026, Fitch Ratings forecasts 3.0% (2025) and 2.4% (2026), and Moody’s anticipates 2.5% annually. International financial institutions are

[26] Azerbaijan's GDP grows 1.3% in 9M 2025 - State Statistics Committee, https://interfax.com/newsroom/top-stories/114249/

broadly aligned on moderation: the IMF projects 3.5% (2025) and 2.5% (2026); the EBRD sees 3.0% (2025) and 2.5% (2026); the ADB estimates 3.4% and 3.3% over the next two years; and the World Bank's April and June 2025 updates projected real GDP growth for Azerbaijan of 2.6% in 2025 and 2.4% in 2026. In its 8 October 2025 release, the Bank lowered these forecasts to 1.9% (2025), 1.8% (2026) and 1.7% (2027)[27]. The IMF likewise revised its outlook in the October World Economic Outlook ("Global Economy in Flux, Prospects Remain Dim")[28], cutting the 2025 projection by 0.5 percentage points—from 3.0% to 2.5%—and signaling a weaker profile for 2026."

Consistent with these short- to medium-term signals, the World Bank's Long-Term Growth Model (LTGM) is more sobering: absent significant reform, average annual growth could fall to 0.5% over 2024–2050, with GDP per capita rising by only ~11% over the next 30 years.[29]

Table 3 summarizes the World Bank staff's Long-Term Growth Model (LTGM) projections for Azerbaijan over 2024–2050.

Table 3. World Bank LTGM projections for Azerbaijan, 2024–2050, (%)

Average Growth Rate	2024-2050	2024-2029	2030s	2040s
I. Total GDP	0.5	1.1	0.5	0.1
II. Non-Energy GDP	1.6	2.0	1.8	1.3
III. Energy GDP (Oil + Gas)	-2.3	-0.2	-2.2	-3.5

Source: The World Bank (2022), Azerbaijan: Country Economic Memorandum

According to the World Bank's recent report[30] on accelerating economic growth through entrepreneurship, technological adoption, and innovation, under current structural and policy conditions, Azerbaijan is projected to require approximately 100 years to attain high-income country status ($14,005 in 2023). In contrast, Georgia and Armenia are expected to reach this

[27] The World Bank (2025),Jobs and Prosperity Office of the Chief Economist Fall 2025 Europe and Central Asia Economic Update, https://openknowledge.worldbank.org/server/api/core/bitstreams/9b18a520-9e9a-4e71-af8d-cf04b499fa18/content

[28] The IMF (2025), Global Economy in Flux, Prospects Remain Dim, https://www.imf.org/en/Publications/WEO/Issues/2025/10/14/world-economic-outlook-october-2025?cid=bl-com-AM2025-WEOEA2025002

[29] The World Bank (2022), Azerbaijan: Country Economic Memorandum, https://documents1.worldbank.org/curated/en/099100009222236784/pdf/P17532606988e2056084e603c9c48ddc618.pdf

[30] The World Bank (2025), Accelerating Growth through Entrepreneurship, Technology Adoption, and Innovation Office of the Chief Economist Spring 2025, https://openknowledge.worldbank.org/server/api/core/bitstreams/f34d0317-f1ab-4e39-b209-c7e2c149de19/content

threshold within 30 and 20 years, respectively. For Kazakhstan, the transition is estimated at just over 30 years, while Turkey may achieve this status in under 30 years. Among the 16 countries assessed across Eastern Europe, the South Caucasus, and Central Asia, Azerbaijan ranks among the bottom three, alongside Tajikistan and Uzbekistan, indicating significant challenges in convergence with high-income economies. However, the Socio-Economic Development Strategy of the Republic of Azerbaijan for 2022–2026[31], adopted on July 22, 2022, articulates an ambitious goal of elevating Azerbaijan to the status of a high-income economy by 2026, emphasizing structural reforms, productivity growth, and diversification as the principal drivers of this transformation.

Table 4 presents World Bank estimates of the number of years required for selected Eurasian economies to reach the high-income threshold, based on current structural and policy conditions. Balkan economies have been excluded for comparability within the post-Soviet and broader Eurasian region.

Table 4. Years Required to Reach High-Income Status (Selected Eurasian Economies)

Country	Years to Reach High-Income Threshold
Armenia	≈20 years
Georgia	≈30 years
Türkiye	≈30 years
Kazakhstan	≈35 years
Turkmenistan	≈35 years
Belarus	≈60 years
Kyrgyz Republic	≈70 years
Ukraine	≈70 years
Azerbaijan	Over 100 years
Tajikistan	Over 100 years
Uzbekistan	Over 100 years

Source: Iacovone et al. (2025); World Bank

In terms of macroeconomic performance, retrospective evidence indicates that during 1996–2016 Azerbaijan's real GDP expanded at an average rate of about 10 percent per year. From 2016 through 2025, however, the pace of growth fell roughly sevenfold, to approximately 1.5 percent on average. Current projections suggest that 1.9 percent in 2025 represents the upper bound of medium-term growth under existing policies. Looking further ahead, the World Bank staff's

[31] Socio-Economic Development Strategy of the Republic of Azerbaijan for 2022–2026, https://e-qanun.az/framework/50013

LTGM implies an even lower long-run trajectory. Taken together—and absent fundamental reforms—these estimates imply that, given current rates of natural population increase, Azerbaijan is unlikely to converge to high-income status and may remain within the middle-income range for at least a century.

II. Oil Production Trends and Forecasts

Macroeconomic outcomes over the past decade, reinforced by data for the first nine months of 2025, point to a clear deceleration in Azerbaijan's growth. With the economy long anchored in hydrocarbons, the slowdown reflects a structural decline in crude-oil output alongside subdued non-energy activity. The 2015 double devaluation and the collapse in global oil prices laid bare the vulnerabilities of this model—balance-sheet strain, exchange-rate rigidity, and procyclical fiscal dynamics. Although authorities subsequently unveiled an ambitious, economy-wide reform agenda to spur non-energy growth, weak implementation and continuing deficits in transparency and accountability have limited its impact on private investment, productivity, and diversification.

Recent data underscore the shift. GDP grew by 1.9% in January–September 2025, notably below consensus expectations of ~3% following 4.1% growth in 2024. The past-decade (2016-2025) average of 1.46% further illustrates the regime change from the high-growth years. The moderation reflects a combination of external headwinds—notably oil and gas price dynamics and supply-chain disruptions—and domestic structural factors, including falling oil production and a surge in imports linked to large-scale infrastructure investment in the liberated territories. This chapter analyzes the drivers and consequences of the slowdown in a longer-run structural context. It begins with the decline in crude-oil production as a proximate cause, then assesses non-energy sector performance, the reform record, and the macro-financial and fiscal transmission mechanisms through which shocks have propagated.

In 2024, the oil and gas sector accounted for 32.15 percent of Azerbaijan's gross domestic product (GDP)[32], while its share in total state budget revenues reached 48.4 percent[33]. The exports of oil- and gas-related goods constituted 87.36 percent of total merchandise exports[34], reflecting the continued dominance of hydrocarbons in the country's external sector.

[32] The Ministry of Economy of the Republic of Azerbaijan, Key economic indicators for 2024, https://economy.gov.az/storage/files/files/9603/LH8Nuk5IHoxRCgyMhh4XArjVoUbm8KPZjX14f2CK.pdf

[33] The Opinion of the Chamber of Accounts of the Republic of Azerbaijan on the annual report on the implementation of the state budget of the Republic of Azerbaijan for 2024, https://sai.gov.az/files/R%C9%99y%202024_yekun-208475301.pdf

[34] State Customs Committee of the Republic of Azerbaijan (2025), Customs Statistics of Foreign Trade of the Republic of Azerbaijan, Reporting period: 01.01.2024 – 31.12.2024, https://customs.gov.az/uploads/foreign/2024/2024_12.pdf?v=1737520142

By comparison, in 2023, the oil and gas sector represented 33.82 percent of GDP, attracted 30.87 percent of total investment in fixed capital, and contributed 51.52 percent of actual state budget revenues[35]. These figures underscore the centrality of the hydrocarbon sector to both economic performance and fiscal stability in Azerbaijan.

In 2024, Azerbaijan produced 28.9 million tons of commodity (marketable) oil: Azeri–Chirag–Gunashli (ACG) supplied 16.8 million tons (57.7%), SOCAR-operated fields 7.5 million tons (25.7%), Shah Deniz 4.2 million tons (14.4%), with the remainder from “Absheron” field. This breakdown underscores ACG’s central role in national output. At its peak in 2010, ACG produced about 835,100 barrels per day (≈300 million barrels per year). By 2024, ACG’s output had fallen by roughly 342,000 b/d—about 125 million barrels per year—which corresponds to an approximate 59 % decline relative to 2010.

As for 2024 natural gas production, Azerbaijan produced 50.3 bcm, of this total, Shah Deniz - 27.8 bcm (55.3%), Azeri–Chirag–Guneshli (ACG) - 13.3 bcm (26.4%), Absheron - 1.5 bcm (3.0%) and SOCAR-operated fields -7.7 bcm (15.3%). Output was up by 2.0 bcm from 2023 (from 48.3 to 50.3 bcm), a 4.1% year-over-year increase.

In 2024, Azerbaijan’s commodity gas output reached 37.8 bcm, marking the highest level in the country’s post-independence history. Currently, the Shah Deniz field produces an average of 77.2 mcm of gas per day, which corresponds to around 28.2 bcm annually. Shah Deniz now accounts for 72.1% of Azerbaijan’s total commercial gas production. From the start of field production on December 15, 2006, to October 1, 2025, a total of 257.7 bcm of gas and about 51.5 million tonnes of condensate have been produced. According to the latest data from the Ministry of Energy[36], 185.7 bcm of gas produced at Shah Deniz were exported, while the remaining 72 bcm were supplied to meet domestic demand in Azerbaijan.

The commodity oil & gas production figures over the past two decades are presented in Table 5**.**

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[35] Ibadoghlu, Gubad (2024), Orthodox View on the 30th Anniversary of the Azerbaijan's "Contract of the Century", (Available at SSRN: https://ssrn.com/abstract=4962993 or http://dx.doi.org/10.2139/ssrn.4962993

[36] The Ministry of Energy of the Republic of Azerbaijan, Oil and gas figures were announced for 2024, 15 January 2025, https://minenergy.gov.az/en/xeberler-arxivi/00634

Table 5. Commodity (marketable) oil and gas production in Azerbaijan (2005-2024)

Year	Commodity Oil Output (million tons)	Commodity Gas Output (bcm)
2005	22.2	5.7
2006	32.1	6.0
2007	42.5	10.8
2008	44.3	16.3
2009	50.3	16.3
2010	50.8	16.6
2011	45,3	16.3
2012	42,9	17,2
2013	43.1	17.8
2014	41.9	18.8
2015	41.5	19.2
2016	40.9	18.8
2017	38.6	18.1
2018	38.7	19.2
2019	37.4	24.5
2020	34.4	26.4
2021	34.5	32.5
2022	32.6	34.9
2023	30.0	36.4
2024	28.9	38.6

Source: State Statistical Committee of the Republic of Azerbaijan.

As shown in the table, oil and gas have played a dominant role in Azerbaijan’s economy over the past twenty years, particularly within the mining sector. Although the decline in oil production that began in 2011 has continued, gas output has shown a steady increase. For comparison, prior to Azerbaijan’s independence in 1991, the country’s commodity (marketable) oil and gas production amounted to 11.7 million tons and 8.6 bcm, respectively.

As indicated by the data presented in the table, Azerbaijan’s commodity (marketable) oil production declined by 41.3 percent in 2024 relative to 2010, reflecting a sustained downward trend in the sector. During the same period, domestic oil consumption increased by approximately 1.3 times, thereby exerting additional pressure on the country’s oil export capacity and overall external balance.

Oil production is expected to continue until 2050; however, after 2040, a gradual decline is anticipated due to the depletion of existing fields, with crude oil output projected to fall below pre-independence levels. Besides, the next 25 years will belong to whoever masters AI-driven drilling, low-carbon extraction, and flexible LNG infrastructure.

In 2025, Azerbaijan's commodity (marketable) oil production is forecasted to reach 28.7 million tons, while gas production is expected to total 38.4 bcm.

Conversely, commodity (marketable) natural gas production expanded by 2.32 times between 2010 and 2024, underscoring the growing strategic importance of gas within Azerbaijan's energy portfolio. Despite a 1.5-fold rise in domestic gas demand, the country remained a net exporter, with approximately 24 bcm of natural gas supplied to international markets in 2024. The projected indicators for the current and next three years are presented in Table 6.

Table 6. **Commodity oil and gas production forecast for Azerbaijan (2025-2028)**

	2025f	2026f	2027f	2028f
Commodity (marketable) Oil Output (million tons)	28,7	27,8	27,4	26,7
Commodity (marketable) Gas Output (bcm)	38,4	37	37,3	36,6

Source: Ministry of Economy of the Republic of Azerbaijan

Medium-term forecasts for Azerbaijan's commodity oil and gas production suggest that the gradual decline in oil output is expected to persist, whereas natural gas production is projected to stabilize near current levels. Under these conditions, the dynamics of rent revenue inflows—which remain the principal source of state income—are increasingly shaped by macroeconomic and sectoral factors, including fluctuations in global energy prices, rising production costs, and evolving export market conditions. Together, these factors contribute to the continuing decline in hydrocarbon-related fiscal and export revenues.

The recent downturn in global oil prices, which fell to their lowest level in nearly five years on October 17, 2025[37], coupled with a persistent oversupply in crude markets, has driven a 19 percent decline in Brent crude oil futures over the past year. This downward trajectory, reflected in the latest forecast revisions, is expected to exert substantial downward pressure on Azerbaijan's fiscal revenues and external balance. Furthermore, the shifting macroeconomic

[37] https://www.bloomberg.com/markets/commodities

environment in the United States and broader global inflationary trends have amplified uncertainty and volatility in international energy markets, complicating the fiscal outlook for energy-exporting economies.

According to the U.S. Energy Information Administration (EIA), Brent crude oil prices are projected to average USD 62 per barrel in the fourth quarter of 2025 and USD 52 per barrel in 2026, reflecting expectations of continued market oversupply and moderating global demand.[38].

The Netherlands-based ING Group, in its latest regional assessment, highlights the impact of falling oil prices on energy-exporting CIS economies, particularly Azerbaijan and Kazakhstan. Given that oil exports account for approximately 55 percent of Kazakhstan's and 88 percent of Azerbaijan's total export proceeds, and 22 percent and 52 percent of their respective fiscal revenues, even marginal price movements have material macroeconomic effects. According to ING's estimates[39], each USD 1 per barrel change in the annual average oil price translates into approximately USD 550 million in export proceeds and USD 150 million in budget revenues for Kazakhstan, and around USD 300 million and USD 150 million, respectively, for Azerbaijan. Consequently, the recent downward revision of oil price forecasts - by USD 5 for 2025 and USD 11 for 2026 - is projected to widen Kazakhstan's current account and fiscal deficits by 0.3–0.6 percentage points of GDP over 2025–2026, while the corresponding financial impact for Azerbaijan could reach approximately 2 percent of GDP over the same horizon. While Kazakhstan benefits from a flexible exchange rate regime that allows for partial macroeconomic adjustment, Azerbaijan's pegged exchange rate increases the likelihood of recording its first current account deficit since 2020. Nonetheless, Azerbaijan's substantial fiscal buffer - accumulated through its sovereign wealth mechanisms - may mitigate short-term vulnerabilities arising from the external price shock.

Oil and gas revenues continue to play a pivotal role in financing the state budget and the State Oil Fund of Azerbaijan (SOFAZ), serving as the foundation for macroeconomic stability, public investment, and social expenditure programs. A significant portion of the hydrocarbon revenues accumulated in SOFAZ originates from the Azeri–Chirag–Gunashli (ACG) oil and Shah Deniz gas fields, the cornerstones of Azerbaijan's energy sector.

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[38]U.S. Energy Information Administration (2025), Short-Term Energy Outlook, 7 October 2025, https://www.eia.gov/outlooks/steo/

[39] INC Group (2025), We're changing the outlook for the CIS-4 due to global woes, 8 May 2025, https://think.ing.com/articles/changing-the-outlook-for-cis-4-due-to-global-woes/

In 2024, under the framework of the production-sharing agreement for the ACG field, SOFAZ received USD 6,158.5 million, while revenues from the Shah Deniz gas field amounted to USD 442.1 million[40]. This composition indicates that approximately 92.9 percent of SOFAZ's hydrocarbon income was derived from oil, and only 7.1 percent from natural gas.

The anticipated decline in Azerbaijan's oil revenues in 2025 will stem not only from lower production volumes and reduced global oil prices, but also from a temporary disruption in crude exports caused by organic-chloride contamination in Azeri Light crude. In mid-2025, several European importers—including Austria, the Czech Republic, Italy, and Romania—reported the presence of organic-chloride impurities in Azerbaijani oil shipments. The incident prompted Romania to declare a "state of emergency" after contamination was detected in approximately 92,000 tons of crude.

As a result, exports through the Ceyhan terminal were suspended for several days, and multiple tankers were returned pending quality verification. The operator, BP, subsequently confirmed that the issue had been resolved following the isolation and cleaning of the affected storage tanks. Although the interruption was short-lived, it highlighted the vulnerability of Azerbaijan's export infrastructure and the potential fiscal implications of quality-related disruptions in a period of already declining prices and output.

Table 7. Economic Growth Rates of Non-Oil Sector Industries, 2020–2024 (%)

Year	Transport	Agriculture	Construction	Trade	Tourism	Information & Communication	Non-Oil Industry
2020	-59	2	-1	1	13	5	-8
2021	-2	3	5	6	34	19	16
2022	23	3	13	3	58	15	7
2023	-10	3	4	13	22	16	8
2024	14	1	10	4	13	11	7

Source: State Statistical Committee of the Republic of Azerbaijan (DSK), 2025.

The dynamics of non-oil sector growth in Azerbaijan between 2020 and 2024 reflect both the impact of the COVID-19 pandemic and the gradual restructuring of the national economy toward diversification. In 2020, nearly all non-oil sectors experienced severe contraction, particularly

[40] SOFAZ (2025), Revenues from ACG and Shah Deniz – as of January 01, 2025, 08 January 2025, https://oilfund.az/en/fund/press-room/news-archive/1680

transport (-59%) and non-oil industry (-8%), due to pandemic-related disruptions in logistics, trade, and mobility.

A strong rebound followed in 2021–2022, led by tourism (34% and 58%) and information and communication (19% and 15%), demonstrating post-pandemic recovery and digital sector expansion. The construction and trade sectors also recovered moderately, supported by public investment and rising domestic demand. However, by 2023–2024, growth decelerated across most sectors, indicating normalization after the recovery surge.

The agricultural sector maintained steady but low growth (1–3%), reflecting structural rigidity and limited technological advancement. In contrast, tourism remained volatile, with sharp growth swings linked to external demand and seasonal fluctuations.

Overall, the data underscore Azerbaijan's gradual progress in non-oil diversification, driven by services and digitalization, but constrained by uneven sectoral performance and the need for more sustainable, innovation-oriented growth

III. Assessment of Progress toward the Strategic Roadmap Targets

The Strategic Roadmap for the National Economy[41] and 11 Key Sectors[42], adopted by Presidential Decree on December 6, 2016, set forth an ambitious development agenda to be achieved by 2025. It envisages attaining an average annual real GDP growth rate exceeding 3 percent and the creation of more than 450,000 new jobs across the economy.

According to the document, the implementation of the Strategic Roadmap for the National Economy is expected to contribute to the achievement of four specific sectoral and macroeconomic targets by 2025.

1. Attracting Foreign Direct Investment (FDI) in the Non-Oil Sector. The first target envisions increasing the share of FDI in the non-oil sector from 2.6 percent to 4 percent of non-oil GDP by 2025.

2. Expanding Non-Oil Exports. A second key target aims to increase non-oil exports from USD 170 per capita in 2015 to at least USD 450 per capita by 2025.

3. Job Creation in the Tradable Sector. The third target calls for the creation of 150,000 additional jobs in the commercial goods and services sector—particularly in manufacturing, tourism, and other tradable industries—by 2025.

4. Reducing Fiscal Dependence on the State Oil Fund. The fourth strategic target aims to reduce the state budget's dependence on transfers from the State Oil Fund of Azerbaijan (SOFAZ) from nearly 50 percent of total expenditures to 15 percent by 2025.

An evaluation of the final results and dynamics of the Strategic Roadmap for the National Economy and Key Sectors indicates that Azerbaijan has not yet achieved the key performance targets set under the roadmap, the implementation period of which concluded in 2024.

Table 8. Strategic Roadmap Targets vs. Outcomes (2024–2025)

Indicator	2025 Target	2024 Actual
GDP annual growth	>3%	1.97%
FDI in non-oil GDP	>4%	0.7%
Non-oil exports per capita	USD 450	USD 302.2

[41] Strategic road map of the Republic of Azerbaijan on national economy perspective, https://static.president.az/pdf/38542.pdf

[42] Decree of the president of the Republic of Azerbaijan on approval of strategic road maps on the national economy and key sectors of the economy, https://president.az/az/articles/view/21953

Indicator	2025 Target	2024 Actual
SOFAZ transfer share in state budget revenues	15%	34.4%

Source: Source: Author's calculations based on data from the State Statistical Committee of the Republic of Azerbaijan (SSC).

Most targets remain unmet, undermining diversification efforts.

6.1. Real GDP Growth. Empirical assessments show that the Strategic Roadmap for the National Economy and Key Sectors did not achieve the target of an average annual real GDP growth rate exceeding 3 percent by 2025.

The slowdown in overall GDP growth observed during the implementation period reflects both external shocks and structural weaknesses in the national economy.

During the Roadmap's implementation period (2016–2025), Azerbaijan's GDP contracted twice—by 3.1 percent in 2016 and 4.2 percent in 2020, the latter due to the COVID-19 pandemic and its global economic repercussions. In other years, GDP growth remained positive but moderate: 0.2 percent in 2017, 1.8 percent in 2018, 2.5 percent in 2019, 5.6 percent in 2021, 4.7 percent in 2022, 1.1 percent in 2023, and 4.1 percent in 2024.

Taking into account the forecasted growth rate of 1.9 percent for 2025, the average annual real GDP growth over the entire period is estimated at approximately 1.46 percent, significantly below the 3-percent target.

Table 9. **Real GDP Growth (2016-2025)**

Years	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025f
Real GDP Growth, %	- 3.1	0.2	1.8	2.5	-4.2	5.6	4.7	1.1	4.1	1.9

Source: State Statistical Committee of the Republic of Azerbaijan

Note: The indicator for 2025 year presented in the table represents a forecast, while all other figures reflect actual data.

Similarly, under the Azerbaijan 2020: Look into the Future Development Concept (Presidential Decree No. 800, December 29 2012)[43], the average annual real growth rate of non-oil GDP was expected to exceed 7 percent. However, actual performance fell short: even after including

[43] Azerbaijan 2020: Look into the Future Development Concept, https://e-qanun.az/framework/25029

several oil- and gas-related activities classified within the non-oil sector, average non-oil GDP growth reached only about 4 percent, underscoring limited diversification and productivity gains.

6.2. Foreign Direct Investment (FDI) in the Non-Oil Sector. Among the target indicators set forth in the Strategic Roadmap for the National Economy and Main Sectors of the Economy, attracting foreign direct investment (FDI) into the non-oil sector remains one of the most critical priorities for ensuring the long-term modernization and diversification of Azerbaijan's economy. However, FDI trends indicate that this objective was not successfully achieved during the implementation period of the Strategic Roadmap.

Following a pandemic-related contraction in 2020, when FDI inflows to joint ventures and enterprises with foreign participation fell to USD 606 million, a gradual recovery was observed in subsequent years: USD 790 million in 2021, USD 1.8 billion in 2022, and over USD 2.0 billion in 2023. Nevertheless, a new decline was recorded in 2024, when FDI inflows decreased to USD 1.385 billion.

Table 10. Dynamics of FDI in the Non-Oil Sector of Azerbaijan, 2016–2024

Year	FDI inflows to non-oil sector (USD million)	Ratio of FDI to non-oil & gas GDP (%)
2016	1706.2	6.9
2017	813	5.9
2018	967.1	4.5
2019	930.1	5.0
2020	606	3.2
2021	790	2.3
2022	1 800	1.3
2023	2 001.1	0.9
2024	1 358.5	0.7

Source: Author's calculations based on data from the State Statistical Committee of the Republic of Azerbaijan (SSC)

During the implementation period of the Strategic Roadmaps (2016–2024), the share of foreign direct investment (FDI) in non-oil GDP declined significantly—from 6.9 percent in 2016 to 0.7 percent in 2024. This trend stands in contrast to the target established in the Strategic Roadmap for the Development Prospects of the National Economy, which envisaged that the share of FDI in non-oil GDP would exceed 4 percent by 2025.

Based on calculations using data from the State Statistical Committee (SSC), the ratio of FDI directed to the non-oil and gas sector relative to the non-oil and gas GDP exhibited a continuous downward trend: 6.9 percent in 2016, 5.9 percent in 2017, 4.5 percent in 2018, 5.0 percent in 2019, 3.2 percent in 2020, 2.3 percent in 2021, 1.3 percent in 2022, 0.9 percent in 2023, and 0.7 percent in 2024. Thus, the share of FDI in the non-oil sector declined nearly tenfold over the past eight years—from 6.9 percent of non-oil GDP in 2016 to 0.7 percent in 2024.

The sectoral structure of foreign investment remains highly skewed. The extractive industries accounted for 73.6 percent of total FDI over 2015–2024 (of which 99 percent was directed to oil and gas activities). The construction and transport sectors received 13.3 percent and 5.2 percent, respectively, while manufacturing attracted approximately 959.8 million manats during the same period. According to SSC data, the total volume of foreign investment in fixed capital in the Azerbaijani economy between 2015 and 2024 amounted to 56.152 billion manats, of which 41.2 billion manats (73.5 percent) were concentrated in the oil and gas sector and 14.9 billion manats (26.5 percent) in the non-oil and gas sectors[44].

To reverse this trend and strengthen diversification, the Socio-Economic Development Strategy of the Republic of Azerbaijan for 2022–2026 (Presidential Order, August 4, 2023) set an ambitious goal of achieving a 10–15 percent annual increase in the volume of non-oil FDI through 2026. Nevertheless, despite certain improvements in investment legislation and infrastructure, the overall outcomes of the Strategic Roadmap remain below expectations, reflecting persistent institutional and structural constraints that continue to hinder private capital inflows. The evidence suggests that Azerbaijan's non-oil and gas sector remains insufficiently attractive to foreign investors, particularly compared with resource-based segments of the economy.

6.3. Non-Oil Exports. According to Customs Statistics of Foreign Trade of the Republic of Azerbaijan, non-oil and gas exports totaled USD 3.36 billion in 2024, representing 12.64 percent of total exports and roughly USD 329 per capita.

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[44] Baku Research Institute (BRI), How much interest have foreign investors shown in the Azerbaijani economy over the past 10 years? written by BRI Economic Team, 16 September 2025, https://bakuresearchinstitute.org/en/how-much-interest-have-foreign-investors-shown-in-the-azerbaijani-economy-over-the-past-10-years/

While this demonstrates some progress relative to previous years, the outcome still falls short of the Strategic Roadmap's per-capita export target of USD 450, highlighting the continuing dominance of hydrocarbons in the export structure.

Table 11. Annually and per capita non-oil export and gas export

Year	Non-oil and gas export (USD million)	Non-oil & gas export per capita (USD)
2016	1 237	126.8
2017	1 538	156.1
2018	1 689	169.9
2019	1 954	194.9
2020	1 851	183.4
2021	2 713	267.6
2022	3 047	300.4
2023	3 348	329.7
2024	3 356	328.9

Source: Author's calculations based on data from the Statement on the state of foreign trade of the State Customs Committee of the Republic of Azerbaijan

According to the Socio-Economic Development Strategy of the Republic of Azerbaijan for 2022–2026, improvements are planned in the regulatory framework of management and institutional mechanisms to facilitate export activities. The strategy envisions ensuring the production of high-quality, export-oriented local goods, developing e-export infrastructure, and expanding state support for the promotion of non-oil and gas exports. It also sets a target of achieving an 85 percent increase in the volume of non-oil and gas exports by 2026 compared to 2021. However, when examining the share of Azerbaijan's non-oil export value in total exports during the period 2020–2024, it is observed that this indicator stood at 13 percent in 2020, declined over the years 2021–2023, and returned to its 2020 level in 2024. This trend indicates that despite strategic commitments and policy initiatives, the diversification of exports beyond the oil and gas sector remains a persistent challenge. As for the implementation of the Strategic Roadmap for the National Economy, although the growth trajectory of non-oil exports throughout the implementation period—from 2016 to 2025—was generally positive, the per capita value of non-oil exports in 2024 (USD 338.9) remained 24.68 percent below the planned target of USD 450. This shortfall indicates that progress in export diversification and competitiveness has been slower than anticipated, despite the government's strategic efforts to stimulate the non-oil sector.

6.4. Fiscal Dependence on SOFAZ Transfers. The objective of reducing the state budget's dependence on transfers from the State Oil Fund of Azerbaijan (SOFAZ) to 15 percent by 2025 has not been achieved. In 2024, SOFAZ transfers amounted to 12781 million manat, equivalent to 34.4 percent of total budget revenues.

Table 12. SOFAZ's transfers and its share in state budget revenues

Year	Transfers from SOFAZ (billion AZN)	Share in state budget revenues (%)
2016	6.0	50.2
2017	6.1	46.9
2018	9.2	52.7
2019	11.4	52.0
2020	12.2	58.0
2021	12.3	54.3
2022	11.4	45.2
2023	11.2	40.1
2024	12.7	34.4
2025f	14.5	37.8

Source: Source: Author's calculations based on data from the budget documents Of Ministry of Finance of the Republic of Azerbaijan

Note: The indicator for 2025 year presented in the table represents a forecast, while all other figures reflect actual data.

The dependence of the state budget on transfers from the State Oil Fund of Azerbaijan (SOFAZ) was projected to decline to 15 percent by 2025. However, the corresponding figure for 2024 exceeded the target by more than twofold, reaching 34.4 percent. Moreover, this dependence is expected to increase further in the current year, with projections indicating a rise to 37.8 percent. This sustained reliance underscores the persistent fiscal vulnerability associated with hydrocarbon revenues, despite the diversification goals articulated in the Strategic Roadmaps.

Table 13. Forecasted transfer from SOFAZ to state budget and its annual change

Year	SOFAZ transfers (billion AZN)	Annual change compared to previous year (%)
2025	14.481	+ 14
2026	12.750	−12.0
2027	11.900	−6.7
2028	11.050	−7.1
2029	10.200	−7.7

Source: Author's calculations based on data from the medium-term expenditure framework of Ministry of Finance of the Republic of Azerbaijan
Note: All indicators presented in the table represents a forecast, while all other figures reflect actual data.

As shown in Table 13, SOFAZ transfers are projected to decline by nearly 30 percent between 2025 and 2029, signaling a deliberate policy shift toward fiscal consolidation and diversification of non-oil revenue sources. According to data from the Ministry of Finance of the Republic of Azerbaijan, transfers from the State Oil Fund of Azerbaijan (SOFAZ) to the state budget for the current fiscal year have been approved at 14.481 billion manats. Medium-term fiscal projections foresee a gradual decline in these transfers over the coming years. Specifically, transfers are expected to amount to 12.750 billion manats in 2026 (a 12.0 percent decrease compared to 2025), 11.900 billion manats in 2027 (a 6.7 percent decline relative to 2026), 11.050 billion manats in 2028 (a 7.1 percent decline relative to 2027), and 10.200 billion manats in 2029 (a 7.7 percent decline relative to 2028). Despite gradual reductions in nominal transfer volumes, SOFAZ allocations are projected to comprise one-third of total state budget revenues (33.2 percent) in 2026, indicating that the Azerbaijani budget remains structurally reliant on oil-related income.

6.5. Labor-market fragility compounds risks

Among Azerbaijan's macroeconomic indicators, the accuracy of employment statistics remains particularly contentious. Official data on the employed and unemployed populations often fail to capture the underlying realities of the national labour market. Nevertheless, given the absence of credible alternative data sources, scholars and policymakers are constrained to rely on official figures for analysis. Within this context, the Strategic Road Map for the National Economy projects the creation of more than 450,000 new jobs by 2025. Accordingly, the present assessment employs official statistical data to evaluate the extent to which these targets are being achieved.

Although no supplementary information was available in statistical reports regarding the creation of 150,000 new jobs by 2025 in the commercial goods and services sector—including manufacturing and tourism—data disaggregated by economic region and by year were accessible. These figures are presented in Table 14, which illustrates annual trends in job creation between 2016 and 2024.

Table 14. Number of new jobs created in 2016-2024

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024
Number of new jobs created, thousands	196,5	281,4	238,9	192,0	128,9	68,9	71,2	82,3	91,7

Source: State Statistical Committee of the Republic of Azerbaijan

According to official statistics, 15,942 workplaces were closed in Azerbaijan in 2024, representing an increase of 1,033 closures (7%) compared with 2023. Of these, 30.1% occurred in the non-state sector. Furthermore, 29.7% of closures were attributed to the suspension of enterprise activities, while 70.3% resulted from workforce reductions within operational organizations.

Despite the regular publication of optimistic data on job creation, official sources fail to disclose comprehensive information on the number of jobs eliminated annually. The statistics on terminated employment contracts, however, provide a more accurate reflection of labour market volatility: 780,000 contracts were terminated in 2022, 872,000 in 2023, and 999,000 in 2024. These figures suggest that the official data on job creation and closure lack empirical reliability. Reported job creation figures appear to be systematically overstated, largely due to the inclusion of temporary or short-term employment, while job losses are underreported, thereby obscuring the true dynamics of Azerbaijan’s labour market.

Further inconsistencies emerge when comparing these data with statistics on wage employment. As of 1 January 2025, total wage employment in Azerbaijan stood at 1,778.5 thousand persons, of whom 882.8 thousand were employed in the state sector and 895.7 thousand in the non-state sector. In contrast, as of 1 January 2024, total wage employment was 1,741.8 thousand, including 899.1 thousand in the state sector and 842.7 thousand in the non-state sector. Thus, during 2024, employment in the state sector declined by 16.2 thousand, while non-state employment increased by 53 thousand.

These data reveal a clear statistical contradiction. If 16.2 thousand jobs were lost in the state sector alone, and additional reductions occurred in the private sector, it is implausible that the total number of closed workplaces amounted to only 15,942 nationwide. This inconsistency raises questions about data coherence and transparency in the official reporting of employment indicators.

A noteworthy structural development in 2024 was the surpassing of state-sector employment by the non-state sector, marking an important milestone in Azerbaijan's post-Soviet labour market transformation. Nonetheless, the state continues to occupy a disproportionately large position in the economy, accounting for 49% of total wage employment. This figure contrasts sharply with those of neighbouring economies—24% in Georgia and 29% in Armenia—highlighting Azerbaijan's ongoing dependence on public-sector employment as a mechanism of macroeconomic stabilization and political control. Notably, official data indicate that two-thirds of employees in the country's regions continue to work in the public sector.

Finally, unemployment statistics also invite skepticism. As of 1 October 2025, 236,4 thousand individuals were officially registered as unemployed with local branches of the State Employment Agency, 50,9 % of whom were women[45]. These figures underscore not only the persistence of structural weaknesses in employment generation and labour market diversification, but also the limitations of official statistical methodologies in accurately capturing the true scope and nature of unemployment in Azerbaijan. Despite formal policy commitments to job creation and private-sector expansion, the available evidence points to an ongoing disjunction between reported and actual labour market outcomes.

[45] State Statistical Committee, Report on Social and Economic Development in January-September 2025, https://www.stat.gov.az/news/source/doklad_2025-09.pdf

IV. Assessment of Progress of Outcomes of Program for the Socio-Economic Development of the Regions

Among all national policy initiatives implemented in the Republic of Azerbaijan, the State Program for the Socio-Economic Development of the Regions stands out as the most extensive in terms of duration, financial capacity, and scope of implementation. The program was first introduced in 2004[46] as part of the government's strategic vision to reduce regional disparities, stimulate balanced economic growth, and promote social welfare across the country's administrative-territorial units.

Following the completion of the first phase, Azerbaijan continued to implement successive five-year programs with comparable objectives, reflecting a continuation of the centralized planning approach characteristic of the Soviet period. Over the two decades from 2004 to 2023, four consecutive regional development programs were executed, through which the government channelled significant fiscal resources toward regional infrastructure, social services, and economic modernization[47]. Collectively, these programs mobilized significant state and private investments totaling approximately 92.2 billion Azerbaijani manats. The distribution of investments by program stage is summarized in Table 15.

Table 15. Investment of Socio-Economic Development of the Regions

Name and duration of programs	Amount of investment, in billion AZN
The First Program (2004–2008)	16.0
The Second Program (2009–2013)[48]	34.7
The Third Program (2014–2018)[49]	24.5
The Fourth Program (2019–2023)[50]	17.0
Total:	92.2

Source: State Statistical Committee of the Republic of Azerbaijan

[46] State Program on "Socio-economic development of the regions of the Republic of Azerbaijan (2004 — 2008)", https://e-qanun.az/framework/4797
[47] State programs of Azerbaijan, https://azerbaijan.az/related-information/276
[48] State Program on "Socio-economic development of the regions of the Republic of Azerbaijan (2009 — 2013)", https://files.preslib.az/projects/regions/r2/a1.pdf
[49] State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2014-2018, https://economy.gov.az/az/page/regionlarin-inkisafi/dovlet-proqramlari/azerbaycan-respublikasi-regionlarinin-2014-2018-ci-illerde-sosial-iqtisadi-inkisafi-dovlet-proqrami
[50] State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2019-2023, https://economy.gov.az/az/page/regionlarin-inkisafi/dovlet-proqramlari/azerbaycan-respublikasi-regionlarinin-2019-2023-cu-illerde-sosial-iqtisadi-inkisafi-dovlet-proqrami

The data indicate that regional development financing in Azerbaijan has closely followed the cyclical pattern of oil revenue inflows. While the 1st and 4th programs were implemented under relatively tighter fiscal conditions, the 2nd and 3rd programs coincided with the peak of the oil boom, when rapidly growing hydrocarbon revenues enabled expansive fiscal policy. Consequently, 64.2 percent of total funds allocated for regional development between 2004 and 2023 were disbursed during these two programs, underscoring the government's tendency toward pro-cyclical expenditure and its dependence on oil-driven fiscal surpluses.

In addition, the Azerbaijani government implemented several comprehensive initiatives aimed at fostering balanced urban development, including the *"Program of Measures to Accelerate the Socio-Economic Development of the Settlements of Baku City for 2006–2007[51],"* the *"State Program on the Socio-Economic Development of the City of Baku and Its Settlements for 2011–2013[52],"* and the *"State Program on the Socio-Economic Development of the City of Baku and Its Settlements for 2014–2016.[53]"* Collectively, these programs, spanning the period from 2006 to 2017, coincided with a phase of accelerated economic growth in Azerbaijan, largely driven by the substantial increase in oil revenues.

According to official reports, approximately 3 billion manats were allocated for the implementation of the *State Program on the Socio-Economic Development of the City of Baku and Its Settlements for 2011–2013.* This figure was publicly announced by the Minister of Economy and Industry during a conference chaired by President Ilham Aliyev, which was dedicated to assessing the outcomes of the program's implementation[54]. However, no subsequent reporting conference was held to evaluate the *2014–2016 State Program*, and therefore, information regarding the financial resources allocated to that phase was not made publicly available. Nevertheless, it should be noted that the adoption of each state program presupposes the formal approval of its corresponding budgetary framework.

Despite the substantial scale of financial input and institutional effort, the outcomes remain mixed. While some regions experienced localized improvements in infrastructure, industry, and

[51] Program of Measures to Accelerate the Socio-Economic Development of the Settlements of Baku City for 2006–2007, https://anl.az/down/beqsii.pdf
[52] State Program on the Socio-Economic Development of the City of Baku and Its Settlements for 2011–2013, https://e-qanun.az/framework/21652
[53] State Program on the Socio-Economic Development of the City of Baku and Its Settlements for 2014–2016, https://e-qanun.az/framework/26845
[54] https://president.az/az/articles/view/10571

employment, the overall level of socio-economic development continues to exhibit significant spatial disparities. In particular, the Baku–Absheron economic region, which includes the capital city, remains the dominant center of economic activity, capital accumulation, and population growth, far outpacing the rest of the country in most development indicators.

Consequently, the regional imbalance remains a major policy challenge. As of 2024, the comparative socio-economic situation of Azerbaijan's regions, assessed through multiple parameters (e.g., gross regional product, industry, employment structure, financial institutions and incomes, etc), is summarized in Table 16.

Table 16. Comparative socio-economic situation of Azerbaijan's regions

Indicator	Share of Baku and Absheron–Khizi Economic Regions (%)
Population	23.3
Territory	2.5
GDP	80.8
Industry	55.1
Retail turnover	60.3
Wholesale trade	86.3
Catering turnover	71.1
Small and medium-sized business activity	66.1
Capital stock	50.2
Employees	61.8
Income	61.1
Deposits	88.6
Credit	76.5
ATMs	52.1

Source: State Statistical Committee of the Republic of Azerbaijan.

The data presented in Table 16 clearly demonstrate that the Baku and Absheron–Khizi Economic Regions constitutes the dominant center of Azerbaijan's economic activity. Although it covers only 2.5 percent of the country's territory, it accommodates 23.3 percent of the population and generates the vast majority of national GDP (80.8 percent). This region similarly concentrates most of the country's industrial output, trade, and financial infrastructure, including 86.3 percent of wholesale trade and 88.6 percent of total deposits. However, the Socio-Economic

Development Strategy of the Republic of Azerbaijan for 2022–2026[55], adopted on July 22, 202**2**, sets a target to increase the share of regional agricultural production in total crop output from 35 percent in 2020 to 42 percent by 2026**.**

Such figures underscore the extraordinary spatial concentration of economic power within the capital area (75.8 %). The next largest contributor, the Absheron–Khizi regions, accounts for only about 5 percent of GDP, while the remaining regions each contribute approximately 1–2 percent. Consequently, the economic output of Baku is roughly 15 times greater than that of the second-ranked region, highlighting the depth of regional inequality in Azerbaijan's development pattern.

When compared internationally, Azerbaijan's regional imbalance is even more pronounced. The capital city's share in GDP stands at 75.8 percent, compared to 62.1 percent for Yerevan in Armenia and 52.7 percent for Tbilisi in Georgia. A similar pattern emerges when examining per capita GDP levels: in Baku, per capita GDP reaches approximately USD 23,600, while in the Lankaran–Astara economic region it is only USD 1,500—a more than 15-fold difference. For comparison, the ratio between the richest and poorest regions is about 4:1 in Armenia and 2.6:1 in Georgia[56].

State Program on the Socio-Economic Development of Baku and its Settlements in 2014-2016[57]

These disparities reveal a highly centralized economic and administrative structure, where development remains heavily concentrated in the capital and its surrounding area, leaving the rest of the country with limited economic diversification and lower living standards.

The continued reliance on oil-fund resources reflects the limited success of fiscal diversification efforts and underscores the enduring structural dependence of Azerbaijan's national budget on hydrocarbon revenues. Despite measurable progress in certain areas—such as the gradual expansion of non-oil exports and the partial recovery of foreign direct investment inflows—macroeconomic indicators and fiscal trends demonstrate that advancement toward the Strategic Roadmap's objectives remains insufficient.

[55] Socio-Economic Development Strategy of the Republic of Azerbaijan for 2022–2026, https://e-qanun.az/framework/50013

[56] Baku Research Institute (BRI), The Contribution of the Regions to the National Economy: A Comparison Between Azerbaijan and Neighboring Countries, written by BRI Economic Team, 28 July 2025, https://bakuresearchinstitute.org/en/the-contribution-of-the-regions-to-the-national-economy-a-comparison-between-azerbaijan-and-neighboring-countries/

[57] State Program on the Socio-Economic Development of Baku and its Settlements in 2014-2016

The persistence of a substantial non-oil budget deficit and ongoing fiscal dependence on hydrocarbon income reveal unresolved systemic vulnerabilities within the national economy. This divergence between policy aspirations and actual outcomes highlights the urgent need for a comprehensive reassessment of Azerbaijan’s post-2025 development strategy. Such a reassessment should prioritize institutional reform, fiscal consolidation, economic diversification, and the enhancement of investment efficiency as essential preconditions for long-term sustainability.

Ultimately, these disparities point to the deeply centralized character of the country’s economic and administrative structure, where development remains disproportionately concentrated in the capital and adjacent regions. Addressing these spatial and structural imbalances is critical for fostering inclusive growth, ensuring regional equity, and building a more resilient and diversified post-oil economy.

V. Structural Challenges in Agriculture and Food Security

Agriculture has historically been one of the principal sectors of the non-oil and gas economy in Soviet Azerbaijan, serving as a major source of employment and rural livelihood. Following the restoration of independence, the implementation of land reform represented a critical step toward transitioning this sector to a market-oriented economic system. However, during the oil boom period, the reallocation of resources from the commercial to the non-commercial sector, coupled with inadequate investment, underdeveloped infrastructure, water scarcity, currency devaluation, and rising production costs, collectively constrained agricultural development.

In the post–oil boom period, the consolidation of monopolistic tendencies in agricultural production and exports—particularly through the establishment of agro-parks—alongside extensive state intervention via various support programs, further undermined the competitiveness of agricultural products. The limited effectiveness, weak accountability, and lack of transparency in the implementation of state programs for agricultural development have also contributed to the sector's current stagnation.

Although total agricultural output increased by 1.5 percent in 2023—comprising a 1.7 percent rise in livestock production and a 1.1 percent increase in crop production—the growth trajectory slowed considerably in 2025. During the first nine months of 2025, compared with the same period of the previous year, total agricultural output and livestock production rose by only 0.1 percent, while crop production declined by 0.7 percent[58].

Empirical evidence from this and previous studies underscores that agriculture continues to hold substantial strategic importance for Azerbaijan's economy. The country's favorable agro-climatic conditions and long-standing agricultural traditions provide a comparative advantage that, if effectively leveraged through institutional reform, technological modernization, and increased investment, could significantly enhance non-oil growth, rural employment, and export potential. Agriculture remains one of the most viable sectors for advancing the diversification of Azerbaijan's hydrocarbon-dependent economy.

In the post–oil boom context, the government has introduced a series of policy initiatives aimed at revitalizing agricultural production and fostering the commercialization of selected crop commodities. Nevertheless, despite these efforts, the sector's contribution to broader economic

[58] https://www.stat.gov.az/news/macroeconomy.php?page=1&lang=az

diversification remains limited due to persistent structural inefficiencies, weak value-chain integration, and uneven regional development.

At the same time, agriculture plays a vital role in shaping the composition of Azerbaijan's non-oil exports. In 2024, exports of agricultural products increased by 2.8 percent, reaching USD 789.4 million, while exports of agro-industrial products rose sharply by 57.3 percent to USD 316.1 million. Combined, the total export of agricultural and agro-industrial products grew by 14.1 percent, amounting to USD 1.11 billion, which accounted for 32.6 percent of total non-oil and gas exports. Within this structure, agricultural products alone constituted 23.2 percent of non-oil exports, with fruit and vegetable products representing the largest share[59].

5.1. Assessment of the Progress and Outcomes of State Programs in the Agrarian Sector

Despite substantial state support and multiple sectoral programs, agricultural outcomes over the past decade have remained underwhelming. Programs targeting cotton, tobacco, rice, and sericulture have largely fallen short of their objectives, revealing inefficiencies in planning, implementation, and monitoring. The evaluation below synthesizes official data to assess the effectiveness and progress of key agrarian programs.

Tobacco Growing

The *State Program on the Development of Tobacco Growing in the Republic of Azerbaijan for 2017–2021*[60], adopted on August 10, 2017, aimed to expand the cultivated area to 6,000 hectares and increase tobacco production to 12,000 tons by 2021, with an average yield of 20 quintals per hectare. However, after five years of implementation, these targets were not achieved. In 2021, tobacco was cultivated on only 3,100 hectares—48.3 percent below the planned area—and production amounted to 6.4 thousand tons, 46.7 percent below the target. By 2024, production reached just 6.5 thousand tons, reflecting persistent stagnation and limited productivity growth.

Cotton Growing

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[59] "Export Review" of the Center for Analysis of Economic Reforms and Communication, 2025 January, https://ereforms.gov.az/files/review/pdf/az/71f2a76ca8b765e7a3bc995111e7265d.pdf

[60] State Program for the development of tobacco farming in the Republic of Azerbaijan for 2017-2021, https://e-qanun.az/framework/36324

The *State Program on the Development of Cotton Growing in the Republic of Azerbaijan for 2017–2022*[61], adopted on July 13, 2017, projected an increase in raw cotton production to 500 thousand tons by 2022. According to the State Statistics Committee, actual production amounted to 321.8 thousand tons in 2022—35.6 percent below the target. By 2024, cotton production had further declined to 307 thousand tons, underscoring difficulties in sustaining output despite significant state support and mechanization initiatives.

Tea Growing

The *State Program on the Development of Tea Growing in the Republic of Azerbaijan for 2018–2027*[62], approved on February 12, 2018, aimed to expand the cultivated area to 3,000 hectares and achieve a green tea leaf harvest of 8.5 thousand tons by 2027. Progress has been slow: within the first four years, the cultivated area increased only to 1.06 thousand hectares before declining to 996 hectares in 2021. In 2022, green tea leaf production amounted to 1.0 thousand tons—15 percent less than the previous year. By 2024, production stood at 1.1 thousand tons, approximately 8.5 times lower than the 2027 target.

Rice Growing

The *State Program on the Development of Rice Growing in the Republic of Azerbaijan for 2018–2025*[63], adopted on February 9, 2018, sought to revitalize rice cultivation, enhance self-sufficiency, and reduce import dependence. The program set a target of 10,000 hectares of cultivated area, a yield of 40 quintals per hectare, and total production of 40,000 tons by 2025. However, after seven years of implementation, rice cultivation declined by 37.2 percent and production by 12.2 percent. Rice imports increased by 26 percent in volume and 84.1 percent in value, leading to a 14.2 percent drop in self-sufficiency. In 2024, domestic rice production totaled only 19.6 thousand tons—down from 22.2 thousand tons in 2000—while imports surged from 17.8 thousand to 64.3 thousand tons, a 3.6-fold increase.

Silkworm Farming

The *State Program on the Development of Silkworm Farming and Sericulture in the Republic of Azerbaijan for 2018–2025*[64], adopted on November 27, 2017, set a target of increasing wet

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[61] State Program for the development of cotton cultivation in the Republic of Azerbaijan for 2017-2022, https://e-qanun.az/framework/36050

[62] https://e-qanun.az/framework/37902

[63] https://e-qanun.az/framework/37848

[64] State Program for 2018-2025 on the development of silkworm farming and sericulture in the Republic of Azerbaijan, https://e-qanun.az/framework/37032

cocoon production to 6.0 thousand tons by 2025. Despite substantial financial allocations, the results have been limited. Early measures—such as importing silkworm seeds and 4.5 million mulberry seedlings from the People's Republic of China, providing them free of charge to producers, and establishing 150 hectares of intensive-type mulberry plantations—produced short-lived success. Cocoon production peaked at 643.7 tons in 2019 but subsequently declined by 30.6 percent in 2020, by 22.7 percent in 2021, and by 2.68 times overall by 2024, when production totaled only 239.4 tons. This steep decline suggests structural weaknesses in production sustainability, market organization, and incentive mechanisms.

Viticulture

The *State Program on the Development of Viticulture in the Republic of Azerbaijan for 2012–2020*[65], adopted on December 15, 2011, aimed to achieve self-sufficiency in grape and wine production, create rural employment, and strengthen related industries. Although vineyard expansion and raw material supply improved modestly, the program's overall outcomes were mixed. Persistent reliance on outdated production techniques, limited modernization of processing facilities, and market concentration constrained the sector's productivity and broader socio-economic impact.

Sugar Beet Production

The *State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan (2019–2023)*[66] included objectives to expand sugar beet cultivation and establish processing infrastructure in several districts, including Agjabedi, Agdash, Barda, Kurdamir, Goranboy, Agstafa, Fuzuli, Tovuz, Shamkir, Samukh, and Yevlakh. Nevertheless, production outcomes deteriorated. In 2017, prior to the program's adoption, sugar beet output stood at 410 thousand tons—187.9 thousand tons higher than in 2022. This represents a 45.8 percent decline in five years. By 2024, production fell further to 289.1 thousand tons, reflecting the continued weakness of this subsector despite policy attention.

The summarized results of the assessment are presented in Table 17, which provides a comparative overview of the planned targets and actual outcomes of the principal state programs implemented in Azerbaijan's agrarian sector.

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[65] The State Program on the Development of Viticulture in the Republic of Azerbaijan for 2012–2020, https://e-qanun.az/framework/22694

[66] State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan (2019–2023), https://e-qanun.az/framework/41320

Table 17. Summary of Program Implementation

State Program	Targeted Indicator	Result Indicator	Implementation (%)
Development of Cotton Production (2017–2022)	500,000 tons by 2022	307,000 tons in 2024	61.4
Development of Tobacco Growing (2017–2021)	12,000 tons by 2021	6,478.3 tons in 2024	54.0
Development of Sericulture and Silk Production (2018–2025)	6,000 tons by 2025	239.4 tons in 2024	3.9
Development of Rice Growing (2018–2025)	40,000 tons by 2025	19,600 tons in 2024	49.0
Development of Tea Growing (2018–2027)	8.5 thousand tons by 2027	1.1 thousand tons in 2024	12.9

Source: Author's calculations based on data from the Ministry of Agriculture of the Republic of Azerbaijan.

Across these key sub-sectors, the evidence indicates that most state programs have failed to meet their planned quantitative and qualitative targets. Common challenges include weak inter-agency coordination, limited private sector engagement, inadequate infrastructure investment, and the absence of robust monitoring and evaluation mechanisms. In many instances, performance shortfalls reflect overly ambitious planning that exceeded institutional and financial capacities.
For Azerbaijan's agricultural policy to achieve its intended outcomes, a more coherent, data-driven, and market-oriented approach is essential. Future strategies should prioritize productivity enhancement, competitiveness, and sustainability rather than short-term expansion targets. Strengthening rural infrastructure, improving irrigation and logistics systems, enhancing producer cooperatives, and fostering innovation and research in agri-technologies are critical to revitalizing growth. A systematic shift toward evidence-based policy design and transparent performance evaluation will be necessary for realizing the agricultural sector's full potential as a driver of non-oil economic diversification.
Overall, the assessment demonstrates that state programs in Azerbaijan's agrarian sector have yielded limited results relative to their planned objectives. While government support has

expanded production capacity in certain subsectors, most initiatives have underperformed due to structural inefficiencies, weak institutional coordination, and limited private sector participation. Sustained progress will depend on shifting from target-based planning toward policies that prioritize productivity, technological modernization, and market competitiveness. Strengthening governance and accountability mechanisms remains essential for transforming agriculture into a dynamic driver of non-oil economic diversification and sustainable rural development.

5.2.Structural Challenges in Agriculture and Food Security

The challenges identified in the implementation of state programs are further reflected in Azerbaijan’s food self-sufficiency performance. Despite substantial public investment and policy initiatives, agricultural output growth has not translated into consistent improvements in national food security. Persistent productivity gaps and import dependence for key commodities indicate that structural inefficiencies continue to constrain the sector’s contribution to sustainable food supply.

Despite targeted interventions, Azerbaijan’s food security remains fragile and uneven across commodity groups. Periodic improvements in production have not ensured sustained self-sufficiency, and the country continues to depend on imports for several essential food products. Self-sufficiency levels for both livestock and plant-based commodities fluctuate considerably from year to year, reflecting the agricultural sector’s exposure to climatic risks, input shortages, and policy inefficiencies.

Table 18. Food Self-Sufficiency — Livestock Products (2020–2024, %)

Product	2020	2021	2022	2023	2024
All types of meat and meat products	84.5	86.4	86.0	85.3	83.4
Beef and beef products	87.4	91.9	93.0	88.4	88.5
Mutton and goat meat and products	97.3	98.2	97.0	94.9	96.5
Poultry meat and products	79.0	79.6	78.5	81.7	76.6
Milk and dairy products	83.5	84.8	83.3	84.0	83.9
Eggs	100.0	99.1	100.5	102.2	103.7

Product	2020	2021	2022	2023	2024
Fish and fish products	81.7	78.2	76.7	75.4	77.3

As shown in Table 18, livestock-related self-sufficiency ratios remained broadly stable over the five-year period, though with a modest downward drift. Aggregate meat self-sufficiency declined from 84.5% in 2020 to 83.4% in 2024, suggesting stagnation rather than expansion. Within this category, beef and mutton products maintained relatively high ratios (above 88%), reflecting Azerbaijan's established smallholder livestock systems and strong domestic demand. However, poultry meat—a crucial source of affordable protein—registered a steady decline from 79.0% to 76.6%, underscoring dependence on imported feed, breeding stock, and input costs sensitive to exchange rate fluctuations.

Dairy production also remained largely unchanged (around 83–84%), indicating limited modernization of the dairy value chain and persistent productivity constraints in small-scale farms. In contrast, egg production exceeded self-sufficiency (reaching 103.7% in 2024), reflecting efficient domestic production systems and export potential within the regional market. Fish and aquaculture products continued to underperform, with self-sufficiency falling from 81.7% to 77.3%, largely due to ecological pressures, underinvestment, and a weak regulatory framework for aquaculture development.

Overall, livestock indicators suggest that while Azerbaijan sustains a moderate level of domestic supply for animal-based foods, the sector lacks dynamic growth and technological advancement, leaving it vulnerable to feed price volatility and climate-induced risks.

Table 19. Food Self-Sufficiency — Plant Products (2020–2024, %)

Product	2020	2021	2022	2023	2024
Total grains (excluding paddy)	68.1	73.7	69.0	70.5	68.4
Wheat	57.1	61.5	56.7	60.4	56.1
Leguminous	60.3	56.4	61.5	62.8	65.1
Potato	90.6	88.8	89.0	89.8	88.8
Vegetables (all kinds)	110.4	106.6	106.8	107.2	105.8
Tomato	131.0	121.1	119.8	118.9	119.7

Product	2020	2021	2022	2023	2024
Market garden crops	100.8	102.6	103.2	103.2	101.7
Fruit and berries	116.3	122.9	123.9	135.5	128.5
Walnut and hazelnut	138.0	136.5	137.0	139.7	126.1
Pomegranate	112.0	127.8	125.9	132.8	135.1
Grape	95.8	94.4	94.8	93.9	89.4

The data in Table 19 highlight pronounced disparities between staple crops and high-value horticultural products. Grain and wheat self-sufficiency remained critically low, fluctuating between 56–73% and trending downward after 2021. In 2024, wheat self-sufficiency stood at 56.1%, the lowest level in the five-year period, illustrating persistent reliance on imports from major grain-exporting countries. These results signal that cereal production has not benefited proportionally from government investment programs, with yield stagnation, water scarcity, and input inefficiencies limiting domestic competitiveness.

Conversely, fruit and vegetable production consistently exceeded domestic demand. Self-sufficiency levels for vegetables (≈106%), tomatoes (≈120%), and fruits and berries (≈128%) confirm Azerbaijan's comparative advantage in labor-intensive horticultural production, which benefits from favorable climatic conditions and export-oriented cultivation practices. Tree crops such as walnuts, hazelnuts, and pomegranates displayed strong performance, with self-sufficiency ratios exceeding 125–135%, positioning these commodities as important drivers of non-oil export diversification.

By contrast, the grape sector experienced a gradual decline from 95.8% in 2020 to 89.4% in 2024, suggesting that despite the state's viticulture programs, production has not kept pace with processing capacity or export ambitions. The duality between high-performing horticultural exports and underperforming staples underscores an imbalance between economic and food security priorities: export competitiveness has improved, but domestic resilience in basic crops remains weak.

Table 20. Food Self-Sufficiency — Processed Foods (2020–2024, %)

Product	2020	2021	2022	2023	2024
Brown rice	14.2	17.7	17.6	20.4	22.3
Flour (all kinds)	95.4	95.0	93.3	90.4	93.7
Vegetable oils	34.8	73.2	66.7	54.9	55.6
Butter	62.7	66.7	62.0	64.7	69.8
Cheese (all kinds)	88.1	86.3	87.9	86.4	85.0
Sugar	68.4	100.7	103.9	84.4	93.0
Tea	45.5	89.5	91.1	89.5	87.1
Salt	111.4	104.8	117.2	101.6	121.2
Unsweetened mineral and aerated waters	95.9	97.2	94.8	96.6	97.2

Source for Tables 18–20: State Statistical Committee of Azerbaijan (SSCA), Food Balances of Azerbaijan, 2025.

Table 20 reveals an uneven pattern of self-sufficiency in processed food categories, indicating progress in some segments but ongoing reliance on imports for critical goods. Brown rice, despite modest gains (from 14.2% to 22.3%), remains the most import-dependent staple, confirming the limited success of the 2018–2025 Rice Development Program. Vegetable oil self-sufficiency showed significant volatility—spiking to 73.2% in 2021 but declining to 55.6% in 2024—reflecting global price shocks and domestic processing bottlenecks.

Among animal-based processed products, butter and cheese maintained moderate self-sufficiency (≈65–85%), with minor fluctuations linked to milk supply and import substitution policies. Sugar exhibited a cyclical trend: surging above 100% in 2021–2022 before falling back to 93% in 2024, likely influenced by external supply disruptions and exchange rate adjustments. The most notable improvement occurred in tea, where self-sufficiency nearly doubled from 45.5% in 2020 to 87.1% in 2024, attributable to the expansion of domestic tea processing under the 2018–2027 Tea Development Program. Salt production consistently exceeded national demand, demonstrating sustained capacity and potential for regional exports.

While Azerbaijan achieved high self-sufficiency in products such as flour, sugar, salt, and bottled water, the overall processed food segment remains exposed to external shocks due to input import dependence and limited technological integration in domestic processing industries.

An analysis of Azerbaijan's food self-sufficiency data for 2020–2024 reveals considerable variation across commodity groups, underscoring the dual structure of the country's agricultural system. Strong performance in horticultural and perishable products contrasts sharply with persistent import dependence in key staples and processed foods. While short-term improvements are observable in some categories, long-term stability remains fragile, exposing structural inefficiencies and vulnerability to external shocks.

While the government's development policy seeks to achieve higher levels of productivity in crops, some of them have been dropped from the agenda. This lack of consistency disrupts long-term productivity gains and does not allow for efficient resource allocation in the agricultural sector[67].

Trend analysis across livestock, crop, and processed food segments identifies three overarching structural patterns:

- **Resilient yet stagnant livestock production** — Moderate self-sufficiency has been maintained, but technological stagnation and dependence on imported feed continue to constrain growth.
- **Horticultural dominance versus staple fragility** — Export-oriented fruit and vegetable production outperforms other subsectors, while cereals and grains lag behind, heightening food security risks.
- **Incomplete industrial upgrading** — the processed food sector shows partial progress in import substitution, yet oilseeds, dairy, and rice remain persistently vulnerable.

Collectively, these trends indicate that Azerbaijan's agricultural system is more commercially diversified than nutritionally secure. The country's comparative advantage in export-oriented crops has not translated into structural food resilience. Bridging this gap requires rebalancing investment toward staple crop productivity, enhancing agro-processing efficiency, and building integrated value chains that link primary production with domestic consumption and export markets.

[67] Niftiyev, I.; Ibadoghlu, G. Longitudinal Principal Component and Cluster Analysis of Azerbaijan's Agricultural Productivity in Crop Commodities. *Commodities* 2023, *2*, 147-167. https://doi.org/10.3390/commodities2020009

From 2020 to 2024, overall food self-sufficiency remained moderate but exhibited a widening divide between export-oriented horticulture and import-dependent staples. Continued asymmetries reflect systemic weaknesses—low input efficiency, limited innovation, and weak institutional coordination—that undermine food security and rural stability. Persistent import dependence on wheat, vegetable oils, butter, and tea highlights exposure to external price volatility and supply chain disruptions. Conversely, export surpluses in vegetables, fruits, nuts, and pomegranates partly offset these imbalances but do little to improve nutritional sovereignty. The evidence points to a dual performance pattern: labor-intensive horticulture achieves high self-sufficiency and export capacity, while productivity in cereals and livestock—vital for national food security—remains weak. This imbalance underscores the need for policies that align production incentives, resource allocation, and market mechanisms with food security priorities.

In conclusion, despite measurable gains in agricultural output and exports, Azerbaijan's agrarian sector continues to face deep-seated structural challenges related to productivity, competitiveness, and institutional efficiency. Sustained progress will depend on shifting from expansion-oriented policies toward strategies emphasizing efficiency, resilience, and value addition. Strengthening governance, promoting technological modernization, and improving access to finance and export markets are essential for transforming agriculture into a resilient driver of inclusive, non-oil economic growth and long-term food security.

VI. Information and Communication Technologies (ICT) and the Digital Economy

The Information and Communication Technologies (ICT) sector represents one of the most promising avenues for the modernization and diversification of Azerbaijan's economy. Despite its strategic potential, the sector's overall contribution to economic growth remains modest. In 2024, ICT accounted for only 1.8 percent of GDP, while ICT goods comprised a mere 0.036 percent of total exports. Employment in the sector stood at approximately 1.4 percent of the labor force, underscoring its limited scale within the national economy[68].

A major constraint on ICT development is the low level of investment in research, development, and innovation (R&D). In 2024, total R&D expenditures accounted for just 0.2–0.3 percent of GDP, considerably below regional and global averages. International comparisons further highlight this gap: Azerbaijan ranked 86th of 132 countries in R&D intensity in 2022 and 94th of 139 countries in WIPO's Global Innovation Index 2025, trailing behind Georgia (56th) and Armenia (59th). These indicators reflect structural weaknesses in the innovation ecosystem, institutional capacity, and knowledge transfer mechanisms.

Among the most significant state-led initiatives in the ICT domain is the development of satellite telecommunications under Azercosmos[69]. Established in 2010 by presidential decree, Azercosmos has played a pivotal role in expanding satellite-based communication services and promoting service exports. A major milestone was the launch of the "Azerspace-1" telecommunications satellite, financed through a US$116.6 million loan from the Export–Import Bank of the United States. In 2023, the government allocated an additional 85 million manats from the state budget to finance the Azersky-2 satellite program[70].

According to Azercosmos' 2023 activity report, cumulative revenues from satellite operations reached 590 million manats over a decade. In 2023 alone, the agency provided telecommunications, optical satellite, and teleport services to approximately 200 companies in more than 50 countries, generating 48 million manats in revenue. However, export performance weakened in 2025: during January–July 2025, exports to 41 countries declined by 7.3 percent year-on-year to US$10.1 million, and the number of client countries fell from 48 in 2024 to 41 in

[68] https://www.stat.gov.az/menu/6/statistical_yearbooks/source/communication_2025.pdf
[69] http://www.azercosmos.az/
[70] https://sai.gov.az/files/2023_icra_rey-336563546.pdf

2025. The 2024 financial report also recorded total losses of 379.6 million manats, though annual losses decreased by 40.8 percent, from 54.5 million manats in 2023 to 32.3 million in 2024.
The Strategic Roadmap for the Development of Telecommunications and Information Technologies of the Republic of Azerbaijan[71] sets key objectives for digitalization and financial inclusion:

- Expanding electronic signature usage in internet and mobile banking from 20 percent in 2016 to 80–100 percent after 2020;
- Increasing transaction volume through POS terminals from 400 million to 2.7 billion manats;
- Raising the share of non-cash card transactions from 8 percent in 2016 to 50 percent by 2025, and 80 percent beyond 2025;
- Expanding the share of non-cash POS transactions in consumer spending from 1 percent to 8–9 percent[72].

According to the Central Bank of Azerbaijan, as of 31 December 2024[73]:

- The number of payment cards in circulation reached 19.9 million;
- The number of ATMs totaled 3.3 thousand, and POS terminals reached 119.5 thousand;
- The share of non-cash payments in domestic transactions rose from 30 percent in 2021 to 43.2 percent in 2022, 55.6 percent in 2023, and 64.2 percent in 2024.

These figures indicate a steady digital transformation in financial services, supported by government initiatives and increased adoption of cashless payment systems. Nevertheless, the ICT sector's overall impact on economic diversification remains constrained by underinvestment in innovation, limited private sector participation, and dependence on public financing.
Table 21 provides a concise overview of Azerbaijan's ICT sector performance between 2020 and 2024, capturing four key dimensions—sectoral value added, trade in ICT goods, import dependence, and employment. The data highlight both incremental progress and enduring structural weaknesses that continue to limit the ICT sector's contribution to national economic diversification.

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[71] The Strategic Roadmap for the Development of Telecommunications and Information Technologies of the Republic of Azerbaijan, https://e-qanun.az/framework/57132#_Toc470728680
[72] https://ereforms.gov.az/files/monitoring/pdf/az/147b68e7a6fdd0deba106baada3705a0.pdf
[73] CBAR, Financial Stability Report. 2024, https://uploads.cbar.az/assets/79a4c47c21e7c3c28a0d235f8.pdf

Table 21. ICT Sector Indicators (2020–2024)

	2020	2021	2022	2023	2024
Proportion of value added generating in ICT sector in GPD, per cent	2,2	1,8	1,4	1,6	1,8
ICT goods exports as a percentage of total export, in percent	0,143	0,023	0,060	0,053	0,036
Proportion of imported ICT goods as a percentage of total imports, in percent	5,8	5,4	4,0	5,1	5,2
Proportion of employees involved in ICT sector, in percent	1,4	1,4	1,3	1,4	1,4

Source: SSCA, "Digital Development of Azerbaijan," Statistical Yearbook 2025.

The share of ICT value added in GDP fluctuated between 1.4 and 2.2 percent over the period, showing only a modest rebound in 2024 (1.8%) after a steady decline from 2020. This trend suggests that the ICT sector has not yet achieved a consistent trajectory of growth or deep integration with other sectors of the non-oil economy. The relatively small contribution to GDP underscores the need to strengthen domestic digital infrastructure, promote innovation-based entrepreneurship, and enhance the absorption of ICT across industries.

The share of ICT goods exports in total exports declined sharply—from 0.143 percent in 2020 to just 0.036 percent in 2024—indicating a narrowing export base and limited competitiveness in international technology markets. This contrasts with global trends in digital trade and reflects Azerbaijan's heavy dependence on imported ICT equipment. The relatively high and stable proportion of ICT goods imports (around 5%) demonstrates the country's reliance on foreign technology inputs and its limited domestic production capacity in high-tech manufacturing.

The share of employment in the ICT sector, which remained virtually unchanged at 1.3–1.4 percent, reinforces the observation that Azerbaijan's digital economy has expanded in scope but not in labor absorption. The sector's small employment footprint is typical of technology-intensive industries but also signals a shortage of skilled human capital and limited private sector dynamism in high-value digital services.

In summary, the table illustrates that while digitalization in Azerbaijan has advanced in infrastructure and financial technology, the sector remains underperforming as a growth and export driver. Sustained progress will require a strategic pivot from state-led connectivity projects toward a knowledge- and innovation-based digital economy that can generate high-value employment and export potential.

Taken together, these indicators suggest that the ICT sector's contribution to Azerbaijan's economic transformation remains constrained by low innovation intensity, limited export diversification, and weak linkages with domestic production systems. The country's digitalization progress has been driven primarily by public investment and infrastructure development—particularly in telecommunications and e-banking—rather than by private innovation or knowledge-based entrepreneurship.

While Azerbaijan's ICT sector has demonstrated incremental progress—particularly in digital finance, satellite telecommunications, and service exports—its potential as a driver of non-oil economic growth remains underutilized. To strengthen the sector's impact, policy efforts should focus on increasing R&D investment, stimulating private innovation, and enhancing integration with global digital value chains. Expanding human capital in information technology, fostering start-up ecosystems, and improving the regulatory environment for venture finance are essential for transforming ICT into a dynamic pillar of Azerbaijan's post-hydrocarbon development model.

VII. Tourism and the Border-Closure Effect

Following the sharp currency devaluations in 2015, the urgency of economic diversification in Azerbaijan increased markedly, positioning the tourism sector as a key driver of non-oil growth. As a labor-intensive service sector with substantial potential for foreign exchange earnings, employment generation, and regional development, tourism plays a growing role in the diversification of the national economy. Reflecting this strategic prioritization, one of the eleven national sectoral strategies adopted in December 2016 was the "Strategic Roadmap for the Development of the Specialized Tourism Industry in the Republic of Azerbaijan."[74] The long-term vision of this roadmap, extending to 2025, aims to elevate Azerbaijan into a highly competitive and attractive tourism destination within the wider region and globally.

Tourism is one of the priority non-oil sectors identified in Azerbaijan's national development agenda, particularly under the Strategic Roadmap for the Tourism Industry. A core objective of this strategy is the expansion of inbound tourism. Official statistics confirm that the number of foreign visitors to Azerbaijan increased steadily from 2016 until the onset of the COVID-19 pandemic in 2020. Although the pandemic caused a substantial and unavoidable decline, the post-pandemic recovery has not yet restored international arrivals to pre-crisis levels observed in 2019, indicating that structural challenges remain.

It is important to note that the State Statistical Committee does not publish a distinct tourism satellite account; instead, tourism-related indicators are aggregated under the broader classification of "Accommodation and Food Services."[75] This methodological constraint may obscure the full economic contribution of the tourism sector and highlights the need for improved sector-specific statistical reporting to support evidence-based policy planning.

A further methodological limitation concerns the measurement of inbound tourism in Azerbaijan. The State Statistical Committee reports[76] the "number of foreigners and stateless persons arriving in Azerbaijan"—based on data from the State Border Service—as the number of tourists. However, this indicator does not distinguish the purpose of visit, thereby inflating actual tourism figures.

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[74] Strategic Roadmap for the Development of the Specialized Tourism Industry in the Republic of Azerbaijan, https://e-qanun.az/framework/57127#_Toc469742693

[75] https://www.stat.gov.az/news/source/doklad_2024-12.pdf

[76] https://www.stat.gov.az/menu/6/statistical_yearbooks/source/tourism_2025.pdf

According to the United Nations World Tourism Organization (UNWTO)[77]:

- A visitor is any person traveling to a place outside their usual environment for less than one year, for any purpose other than to be employed in the place visited.
- A tourist is a visitor who stays at least one night in the country — typically for leisure, business, or other tourism-related activities.

In the absence of purpose-specific data, Azerbaijan's current methodology counts all arrivals as tourists, even when the visit does not meet the UNWTO tourism criteria.

This issue is particularly pronounced in relation to Russia, which regularly ranks as the top source country in official statistics. With up to two million Azerbaijani citizens residing in Russia, frequent family visits are common, and each entry is recorded as a tourist arrival. These non-tourism-related trips artificially inflate inbound tourism numbers and distort Azerbaijan's tourism performance profile.

Adopting UNWTO-compliant classifications — such as differentiating between tourists, same-day visitors, expatriate returnees, and labour or family-related travel — along with progress toward a Tourism Satellite Account (TSA) framework, would significantly enhance data accuracy and strengthen evidence-based sector policymaking.

The table below presents key performance indicators of the tourism industry for the period **2019–2024**, capturing both the severe contraction caused by the COVID-19 pandemic and the subsequent recovery trajectory. These indicators provide valuable insight into structural trends in sectoral output, labor dynamics, and investment flows.

Table 22. Main Indicators of Tourism Industries in Azerbaijan (2019–2024)

Indicator	2019	2020	2021	2022	2023	2024*
Number of employees in tourism industries (persons)	58,972	49,019	53,717	63,109	71,063	79,924*
Gross value added in tourism industries (million manats)	3,704.9	1,386.7	1,939.7	3,878.8	5,062.8	5,973.8*
Share of tourism industries in GDP (%)	4.5	1.9	2.1	2.9	4.1	4.5*
Investments in tourism industries (million manats)	133.7	45.8	242.4	100.5	630.7	479.0*

Source: State Statistical Committee of Azerbaijan

*Preliminary data

[77] UNWTO (2024). *International Recommendations for Tourism Statistics (IRTS): Concepts and Definitions of Visitors and Tourists.* Madrid: United Nations World Tourism Organization

The data demonstrate both the shock impact of the COVID-19 pandemic on Azerbaijan’s tourism sector and the subsequent strong but uneven recovery. Employment levels fell sharply from 58,972 in 2019 to 49,019 in 2020, reflecting widespread disruption across hospitality and travel services. A steady rebound followed, with the workforce reaching an estimated 79,924 employees in 2024, a level 35% higher than pre-pandemic capacity, suggesting renewed labor demand and sectoral expansion.

Gross value added (GVA) experienced an even more pronounced contraction, dropping from 3.7 billion manats in 2019 to 1.39 billion manats in 2020 (–63%). The rapid restoration of output by 2022 and the attainment of 5.97 billion manats in 2024—61% above 2019—indicate structural improvements in productivity, visitor spending, or both.

Tourism’s GDP contribution followed similar volatility, falling from 4.5% to 1.9% in 2020 before gradually recovering to 4.5% in 2024, slightly above pre-pandemic levels. This suggests that the sector has regained—and modestly strengthened—its role in non-oil diversification.

Investment flows, however, show greater instability. Following a collapse in 2020, investments surged to 630.7 million manats in 2023, reflecting major infrastructure and branding efforts, yet declined to 479.0 million manats in 2024. This volatility may signal investor caution or project completion cycles and highlights the need for long-term capital commitment to sustain competitiveness.

Overall, Azerbaijan’s tourism sector contributed 4.5% to Azerbaijan's GDP in 2024 and appears resilient and growth-oriented, yet ongoing investment and improved sector governance remain crucial to fully secure tourism as a strategic pillar of the national economy.

The table below presents inbound tourism indicators for 2016–2024, highlighting both pre-pandemic growth momentum and the magnitude of the COVID-19 shock, followed by the sector’s gradual recovery toward the 2019 baseline.

Table 23. Number of Foreign Visitors to Azerbaijan and Their Expenditures, 2016–2024

Year	Number of Foreign Visitors (thousands persons)	Expenditures by Foreign Visitors (million ₼)	% Change in Visitors vs. 2019
2016	2,248.8	1,411.3	–29.1%
2017	2,696.7	2,285.3	–14.9%
2018	2,849.6	2,661.6	–10.1%
2019	3,170.4	2,971.4	0% *(baseline)*
2020	795.8	414.7	–74.9%

Year	Number of Foreign Visitors (thousands persons)	Expenditures by Foreign Visitors (million ₼)	% Change in Visitors vs. 2019
2021	791.8	492.6	–75.0%
2022	1,602.3	1,340.2	–49.5%
2023	2,085.8	2,439.2	–34.2%
2024*	2,626.7	3,403.5	–17.1%

Source: State Statistical Committee of Azerbaijan

The data reveal a clear three-phase dynamic in Azerbaijan's inbound tourism: pre-pandemic expansion, pandemic-induced collapse, and post-pandemic recovery.

Between 2016 and 2019, the number of foreign visitors rose from 2.25 million to 3.17 million, demonstrating positive demand growth supported by improved connectivity and targeted tourism promotion. This momentum was abruptly interrupted in 2020–2021, when arrivals and expenditures declined by approximately 75 percent relative to the 2019 baseline, reflecting global travel restrictions.

Recovery began in 2022, with accelerated improvement in 2023–2024. Visitor numbers reached 2.63 million in 2024, reducing the deficit to –17.1% below pre-pandemic levels, while expenditures increased sharply to 3.4 billion manats, surpassing 2019's spending levels by a significant margin. This suggests a shift toward higher-value tourism, possibly due to longer stays or greater per-visitor spending.

Despite notable progress, the sector has not yet fully restored pre-crisis arrival volumes, underscoring the need for continued efforts in market diversification, international mobility facilitation, and competitive product development to consolidate long-term tourism growth in Azerbaijan.

The table below compares visitor flows from the top source countries in 2019 (pre-pandemic baseline) and 2024, capturing shifts in travel patterns and the extent of recovery across different markets.

Table 24. Number of foreigners and stateless persons arrived to Azerbaijan by countries: Comparison of 2019 and 2024

Country	Tourists in 2019	Tourists in 2024*	Change (persons)	% Change vs. 2019
Russia	932,984	730,971	–202,013	–21.7%
Georgia	725,465	111,300	–614,165	–84.7%

Country	Tourists in 2019	Tourists in 2024*	Change (persons)	% Change vs. 2019
Türkiye	316,628	426,132	+109,504	+34.6%
Iran	255,628	210,081	–45,547	–17.8%
Saudi Arabia	107,230	98,113	–9,117	–8.5%
United Arab Emirates	68,346	46,731	–21,615	–31.6%
India	65,118	243,633	+178,515	+274.1%
Ukraine	59,116	36,144	–22,972	–38.9%
Iraq	50,723	5,320	–45,403	–89.5%
Israel	47,056	28,954	–18,102	–38.5%

Source: State Statistical Committee of Azerbaijan

The data show significant variation in tourism recovery by country of origin. A closer examination of Azerbaijan’s tourism relations with its three key neighboring countries—Russia, Georgia, and Iran—reveals significant structural and political shifts. According to official statistics, in 2019, 725 465 visitors arrived in Azerbaijan from Georgia, most of whom were not Georgian nationals but foreign tourists traveling across the South Caucasus region. However, following the onset of the COVID-19 pandemic and the subsequent closure of land borders in 2020, this figure declined sharply by 84.7 percent, reaching 111 300 visitors in 2024.

Similar downward trends are evident for Azerbaijan’s northern and southern neighbors. Between 2019 and 2024, the number of visitors from Russia decreased by 21.7 percent (from 932 984 to 730 971), while arrivals from Iran fell by 17.8 percent (from 255 628 to 210 081). The contraction in tourism from these key markets is primarily attributable to the continued closure of Azerbaijan’s land borders, which has disrupted regional mobility and cross-border travel flows.

Closured of Azerbaijan’s land borders is stimulated growth in domestic tourism. According to the State Statistics Committee[78], the number of domestic tourist trips increased by 8.6 percent in 2024 compared to 2023, reaching 5.69 million trips—a 25.6 percent rise relative to pre-pandemic levels in 2019. However, domestic tourism expenditures grew even faster, rising by 52 percent during the same period, indicating significant price inflation in hospitality and tourism services. Per capita domestic tourism spending increased from 800 manats in 2019 to 930 manats in 2024, reflecting both increased demand and cost pressures within the sector.

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[78] https://www.stat.gov.az/menu/6/statistical_yearbooks/source/tourism_2025.pdf

Among the top ten source countries, India recorded the highest growth in tourist arrivals to Azerbaijan. Between 2019 and 2024, the number of Indian visitors surged by 274.1 percent, driven by expanding air connectivity and targeted marketing initiatives. However, political tensions in 2025—stemming from Azerbaijan's pro-Pakistan stance during the renewed conflict in Kashmir[79]—have negatively affected bilateral tourism flows. Calls for a boycott of travel to Azerbaijan have gained significant traction across India in response to Baku's pro-Pakistan stance on the Kashmir conflict, and these campaigns are now producing tangible effects on bilateral tourism flows[80].

In the first nine months of 2025, India accounted for 6.8 percent of all visitors to Azerbaijan, compared with 9.1 percent in the same period of 2024, signaling a downturn. Despite a 2.3-fold increase in Indian arrivals in January–September 2024 compared with the previous year, data for 2025 already indicate a reversal of this upward trend[81].

Major declines are observed in neighboring markets traditionally dominant in Azerbaijan's tourism profile. Arrivals from Georgia and Iraq contracted the most (–84.7% and –89.5%), influenced by disrupted land connectivity, stricter border controls, closure of border with neighboring states[82] and broader geopolitical tensions between Iran and Russia. Russia, while still the largest inbound market, remains 21.7% below 2019 levels, reflecting a slower recovery of regional travel dynamics and changes in migration-related travel.

The findings[83] also demonstrate that the continued closure of Azerbaijan's land and sea borders has had a detrimental impact on tourism sector performance. Since March 2020, when pandemic-related restrictions were introduced, the suspension of cross-border land and maritime travel for both citizens and foreign visitors has substantially constrained the country's ability to realize its tourism potential and recover fully in the post-pandemic period.

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[79] Sofia Saeed Shah: Azerbaijan always supports Pakistan's position on Kashmir, 29 October 2025 https://report.az/en/amp/foreign-politics/sofia-saeed-shah-azerbaijan-always-supports-pakistan-s-position-on-kashmir

[80] In India, boycott calls against Turkey, Azerbaijan reflect growing 'consumer-led diplomacy'? 16 May 2025 https://www.scmp.com/week-asia/economics/article/3310592/india-boycott-calls-against-turkey-azerbaijan-reflect-growing-consumer-led-diplomacy

[81] https://www.stat.gov.az/news/index.php?lang=en&id=6082

[82] Cabinet of Ministers of the Republic of Azerbaijan. Decree on Temporary Restrictions on Entry and Exit Across State Borders in Connection with the COVID-19 Pandemic, March 2020 (and subsequent extensions).

[83] Ibadoghlu, Gubad, The Socioeconomic Consequences of Prolonged Closure of Azerbaijan's Land and Sea Borders (October 21,2024). Available at SSRN: https://ssrn.com/abstract=4994333 or http://dx.doi.org/10.2139/ssrn.4994333

In contrast, notable growth is recorded from Türkiye (+34.6%) and especially India (+274.1%), indicating successful penetration into new long-haul and emerging markets. These shifts suggest a gradual reorientation of Azerbaijan's tourism demand structure away from a heavy dependence on land-based short-haul visitors toward more diverse international segments.

The Gulf markets (Saudi Arabia and UAE) show more moderate declines (–8.5% and –31.6%), pointing to sustained potential in high-spending tourism, while continued declines from Ukraine (–38.9%) reflect ongoing war-related constraints.

Overall, Azerbaijan's tourism dynamics between 2019 and 2025 reveal how border restrictions, regional geopolitics, and policy inconsistencies have constrained the sector's recovery and diversification. The continued closure of land borders limits access from key neighboring markets, while external political alignments have introduced new vulnerabilities. In particular, calls for a boycott of travel to Azerbaijan have gained significant traction in India following Baku's pro-Pakistan position on the Kashmir conflict, producing tangible declines in tourist arrivals from one of the fastest-growing source markets. Although domestic tourism has expanded and partially offset the loss of foreign visitors, this growth has been accompanied by rising service costs and inflationary pressures. To position tourism as a sustainable driver of non-oil economic diversification, Azerbaijan must reopen land borders, enhance regional connectivity, and pursue a balanced foreign policy that safeguards its reputation and attractiveness to a broad range of international travelers.

To evaluate the impact of border closures on Azerbaijan's tourism sector and to provide a comparative perspective on its current performance, Table 25 presents key tourism indicators for Georgia and Armenia alongside Azerbaijan. This comparative approach highlights the extent to which Azerbaijan's prolonged land-border restrictions have constrained tourism recovery relative to its regional peers. By examining differences in visitor numbers, revenues, and sectoral contributions to GDP, the table underscores the structural and policy-driven disparities shaping post-pandemic tourism competitiveness in the South Caucasus.

Table 25. Key Indicators of Foreign Tourists Visiting other South Caucasus Countries, 2024

Destination Country	Origin Country	Number of Tourists (persons)	Share (%)
Georgia	Russia	1,113,676	21.87 %
	Türkiye	850,128	16.70 %
	Azerbaijan	836,537	16.43 %
	Other countries	2,291,391	45.00 %
	Total	5,091,113	100 %
Armenia	Russia	937,827	49.50 %
	Georgia	266,048	14.06 %
	Iran	176,453	9.31 %
	Other countries	514,179	27.14 %
	Total	1,894,503	100 %

Source: Media Analysis Center (MTM), Azerbaijan[84]

A comparative analysis of the geographic composition of tourists in 2024 across the three South Caucasus countries shows that neighboring states remain the dominant source of visitors for both Georgia and Armenia, while Georgia continues to serve as the primary regional tourism hub. Several structural and policy factors contribute to Georgia's relative advantage over Azerbaijan and Armenia: diverse and accessible transport infrastructure, lower accommodation and service costs, a liberal visa regime, and strong ethno-cultural and historical appeal.

In contrast, Armenia's tourism sector indirectly benefits from the ongoing closure of land borders between Azerbaijan and Georgia. Tourists entering the region through Georgia often view Armenia as a more accessible secondary destination due to lower travel costs, easier border logistics, and comparatively affordable prices in hospitality and trade services. As a result, Azerbaijan has struggled to attract the same level of cross-border tourism from Georgia, despite its larger economic base and broader resource potential.

To enhance its competitiveness and regional integration, Azerbaijan must align its tourism strategy with regional mobility trends by reopening land borders, reducing travel costs, and

[84] https://mtm.az/wp-content/uploads/2025/02/32-03-1536x1536.png

promoting a more visitor-friendly policy environment that supports sustainable, non-oil economic growth.

Table 26 presents a comparative overview of total and per capita tourism revenues in the South Caucasus, highlighting the relative performance of Azerbaijan, Georgia, and Armenia in generating income from international visitors.

Table 26. Tourism Revenues in the South Caucasus (2024)

Country	Tourism Revenues (billion USD)	Tourism Revenues per Capita (USD)
Azerbaijan	1.5	145
Georgia	3.4	925
Armenia	1.9	626

Source: Author's compilation based on official statistics and international tourism data[85]

The comparative data clearly demonstrate Azerbaijan's continued underperformance in the tourism sector relative to its South Caucasus neighbors. In 2024, Azerbaijan generated USD 1.5 billion in tourism revenues—less than half of Georgia's USD 3.4 billion and significantly below Armenia's USD 1.9 billion. Even more striking is the gap in per capita tourism income, which stood at only USD 145 in Azerbaijan, compared to USD 925 in Georgia and USD 626 in Armenia.

This disparity reflects structural inefficiencies and policy misalignments that have constrained Azerbaijan's ability to translate its infrastructural and resource advantages into sustained sectoral growth. Despite its larger population and better-developed transport and hospitality infrastructure, the country's tourism performance remains hampered by restrictive border policies, limited diversification of source markets, and an underdeveloped service ecosystem. The prolonged closure of land and sea borders since 2020 continues to hinder regional mobility and suppress cross-border tourism, particularly from neighboring countries that historically accounted for the bulk of arrivals.

In contrast, Georgia's superior performance demonstrates the benefits of open-border regimes, flexible visa policies, and diversified tourism offerings, while Armenia's steady recovery reflects the advantages of regional accessibility through Georgia and targeted international marketing

[85] Official tourism statistics: State Statistical Committee of the Republic of Azerbaijan; National Tourism Administrations of Georgia and Armenia; UNWTO datasets (2024).

campaigns. These policy differences underscore the crucial role of mobility and openness in shaping tourism competitiveness across the South Caucasus.

At the same time, changing visitor patterns reveal emerging strengths in Azerbaijan's tourism market. While total arrival numbers remain below pre-pandemic levels, the market composition is shifting toward higher-value tourism segments—such as business, eco-cultural, and medical tourism—and more geographically diversified inbound markets. These trends suggest early signs of resilience and qualitative improvement, provided they are reinforced by targeted international marketing, expanded air connectivity, and competitiveness-enhancing reforms in accommodation, service quality, and digital infrastructure.

The analysis demonstrates that while Azerbaijan's tourism sector has shown measurable resilience following the pandemic-induced downturn, its recovery trajectory remains notably weaker than that of its South Caucasus neighbors. Structural, methodological, and policy-related factors continue to limit the sector's full potential as a driver of non-oil economic diversification.

Empirically, the data reveal three defining patterns. First, the COVID-19 pandemic precipitated a severe contraction in both inbound arrivals and tourism-related output, with only partial recovery achieved by 2024. Second, the country's tourism growth remains disproportionately dependent on oil-funded fiscal transfers, restricted land mobility, and a narrow set of source markets. Third, despite increased domestic tourism and modest improvements in higher-value segments, Azerbaijan's international competitiveness lags substantially behind Georgia and Armenia in terms of total and per capita tourism revenues.

Methodologically, the current statistical framework overstates the scale of inbound tourism by conflating all border crossings with tourism visits, contrary to United Nations World Tourism Organization (UNWTO) definitions. This practice obscures the true size, composition, and performance of the tourism economy and undermines evidence-based policymaking. The establishment of a Tourism Satellite Account (TSA) and harmonization with UNWTO standards are therefore essential for improving data accuracy and strategic planning.

At the policy level, the prolonged closure of land and sea borders—initially justified by pandemic control measures—has evolved into a structural barrier to recovery and competitiveness. This closure has suppressed short-haul regional mobility, diverted tourism flows toward neighboring destinations, and reduced investor confidence. In contrast, Georgia's open-border regime, liberal visa policies, and diversified tourism offerings have positioned it as the regional leader, while Armenia has benefited indirectly from Azerbaijan's continued isolation by attracting transiting travelers through Georgia.

Nonetheless, emerging shifts in visitor composition suggest that Azerbaijan possesses untapped potential for qualitative transformation. The growing presence of long-haul markets such as India, the Gulf States, and Turkey reflects initial progress toward geographical diversification and higher-value tourism. Yet these gains remain fragile, particularly amid geopolitical tensions that have already triggered tourism boycotts from key partners such as India.

To secure sustainable progress, Azerbaijan must reorient its tourism policy toward openness, diversification, and institutional modernization. Key priorities include:

- Reopening land borders and restoring regional mobility;
- Aligning tourism data collection with UNWTO standards;
- Enhancing air connectivity and digital visibility;
- Promoting investment in sustainable tourism infrastructure; and
- Strengthening international cooperation and depoliticizing foreign tourism relations.

In sum, Azerbaijan's tourism recovery remains constrained not by lack of potential but by policy choices. Reintegrating into regional and global tourism networks, supported by evidence-based governance and transparent sectoral reforms, is essential for transforming tourism from a vulnerable adjunct of the non-oil economy into a robust engine of inclusive and sustainable growth.

VIII. Fiscal Imbalances

8.1 Revenue Trends

State revenues in Azerbaijan are primarily accumulated through two main channels—the state budget and the State Oil Fund of Azerbaijan (SOFAZ)—which together constitute the dual structure of the country's public finance management system. Despite ongoing reform initiatives, the national revenue base remains heavily dependent on oil and gas income, both directly through hydrocarbon taxation and indirectly through state transfers and corporate dividends. This continued reliance underscores the urgent need for economic and fiscal diversification to ensure long-term budgetary sustainability and macroeconomic stability.

The limited progress achieved in economic diversification has reinforced the fiscal importance of SOFAZ transfers and hydrocarbon-related tax receipts. According to the government's 2024 report, oil and gas revenues accounted for 48.35% of total budget revenues, while non-oil and gas revenues comprised 51.65%. Within the oil and gas segment, 71.1% of revenues originated from SOFAZ transfers, 12.14% from the operations of SOCAR—the national oil company—and the remainder from foreign oil and gas enterprises.

Reducing dependence on SOFAZ transfers remains one of the central objectives of Azerbaijan's fiscal policy. Nevertheless, the 2025 state budget projects a 13.2% increase in such transfers compared with 2024 and envisages maintaining this level throughout the medium-term expenditure framework. This trend reflects both structural limitations in non-oil revenue mobilization and the government's continued reliance on hydrocarbon income as a fiscal stabilizer.

Non-oil and gas revenues are primarily derived from taxes, customs duties, administrative fees, fines and sanctions, the leasing and privatization of state property, dividends from state-owned enterprises, and donor grants. In 2024, 57.5% of non-oil revenues were collected by the tax authorities, 34.6% by customs, and the remaining 7.9% from other sources, according to official data.

In terms of tax performance, Azerbaijan's tax-to-GDP ratio increased from 19.6% in 2022 to 22.9% in 2023, representing a 3.3 percentage-point rise[86]. Between 2014 and 2023, the ratio expanded by 5.8 percentage points—from 17.1% to 22.9%—marking the highest level observed during the period. The lowest ratios, at 16.2%, were recorded in 2017 and 2018.

The national tax structure continues to be dominated by indirect taxes. In 2023, value-added tax (VAT) accounted for 28.7% of total tax revenues, followed closely by corporate income tax at 28.4%. This composition highlights the fiscal system's strong dependence on enterprise activity and consumption rather than on diversified and progressive tax sources.

Projections for 2025 suggest continued growth in both total and non-oil tax revenues. The government anticipates that ongoing economic diversification and structural reform efforts will gradually reduce fiscal dependence on hydrocarbons. However, the expiration of several tax exemptions by the end of 2025 may temporarily affect revenue performance. To ensure fiscal resilience, it will be essential to enhance the efficiency of non-oil revenue collection, improve tax compliance, and uphold macroeconomic discipline amid evolving global energy market conditions.

According to official statistics, foreign loans and grants play a relatively minor role in Azerbaijan's public finances. The ratio of general government and government-guaranteed debt to GDP has nearly halved between 2020 and 2025, reflecting a conservative fiscal stance and prudent debt management practices. Nevertheless, the concurrent decline in the share of total revenue and grants in GDP raises concerns regarding the sustainability of fiscal revenues, particularly in light of the slow progress in economic diversification.

Table 27. Key Fiscal Indicators of Azerbaijan, 2020–2024

Indicator	2020	2021	2022	2023	2024
Total revenue and grants, in percent of GDP	33.7	36.4	32.1	40.6	37.1
Share of oil & gas revenues in total state revenues (%)	55.8	52.4	50.3	49.1	48.35
Share of non-oil & gas revenues (%)	44.2	47.6	49.7	50.9	51.65
SOFAZ transfers as % of total oil & gas revenues	73.5	72.1	70.8	71.4	71.1
Share of SOCAR payments in total oil & gas revenues (%)	11.8	12.4	11.6	12.2	12.14
General government and government-guaranteed debt, in percent of GDP	54.0	41.6	26.9	28.9	27.6

[86] OECD (2025), Revenue Statistics in Asia and the Pacific 2025, Personal income taxation in Asia and the Pacific, Revenue Statistics in Asia and the Pacific, OECD Publishing, Paris, https://doi.org/10.1787/6c04402f-en

Indicator	2020	2021	2022	2023	2024
Total revenue and grants, in percent of GDP	33.7	36.4	32.1	40.6	37.1
Tax-to-GDP ratio (%)	18.2	19.3	19.6	22.9	23.1*
Main sources of non-oil revenues (% of total)					
Tax authorities	56.0	56.7	57.0	57.3	57.5
Customs authorities	35.5	35.0	34.8	34.5	34.6
Other sources	8.5	8.3	8.2	8.2	7.9

Source: Author's compilation based on the Ministry of Finance, State Statistical Committee of Azerbaijan, and SOFAZ reports (2020–2024)

The fiscal indicators presented in Table 27 reveal that Azerbaijan's public finance system continues to evolve under the dual pressures of hydrocarbon dependency and diversification policy objectives. Between 2020 and 2024, key macro-fiscal trends demonstrate both positive consolidation outcomes and persistent structural vulnerabilities.

Total revenue and grants as a share of GDP fluctuated significantly, rising from 33.7% in 2020 to a peak of 40.6% in 2023, before moderating to 37.1% in 2024. These shifts largely mirror global oil price cycles and the corresponding flow of oil-related revenues into the state budget. Despite short-term gains, this volatility underscores the continuing sensitivity of Azerbaijan's fiscal position to external energy market dynamics.

The share of oil and gas revenues in total state income declined steadily from 55.8% in 2020 to 48.35% in 2024, while non-oil revenues increased correspondingly from 44.2% to 51.65%. Although this transition signals incremental progress in fiscal diversification, hydrocarbons still account for nearly half of total revenues, indicating that Azerbaijan remains only partially insulated from oil price shocks.

Transfers from the State Oil Fund of Azerbaijan (SOFAZ) continue to constitute the bulk of oil and gas-related income—averaging around 71% of total hydrocarbon revenues across the observed period. This persistent dependence illustrates that while SOFAZ plays a stabilizing role in cushioning budgetary volatility, it also reflects limited structural advancement in generating autonomous, non-fund revenues from the extractive sector.

Azerbaijan's general government and government-guaranteed debt declined sharply—from 54% of GDP in 2020 to 27.6% in 2024—demonstrating a commitment to conservative fiscal policy and debt sustainability. This reduction enhances fiscal resilience and external creditworthiness, though it also suggests an underutilization of borrowing capacity for long-term development financing.

The tax-to-GDP ratio rose from 18.2% in 2020 to 23.1% in 2024, marking notable improvement in tax collection efficiency and administrative capacity. The tax structure remains dominated by value-added tax (VAT) and corporate income tax, reflecting reliance on consumption and enterprise activity rather than a broader mix of progressive and property-based taxes.

Non-oil revenue composition remained relatively stable: around 57.5% derived from the tax authorities, 34–35% from customs, and roughly 8% from other sources. This structure demonstrates institutional stability but also limited diversification in non-fiscal revenue channels such as state assets, dividends of state owned companies, and privatization proceeds.

When compared with regional peers, Azerbaijan's fiscal structure exhibits both strengths and structural limitations. In contrast to Georgia—where non-resource sectors generate nearly 95% of total budget revenues—Azerbaijan's fiscal base remains significantly narrower, with non-oil revenues accounting for just over half of total income in 2024. This imbalance highlights the incomplete nature of diversification despite several years of policy prioritization.

Table 28 presents indicators of fiscal diversification in the South Caucasus in a comparative perspective.

Table 28. Share of Non-Resource Revenues in Total State Revenues, 2024 (%)

Country	Share of Non-Oil/Non-Resource Revenues (%)
Azerbaijan	51.7
Georgia	93.8
Armenia	95.2

Source: Author's compilation based on Ministries of Finance of Azerbaijan, Georgia, and Armenia (2024); IMF World Economic Outlook *and World Bank* World Development Indicators.

As shown in Table 28, Azerbaijan's non-resource revenue share remains close to half of total state revenues, in sharp contrast to Georgia and Armenia, where over 90 percent of fiscal income is generated from non-commodity sources. This divergence reflects fundamental differences in economic structure and fiscal policy orientation across the South Caucasus.

Georgia's diversified service economy—supported by a liberal tax regime, dynamic SME sector, and open trade environment—has enabled it to sustain high fiscal autonomy and resilience to external shocks. Armenia, though smaller in scale, demonstrates a similarly robust domestic revenue base built on effective tax administration, a broad VAT and income tax system, and deepening integration with regional trade networks.

By contrast, Azerbaijan's fiscal system, while stable and underpinned by the SOFAZ, remains structurally dependent on hydrocarbon inflows. In 2024, non-oil and gas revenues accounted for 51.7 percent of total income—an improvement from 44.2 percent in 2020, yet still indicative of a resource-concentrated fiscal model. This dependence constrains fiscal flexibility, weakens counter-cyclical capacity, and leaves public finances vulnerable to fluctuations in global energy prices.

The comparison underscores a structural asymmetry within the region: Azerbaijan's larger aggregate revenues stem from oil exports, but its fiscal base is less diversified and more exposed to volatility, whereas Georgia and Armenia rely on stable, broad-based domestic tax systems that enhance predictability and fiscal resilience.

Overall, Azerbaijan's fiscal indicators demonstrate progress in macroeconomic stabilization and declining debt levels. However, fiscal consolidation has largely been achieved through hydrocarbon windfalls and restrained expenditure, rather than through structural transformation of the revenue base. Sustainable fiscal resilience will therefore depend on deepening tax reform, improving non-oil revenue mobilization, enhancing public finance transparency, and gradually reducing SOFAZ-funded budget transfers.

Accelerating diversification of the revenue base—through SME development, digital tax reform, and green fiscal instruments—remains essential for Azerbaijan to transition toward a resilient, post-resource fiscal model comparable to its South Caucasus peers.

Azerbaijan's fiscal performance during 2020–2024 (Table 27) reflected a recovery phase marked by rising revenues, declining debt, and improved fiscal discipline following the dual shocks of devaluation and the pandemic. However, this stabilization was achieved largely through hydrocarbon windfalls and expenditure restraint rather than through fundamental diversification of the revenue base. The government's medium-term fiscal framework for 2025–2030 (Table 29) indicates a strategic shift toward fiscal consolidation and normalization as oil-related revenues moderate and structural reforms gradually expand the non-oil tax base.

Table 29. Fiscal Indicator Panel – Projections (2025–2030f)

Indicator	2025f	2026f	2027f	2028f	2029f	2030f
Total revenue and grants (% of GDP)	34.4	32.8	31.0	29.8	29.5	29.2
Total expenditure (% of GDP)	34.5	33.4	33.4	32.5	31.7	31.0
Current expenditure (% of GDP)	23.9	24.4	24.6	24.4	24.4	24.0
Overall fiscal balance (% of GDP)	–1.3	–1.7	–2.4	–2.8	–2.1	–1.8
Non-oil primary balance (% of non-oil GDP)	–22.1	–18.6	–16.3	–14.5	–12.7	–11.3
General government and government-guaranteed debt (% of GDP)	27.6	28.6	28.9	29.1	29.6	29.4

Source: Author's compilation based on Ministry of Finance and State Statistical Committee projections (2024–2030).

Note: f – forecast values.

A comparative review of Tables 27 and 29 underscores a transition from cyclical recovery to structural adjustment in Azerbaijan's fiscal trajectory.

Between 2020 and 2024, total revenue and grants fluctuated between 32% and 41% of GDP, reflecting volatile oil markets and post-crisis stabilization measures. For 2025–2030, the share is projected to decline steadily to 29–34%, indicating normalization following the windfall phase and a gradual realignment with sustainable non-oil growth trends.

Expenditures show a similar but smoother downward trajectory, falling from 34.5% of GDP in 2025 to 31% by 2030, reflecting continued fiscal restraint. Current expenditure is expected to remain relatively stable around 24% of GDP, which suggests ongoing prioritization of social spending and administrative continuity within a constrained fiscal envelope.

While Azerbaijan is projected to maintain moderate fiscal deficits (between –1.3% and –2.8% of GDP), these remain within prudent thresholds and consistent with fiscal sustainability objectives. More importantly, the non-oil primary balance, which stood at –22.1% of non-oil GDP in 2025, is expected to narrow to –11.3% by 2030. This gradual improvement demonstrates incremental success in fiscal diversification and greater reliance on non-oil revenue mobilization.

Debt levels are projected to remain stable, rising only marginally from 27.6% of GDP in 2025 to 29.4% in 2030, underscoring the government's adherence to a conservative borrowing strategy and effective debt management policy.

As shown in Table 28, the medium-term fiscal outlook portrays a cautiously optimistic yet structurally constrained scenario.

The declining ratio of revenues and expenditures to GDP reflects fiscal normalization and the government's intent to consolidate gains from high oil prices while avoiding excessive dependence on volatile resource inflows. However, the projected slowdown in revenue mobilization also highlights the limits of diversification progress and the enduring importance of hydrocarbon-related transfers to budget stability.

The steady improvement in the non-oil primary balance is a positive development, signaling gradual fiscal adjustment and an increasing contribution from non-resource sectors. Nevertheless, the persistence of a double-digit deficit in this indicator through 2030 suggests that Azerbaijan's fiscal consolidation remains incomplete and vulnerable to external shocks. Without accelerated tax reform, expansion of the private sector, and a more efficient investment environment, progress toward fiscal diversification may stall.

The low debt burden remains one of Azerbaijan's strongest macroeconomic assets. Keeping public debt below 30% of GDP throughout the projection horizon provides fiscal space for counter-cyclical measures if oil prices fall or external shocks occur. However, to preserve this stability, fiscal policy must continue emphasizing transparency, medium-term planning, and prudent SOFAZ transfer management.

In summary, the 2025–2030 projections reflect a cautious consolidation path anchored in fiscal discipline but constrained by structural dependence on oil revenues. Azerbaijan's challenge over the coming decade is to translate macro-fiscal stability into genuine diversification, reduce exposure to hydrocarbon cycles, and build a more resilient, broad-based tax system capable of sustaining growth and social investment in a post-oil future.

The fiscal projections for 2025–2030 should be viewed within the context of Azerbaijan's Medium-Term Expenditure Framework (MTEF) and National Strategy for Socioeconomic Development (2022–2026), which aim to strengthen fiscal sustainability through non-oil growth and improved efficiency in public expenditure. The data suggest that while the government's conservative fiscal stance has preserved macroeconomic stability and maintained low debt levels, deeper structural reforms are essential to sustain these gains. Aligning fiscal policy with diversification priorities—by enhancing non-oil tax capacity, rationalizing public investment, and ensuring transparent management of SOFAZ transfers—will be critical for achieving long-term resilience. Without accelerating progress under the MTEF, Azerbaijan risks maintaining fiscal stability at the cost of growth potential and remaining overly exposed to the cyclical dynamics of the global energy market.

8.2. Expenditure trends

The Medium-Term Budget Framework (MTBF) for 2025–2029 serves as a cornerstone of Azerbaijan's fiscal planning process, providing a structured outlook on government revenues, expenditures, and financing priorities over the medium term. The framework reflects the government's strategic efforts to ensure fiscal sustainability, macroeconomic stability, and policy predictability in an environment shaped by fluctuating global energy markets and ongoing domestic economic transformation.

In line with the objectives of Azerbaijan's national development strategies, the MTBF emphasizes the gradual reduction of fiscal dependence on hydrocarbon revenues and transfers from the State Oil Fund of Azerbaijan (SOFAZ), while promoting diversification of non-oil income sources. It also aligns fiscal policy with broader macroeconomic goals, such as maintaining price stability, enhancing social welfare, and supporting defense and infrastructure priorities.

By providing multi-year projections of revenue and expenditure trends, the MTBF functions as both a fiscal policy tool and a macroeconomic stabilization mechanism, allowing policymakers to anticipate emerging challenges, manage fiscal risks, and improve resource allocation efficiency. The figures presented below outline the key parameters of Azerbaijan's medium-term fiscal trajectory, illustrating the government's evolving approach to public finance management amid efforts to balance developmental objectives with long-term sustainability.

Table 30. Medium-Term Budget Framework (MTBF) for 2024–2029 (AZN billion)

Indicator	2024 a	2025 f	2026 f	2027 f	2028 f	2029 f
Total State Budget Revenues	36.4	38.3	38.1	39.2	39.8	40.5
Transfers from the State Oil Fund of Azerbaijan (SOFAZ)	12.8	14.5	12.8	12.6	12.0	11.5
Tax Revenues from the Oil and Gas Sector	5.0	4.3	4.0	3.9	3.7	3.5
Total State Budget Expenditures	39.7	41.4	40.8	41.8	42.4	43.2

Source: Ministry of Finance of the Republic of Azerbaijan

Note: f- Forecast values.

a- Actual values.

The Medium-Term Budget Framework (MTBF) for 2025–2029 outlines Azerbaijan's fiscal trajectory during a period of gradual transition from resource-based revenue dependence toward a more diversified and resilient economic structure. The framework signals continued government commitment to fiscal sustainability, macroeconomic stability, and structural transformation in line with national development objectives.

Over the forecast horizon, total state budget revenues are projected to increase moderately from AZN 36.4 billion in 2024 to AZN 40.5 billion by 2029, marking an overall growth of approximately 11.3%. This steady rise reflects expectations of stable non-oil sector performance and gradual improvements in tax administration and compliance. However, the composition of revenues remains significantly influenced by oil-related sources and SOFAZ transfers, underscoring the enduring role of hydrocarbons in public finance.

Transfers from SOFAZ are forecasted to peak at AZN 14.5 billion in 2025, before steadily declining to AZN 11.5 billion by 2029. This reduction reflects the government's deliberate strategy to limit reliance on sovereign oil fund resources, thereby strengthening fiscal discipline and aligning with long-term sustainability goals. Meanwhile, tax revenues from the oil and gas sector are expected to decrease from AZN 5.0 billion in 2024 to AZN 3.5 billion in 2029, representing a decline of 30% over the period. This trend mirrors both anticipated moderation in hydrocarbon production and the strategic emphasis on expanding non-oil tax bases.

On the expenditure side, state budget spending is projected to rise from AZN 39.7 billion in 2024 to AZN 43.2 billion by 2029, maintaining a relatively moderate growth rate. This pattern suggests the government's intent to balance fiscal prudence with continued investment in infrastructure, defense, social protection, and human capital development. Nonetheless, the persistence of expenditure growth against a backdrop of declining oil-related revenues may generate fiscal pressures, reinforcing the need for enhanced expenditure efficiency, public sector reform, and results-based budgeting.

The 2025–2029 MTBF encapsulates Azerbaijan's evolving fiscal paradigm—one defined by the gradual shift from oil dependence to a more sustainable, diversified revenue framework. While projected trends in SOFAZ transfers and oil tax receipts point to declining hydrocarbon dependency, they also expose vulnerabilities to potential oil price shocks and global market fluctuations. The medium-term fiscal outlook therefore underscores the necessity of accelerating non-oil revenue mobilization, particularly through tax diversification, digitalization of fiscal administration, and support for private sector development.

Despite being the largest budget in the 33 years since Azerbaijan regained independence, the country's 2025 state budget reveals certain disparities when evaluated on a per capita basis relative to its regional counterparts, Georgia and Armenia. While Azerbaijan maintains the largest aggregate fiscal volume in the South Caucasus, the comparison highlights underlying structural and demographic differences that shape fiscal capacity and spending efficiency.

For 2025, per capita budget revenues in Azerbaijan are projected at 3,753.7 AZN, equivalent to approximately 2,208 USD at the prevailing exchange rate. This marks a significant increase in nominal terms; however, when adjusted for population size, Azerbaijan's fiscal allocations per person remain lower than those of Georgia and Armenia in several key categories.

A comparative overview of the primary budget parameters of Azerbaijan, Georgia, and Armenia for 2025 is presented in Table 31.

Table 31. Comparison of Key Budget Parameters for 2025: Azerbaijan, Georgia, and Armenia

Indicator	Azerbaijan	Georgia	Armenia
Budget Expenditures (billion USD)	24.4	9.9	7.4
Per Capita Budget Expenditures (USD)	2,392	2,632	2,466
Defense Expenditures (billion USD)	4.6	1.73	1.7
Per Capita Defense Expenditures (USD)	451	460	566
Social Protection and Healthcare (billion USD)	4.0	3.14	2.7
Per Capita Social Protection and Healthcare (USD)	392	835	900
Education Expenditures (billion USD)	2.9	1.1	0.78
Per Capita Education Expenditures (USD)	284	292	260

Source: Ministries of Finance of Azerbaijan[87] , Georgia[88] , and Armenia[89]

The data reveal notable contrasts in the allocation of public resources across the South Caucasus countries. In 2025, Georgia is projected to allocate the highest per capita budget expenditures,

[87] https://www.maliyye.gov.az/static/111/budce-layihelerinin-teqdimati-ve-parametrleri
[88] https://civil.ge/archives/643485
[89] https://minfin.am/en/page/medium-term_expenditure_framewor/

surpassing both Armenia and Azerbaijan. Georgia also leads in per capita education spending, reflecting its continued investment in human capital and educational reform initiatives. Conversely, Armenia allocates the highest per capita expenditures on defense, as well as on social protection and healthcare, signaling a fiscal focus on national security and welfare protection. This pattern likely reflects both geopolitical considerations and the country's efforts to strengthen social safety nets amid external and domestic pressures.

Azerbaijan, while maintaining the region's largest total fiscal envelope, ranks lower than its neighbors in all examined per capita expenditure categories. This disparity can be attributed to its relatively larger population base and the concentration of resources in capital-intensive sectors such as infrastructure and defense modernization, which yield less immediate per capita impact. Nonetheless, Azerbaijan remains the regional leader in absolute fiscal capacity, with 2025 state budget revenues projected at 38.3 billion AZN (approximately 22.5 billion USD), representing an increase of 1.93 billion AZN (5.3%) compared to 2024. These figures indicate robust fiscal expansion, supported primarily by oil and gas revenues and SOFAZ transfers.

In comparative terms, Azerbaijan's total budget revenues are forecasted to be nearly 2.5 times greater than Georgia's and over three times greater than Armenia's, underscoring its dominant fiscal position in the South Caucasus. However, the lower per capita figures highlight the need for continued diversification of revenue sources, improved efficiency in public spending, and a stronger focus on human capital development to enhance the qualitative dimensions of fiscal policy performance.

The functional composition of Azerbaijan's projected 2025 state budget illustrates the government's fiscal priorities and strategic focus areas, reflecting the ongoing balance between economic development, national security, and social investment. Analyzing expenditure allocations by function provides critical insight into the structural orientation of fiscal policy—specifically, how public resources are distributed across key sectors that influence short-term stability and long-term growth. The distribution pattern of the 2025 budget underscores a strong emphasis on defense and economic activity, while allocations to education, healthcare, and environmental protection remain comparatively limited.

Table 32. Functional Composition of Expenditures of the Projected 2025 Budget

Category	Expenditure (AZN billion)	Share of Total (%)
Economic activity	8.4	20.4

Category	Expenditure (AZN billion)	Share of Total (%)
Defense and security	8.4	20.3
State governance	5.2	12.7
Education	4.9	12.0
Social protection	4.8	11.6
Grants and other payments	4.9	11.8
Social payments	3.36	8.1
Debt service	2.4	5.8
Health	1.99	4.8
Environment and ecology	0.41	1.0
Total	41.3	100.0

Source: Author's compilation based on the Ministry of Finance of Azerbaijan (2025).

The 2025 budget allocation structure reveals a pronounced focus on defense, security, and economic development, which together account for over 40% of total expenditures. This composition highlights Azerbaijan's continued prioritization of national security and infrastructure-led economic growth within its fiscal policy framework. With defense and security spending constituting 20.3% of total expenditures, Azerbaijan remains one of the region's leading defense spenders, reflecting both strategic geopolitical considerations and post-conflict reconstruction needs.

According to fiscal projections, military expenditures are expected to exceed 7% of GDP by 2026, a level significantly above the global average[90].

Unlike Azerbaijan, the Armenian government plans to reduce defense spending by more than 15 percent in 2026. The draft state budget approved by the government envisages allocating 563 billion drams ($1.47 billion) to the country's Armed Forces. This is a significant reduction compared to this year's 665 billion drams. Next year, total state spending in Armenia is expected to increase by 5 percent in 2026 to 3.6 trillion drams ($9.5 billion).

In parallel, economic activity expenditures (20.4%) underscore the government's commitment to sustaining growth momentum through public investment in infrastructure, industry, and regional development initiatives. This orientation supports the state's long-term economic diversification

[90] https://www.iiss.org/online-analysis/military-balance/2025/07/armenia-broadens-procurement-horizons-in-drive-to-modernise-armed-forces/

agenda but also signals a continued reliance on state-driven economic intervention, which may limit the expansion of private sector-led growth in the medium term.

Conversely, allocations toward human capital and social sectors remain comparatively modest. Spending on education (12.0%), health (4.8%), and environmental protection (1.0%) collectively represent less than 18% of the total budget, indicating an ongoing imbalance between security-oriented and human development-oriented fiscal priorities. While such an expenditure profile may enhance short-term security and infrastructure resilience, it risks constraining future productivity gains and social inclusiveness if investments in education, healthcare, and environmental sustainability remain subdued.

The limited share of debt service (5.8%) reflects a relatively manageable public debt position, suggesting that Azerbaijan retains fiscal space for strategic reallocation should macroeconomic conditions allow. However, given rising regional uncertainties and potential oil market volatility, ensuring that future budgets gradually shift toward human capital formation, innovation, and green development will be critical to sustaining long-term competitiveness and achieving the country's diversification goals.

In sum, the allocation profile emphasizes defense and economic development, together consuming over 40% of total spending. The combined outlays for defense and security (20.3%) and economic activity (20.4%) position Azerbaijan among the highest defense spenders in the region, with military expenditures projected to exceed 7% of GDP in 2026. Meanwhile, spending on education, health, and environmental protection—key enablers of long-term competitiveness—collectively account for less than 18% of the budget, revealing a continued imbalance between security-driven and human capital-driven priorities.

Azerbaijan's elevated defense spending trajectory contrasts sharply with Armenia's shift toward fiscal consolidation and social reinvestment. Table 33 provides a comparative overview.

Table 33. Comparative Defense Expenditures: Armenia and Azerbaijan (2021–2024).

Country	Year	Defense Expenditure (USD)	Change YoY (%)	Share in GDP (%)
Armenia	2021	619.4 million	–2.3	4.5
	2022	795.2 million	+28.4	4.1
	2023	1.33 billion	+67.2	5.5
	2024	1.42 billion	+6.6	6.0
Azerbaijan	2021	2.70 billion	+20.8	4.9
	2022	2.99 billion	+10.7	3.8

Country	Year	Defense Expenditure (USD)	Change YoY (%)	Share in GDP (%)
	2023	3.56 billion	+19.1	4.6
	2024	3.77 billion	+5.9	5.0

Source: Compiled from EVN Report (2025), IISS Military Balance (2025), and national budget documents.

While Armenia's 2026 draft budget anticipates a 15% reduction in defense expenditure—reflecting efforts to redirect resources toward education and infrastructure—Azerbaijan's defense budget continues to grow in absolute terms and as a share of GDP. This divergence reflects different strategic postures: Azerbaijan's focus on deterrence and regional projection contrasts with Armenia's retrenchment and internal stabilization priorities. However, sustained military expansion may crowd out social investment and limit fiscal flexibility in Azerbaijan if not balanced by peacebuilding and economic modernization.

A key indicator of Azerbaijan's fiscal sustainability is the ratio of non-oil revenues to current expenditures, which measures the government's capacity to finance recurring spending from non-resource income. Table 34 provide a comprehensive view of Azerbaijan's fiscal adjustment process and the gradual strengthening of non-oil revenue capacity between 2023 and 2029. The ratio of non-oil and gas revenues to current expenditures, which declined from 84.3 percent in 2023 to an estimated 80.7 percent in 2024, is projected to rise steadily thereafter, surpassing the 100 percent threshold by 2029. This trajectory signals a potential structural shift toward greater fiscal sustainability, as non-hydrocarbon revenues begin to fully finance recurrent government expenditures.

The share of current expenditures in total budget spending also shows a moderate upward trend—from 55.6 percent in 2023 to 60.1 percent in 2024—indicating a short-term expansion of public consumption relative to capital outlays. This increase may reflect temporary fiscal pressures linked to social spending, inflation compensation, and post-pandemic recovery measures.

However, the growth rate of non-oil revenues is expected to slow from 14.8 percent in 2024 to 5.4 percent in 2029, while current expenditure growth fluctuates sharply, peaking at 16 percent in 2025 before stabilizing. This divergence suggests a tightening fiscal policy framework, as the government seeks to contain spending while gradually increasing revenue collection efficiency.

Overall, the data indicate that Azerbaijan is moving toward a more balanced and resilient fiscal structure, with non-oil revenues projected to cover all current expenditures by the end of the decade. Sustaining this trend will require continued reforms to broaden the tax base, improve non-oil export revenues, and enhance fiscal discipline to mitigate long-term risks associated with oil price volatility and external shocks.

Table 34. Non-Oil Fiscal Sustainability and Current Expenditure Pressures

Year	Non-Oil Revenue to Current Expenditure (%)	Growth of Non-Oil Revenues (%)	Growth of Current Expenditure (%)
2023	84.3	12.4	3.3
2024	80.7	14.8	5.3
2025	81.0	2.3	16.0
2026	88.1	10.6	1.7
2027	95.2	7.4	–0.5
2028	98.7	6.0	2.3
2029	101.5	5.4	2.5

Source: Compiled from the Ministry of Finance and State Statistical Committee (2025).

While the medium-term trajectory is positive, the sharp 16% rise in current expenditures in 2025 suggests mounting fiscal pressure driven by defense spending, social transfers, and inflation adjustments. The subsequent moderation in expenditure growth reflects fiscal consolidation efforts but also limited room for real wage or welfare increases.

Non-oil revenue growth is expected to slow from 14.8% in 2024 to 5.4% in 2029, indicating diminishing momentum in tax base expansion. This slowdown, coupled with heavy recurrent spending, could constrain investment in innovation, infrastructure, and environmental protection—the very areas needed to diversify the economy beyond hydrocarbons.

Azerbaijan’s 2025 state budget and medium-term fiscal framework reflect the government’s effort to balance short-term security imperatives with long-term development and sustainability goals. The functional composition of expenditures demonstrates a continued emphasis on defense, security, and economic activity, which together absorb more than 40% of total public spending. While such allocations underscore the importance of safeguarding national sovereignty and promoting infrastructure-led growth, they also reveal structural imbalances in fiscal priorities. Investments in education (12.0%), healthcare (4.8%), and environmental protection

(1.0%)—key drivers of human capital development and long-term competitiveness—collectively represent less than one-fifth of the total budget. This disproportionate distribution of resources suggests that Azerbaijan's fiscal policy remains primarily security- and state-driven, with limited reallocation toward sectors that foster inclusive and sustainable growth.

Azerbaijan's fiscal trajectory, though supported by substantial hydrocarbon revenues and ambitious public investment programs, remains constrained by deep-rooted governance and accountability challenges. The author's research reveals[91] that persistent weaknesses in budget management, transparency, and parliamentary oversight have created systemic fiscal risks that threaten the credibility and efficiency of public financial management. These deficiencies not only undermine the principles of fiscal discipline and public trust but also constrain the effectiveness of the country's broader economic diversification agenda.

The analysis identifies several key vulnerabilities in the management and execution of Azerbaijan's state budget:

- Risk 1: Non-competitive allocation of budgetary funds. Budget resources are often transferred directly to implementing agencies or contractors without open or transparent tendering, increasing the risk of favoritism, corruption, and inefficient spending.
- Risk 2: Disproportionate year-end spending. A significant portion of budget expenditures is concentrated toward the end of the fiscal year, suggesting poor planning and weak expenditure control mechanisms, which may compromise the quality of public investment outcomes.
- Risk 3: Executive overreach in budget execution. The government frequently makes fundamental amendments to the approved budget during execution—often without parliamentary consent—which undermines legislative oversight and distorts fiscal accountability.

[91] Ibadoghlu, Gubad (2021), Corruption Risks in the State Budget of Azerbaijan and Their Management (June 21, 2021). Available at SSRN: https://ssrn.com/abstract=3871136 or http://dx.doi.org/10.2139/ssrn.3871136

- Risk 4: Rising revenue arrears. The growing balances and unpaid debts on revenue obligations indicate weaknesses in tax administration and financial discipline among state enterprises and budget-funded entities.
- Risk 5: Lack of transparency in treasury account management. The single treasury account, which consolidates all government cash resources, operates with limited public disclosure and insufficient external auditing, reducing transparency in cash flow and debt management.
- Risk 6: Inclusion of unallocated contingency funds. The state budget increasingly includes large, unspecified "one-time expenditure" allocations, often amounting to billions of manats, that are not clearly earmarked for specific programs. This practice enables discretionary spending and reduces fiscal predictability.

Collectively, these risks reveal a governance gap in Azerbaijan's public finance system, where executive dominance and opaque fiscal practices continue to undermine budget credibility, parliamentary oversight, and citizen trust.

IX. Diminished Revenues and Rising Costs in the Post-Oil Era

Over the past three decades, Azerbaijan has built its economic model around hydrocarbon wealth, positioning itself as a critical energy supplier linking the Caspian region with Western markets. However, this resource-dependent growth paradigm faces increasing strain as global energy transitions, fluctuating oil prices, and structural weaknesses converge to erode fiscal stability. Despite significant investments in gas infrastructure and diversification initiatives, the country's economic resilience remains heavily tied to fossil fuel exports—a dependency that now poses escalating risks to public finance, political stability, and long-term growth.

Azerbaijan's oil and gas sector continues to dominate export earnings and budget revenues, but the country's production profile has weakened substantially. While commodity natural gas production expanded from 16.6 billion cubic meters in 2010 to 38.6 billion cubic meters in 2024, commodity crude oil production declined by 22 million tons—from 50.8 million tons in 2010 to just 28.9 million tons in 2024, the lowest recorded figure in over a decade. This contraction is primarily attributed to the depletion of mature oil fields and declining output from projects operated with foreign partners.

Although Azerbaijan's commodity natural gas output increased by 22 billion cubic meters between 2010 and 2024, fossil fuel export revenues have fallen sharply in real terms due to global price volatility, increased competition from alternative suppliers, and tightening environmental policies in key markets[92]. This trend exposes a fundamental vulnerability of the Azerbaijani economy—its inability to decouple fiscal performance from the cyclical dynamics of the global energy market.

Forecasts by S&P Global Commodity Insights[93] suggest that Azerbaijan's gas production may peak around 2031, after which both output and export revenues are likely to decline. However, realizing this potential peak faces logistical and geopolitical challenges, including limited

[92] Ibadoghlu, G (2024), Current State of Azerbaijan's Gas & Oil Cooperation with Europe: Opportunities and Challenges. Available at SSRN: https://ssrn.com/abstract=4931082 or http://dx.doi.org/10.2139/ssrn.4931082

[93] S&P Global Commodity Insights by Charles Ross (2023), Will Azerbaijan meet Europe's 2027 gas demand deadline? https://www.spglobal.com/commodityinsights/en/ci/research-analysis/will-azerbaijan-meet-europes-2027-gas-demand-deadline.html

transport capacity, high transit tariffs, and political pressure from the European Union to reduce gas dependency[94].

Further downward pressure on revenues may arise from a potential surge in global oil supply—particularly if a future U.S. administration under former President Trump reverses production restrictions—potentially depressing world oil prices and further straining Azerbaijan's fiscal position[95].

In contrast to declining resource revenues, Azerbaijan's public investment commitments are rapidly expanding. As shown in Table 35, the government's long-term programs represent cumulative investment requirements exceeding USD 150 billion, covering social, urban, infrastructural, and environmental objectives.

Table 35. Major Strategic Development and Infrastructure Programs in Azerbaijan

Program / Initiative	Implementation Period	Estimated Cost	Currency	Approximate Equivalent (USD billion)	Key Focus Areas
Social-Economic Development Strategy (2022–2026)	2022–2026	54.8	AZN	~32.2	Economic diversification, regional development, infrastructure modernization
First State Program on the Great Return (2022–2026)	2022–2026	30.5	AZN	~17.9	Reconstruction and resettlement in liberated territories
Baku Master Plan	up to 2040	93.57	AZN	~54.9	Urban infrastructure, housing, sustainable transport
Gas Pipeline Expansion toward Europe	2025–2030 (est.)	6.3–9.3	USD	6.3–9.3	Energy export infrastructure and EU integration
Decarbonization and Resilience (World Bank estimate)	to 2060	44.0	USD	44.0	Green transition, renewable energy, climate resilience

94 European Parliament (2024), MEPs denounce violations of human rights and international law by Azerbaijan, https://www.europarl.europa.eu/news/en/press-room/20241017IPR24740/meps-denounce-violations-of-human-rights-and-international-law-by-azerbaijan

95 Ibadoghlu, G (2024), U.S. Presidential Elections: Which Party's Leadership is More Favorable for Azerbaijan? https://ssrn.com/abstract=4908188 or http://dx.doi.org/10.2139/ssrn.4908188

Source: Compiled by the author based on official government data and World Bank (2023).

These programs collectively illustrate Azerbaijan's developmental paradox—a growing commitment to capital-intensive infrastructure and energy transition projects financed largely from a shrinking revenue base. The government's pledge to reduce greenhouse gas emissions by 40% by 2035 further compounds fiscal strain, with the World Bank estimating decarbonization costs at USD 44 billion by 2060, or roughly USD 1.35 billion per year[96]. Sustaining these obligations without a robust non-oil revenue framework risks deepening fiscal fragility. Azerbaijan is increasingly recognized as one of the most vulnerable oil-dependent economies in the global energy transition. The Carbon Tracker report[97] categorizes the country among "Tier 5" petrostates—nations expected to lose more than 40% of oil and gas revenues within the next decade. The report estimates that Azerbaijan could experience a 68% revenue shortfall, placing it among the world's most at-risk hydrocarbon exporters alongside Angola, Oman, and Bahrain. Compounding these external pressures are domestic structural constraints. The World Bank's Country Economic Memorandum (2022)[98] and Long-Term Growth Model simulations forecast average annual GDP growth of only 0.5% between 2024 and 2050, with per capita income increasing by just 11% over three decades. These projections suggest that, without structural reforms, Azerbaijan's economy may stagnate long before its hydrocarbon resources are depleted, undermining fiscal stability and social welfare systems.

Azerbaijan's political stability remains tightly bound to hydrocarbon revenues, which underpin both state patronage networks and social spending. Empirical evidence indicates a negative correlation between oil dependence and democratic development[99]. As revenues decline, fiscal constraints may lead to public-sector job losses, delays in salary payments, and social unrest—particularly among teachers, healthcare workers, and other civil servants reliant on state funding.

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[96] World Bank (2023), Country Climate and Development Report: Azerbaijan, November 2023, https://documents1.worldbank.org/curated/en/099112723161524095/pdf/P17904806938f5083093a707fa0352e87a5.pdf

[97] Mike Coffin and Andrew Grant, (2021), Carbon Tracker report on PetroStates of Decline: oil and gas producers face growing fiscal risks as the energy transition unfolds, https://carbontracker.org/reports/petrostates-energy-transition-report/

[98] World Bank (2022), Azerbaijan Country Economic Memorandum, September 2022, https://documents1.worldbank.org/curated/en/099100009222236784/pdf/P17532606988e2056084e603c9c48ddc618 .pdf

[99] Ibadoghlu, G & Sadigov R (2023), *The economics of petro-authoritarianism: Post-soviet transitions and democratization, Resources Policy,* Volume 85, Part B, August 2023, 103752,

The prospect of currency devaluation further exacerbates economic vulnerability. Dwindling oil exports weaken the balance of payments, eroding the real effective exchange rate and triggering inflationary pressures[100]. Devaluation could also accelerate capital flight, worsen inequality, and fuel political discontent, especially amid growing public awareness of elite wealth transfers abroad. According to the Atlas Sentry Project[101], members of the Aliyev family hold assets exceeding USD 13 billion across 148 companies worldwide, heightening concerns about capital outflows and governance opacity.

While intensified international anti–money laundering measures may expose these financial networks, any subsequent political transition would not automatically yield democratization. Historical evidence suggests that only 23% of authoritarian regime collapses between 1972 and 2003 resulted in democratic governance[102]. In Azerbaijan's case, economic crises rather than external democratization pressures are more likely to catalyze political change—a pattern consistent with rentier-state theory.

Azerbaijan's economic model stands at a critical inflection point. Diminishing hydrocarbon revenues, rising public expenditure commitments, and weak institutional capacity collectively threaten fiscal sustainability. Unless structural reforms accelerate, the country risks prolonged stagnation, growing fiscal deficits, and increasing political fragility. Human capital and green sectors remain underfunded, limiting the potential for inclusive and innovation-based growth. Long-term fiscal stability will depend on curbing defense expenditure growth, diversifying revenue sources, and aligning budget priorities with post-oil economic transformation[103].

As former Saudi oil minister Sheikh Zaki Yamani observed[104], "The Stone Age did not end because we ran out of stones, and the oil age will end, but not because we ran out of oil." The urgency for Azerbaijan lies not in resource depletion but in preparing for a post-oil future that demands adaptability, transparency, and institutional resilience.

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[100] Ibadoghlu, G, (2024), Devaluation of Manat: Expectations and Realities (July 15, 2024). Available at SSRN: https://ssrn.com/abstract=4895347

[101] Atlas Sentry (2024), Azerbaijan: Aliyev Empire - Atlas Project, Two sisters, 148 companies, a $13 billion fortune, https://atlas.thesentry.org/azerbaijan-aliyev-empire/

[102] Hadenius, A., & Teorell, J. (2006). Authoritarian Regimes: Stability, Change, and Pathways to Democracy, 1972–2003 (Version 1). University of Notre Dame. https://doi.org/10.7274/26126128.v1

[103] Ibadoghlu, Gubad, The Mechanisms And Tools Of Authoritarian Control In Resource-Rich States: A Case Study Of Azerbaijan (April 16, 2025). Available at SSRN: https://ssrn.com/abstract=5219272 or http://dx.doi.org/10.2139/ssrn.5219272

[104] Susan Ratcliffe (2016), Oxford Essential Quotations (4 ed.) ttps://www.oxfordreference.com/display/10.1093/acref/9780191826719.001.0001/q-oro-ed4-00017466

Challenges, Risks and Conclusion

9.1. Key Challenges and Risks

Azerbaijan's economy stands at a pivotal juncture defined by three intersecting pressures: declining hydrocarbon revenues, limited progress in diversification, and rising geopolitical and institutional risks. Although the macroeconomic indicators remain stable in the short term, this stability is underpinned by transitory factors—chiefly high oil prices, accumulated reserves in the SOFAZ, and strict fiscal controls—rather than durable structural reform.

1. **Persistent Hydrocarbon Dependence**
   Despite two decades of policy commitments to diversification, oil and gas continue to account for nearly half of state revenues and more than four-fifths of export earnings. The gradual decline in crude-oil output and the volatility of global prices expose fiscal policy to recurrent external shocks.
2. **Weak Non-Oil Sector Competitiveness**
   Structural bottlenecks—limited SME financing, constrained innovation capacity, and high logistical costs—restrict the growth of manufacturing, ICT, and agribusiness sectors. Trade barriers and closed land borders further limit regional integration and tourism potential.
3. **Fiscal and Institutional Vulnerabilities**
   The state budget remains dependent on SOFAZ transfers, which finance a large share of public expenditure. This dependence weakens fiscal autonomy and limits the government's counter-cyclical flexibility. At the same time, gaps in governance, low transparency, and selective regulation continue to discourage foreign and domestic investment.
4. **Geopolitical and Security Expenditures**
   Elevated defense and reconstruction spending—now exceeding 7 % of GDP—reflects regional insecurity but simultaneously crowds out long-term investment in human capital, education, and innovation. Without a durable peace settlement and regional stability, these costs will constrain fiscal space.
5. **Demographic and Social Pressures**
   Population growth and urban concentration in Baku–Absheron strain infrastructure, labor

markets, and social services. Meanwhile, persistent income inequality and inflationary pressures risk undermining social cohesion.

6. **Environmental and Climate Risks**
   Azerbaijan faces growing exposure to climate change, desertification, and water scarcity. The absence of large-scale investment in renewable energy and adaptive infrastructure heightens ecological vulnerability and threatens agricultural sustainability.
7. **Grand corruption and monopolization of key economic sectors.**
   The concentration of economic power among politically connected elites continues to distort market competition and discourage private entrepreneurship. Grand corruption in procurement, state budget management, public investment, and natural resource governance diverts state resources from productive sectors and deters both domestic and foreign investment. The persistence of monopolistic practices limits access to markets for small and medium-sized enterprises (SMEs), reducing innovation and economic dynamism.
8. **Weak rule of law and politicization of the judiciary.**
   The absence of an independent and impartial court system undermines property rights, contract enforcement, and investor protection. Judicial decisions are often influenced by political and administrative authorities, resulting in selective application of laws and limited accountability for high-level corruption. This legal uncertainty discourages private investment, especially in non-oil industries that require stable regulatory conditions and fair dispute resolution mechanisms.
9. **Suppression of independent civil society and free media.**
   The restricted operating environment for independent civil society organizations, investigative journalists, and think tanks weakens public oversight of government activities and reduces transparency in economic governance. The crackdown on free media and civic activism limits the availability of reliable information and public debate on fiscal policy, corruption, and environmental challenges. Such restrictions not only erode public trust but also constrain the development of an informed and participatory policymaking process—essential elements for long-term social and economic stability.

9.2. Conclusion

As seen, the problem of Azerbaijan's economy in short and mid-term is not only the decline in production oil sector, the decrease in oil and gas prices, but also difficulties in non-oil economy specially in the ICT, tourism and agricultural sectors. As a result of all these factors, both the export of oil and gas products and non-oil and gas goods and services are decreasing compared to previous years. This necessitates a reassessment of the country's economic diversification policy.

Diversification, which has long been crucial for Azerbaijan's economy, is even more relevant in the current situation. However, without a competitive environment, a diversification policy implemented through the state's administrative and financial resources cannot ensure sustainable development in the medium and long term. Such policies, while having short-term effects, primarily serve to strengthen the dominance of more monopolistic companies. On September 26, 2024, during a consultation dedicated to economic issues, President Aliyev stated[105], “Our main goal is to further diversify our economy and improve the model of sustainable development.” Although this reiterates previously stated goals, it has not been realized in practice. Specifically, many of the concrete targets set in the "National Economy and Strategic Roadmaps for Main Sectors of the Economy", approved by presidential decrees, as well as in the State Programs adopted for the agricultural sector, have not been met.

Naturally, as a result, the outcomes in the direction of diversifying the national economy have been unsatisfactory. Unfortunately, consultations dedicated to economic issues do not discuss the reasons for the failure to implement the tasks and achieve the targets set in the State Programs and Strategic Roadmaps. In general, there are no platforms for such discussions. Consequently, the implementation level of the approved Strategic Roadmaps, Social and economic development of regions and State Programs in agriculture is low. The regrettable results obtained from the preliminary evaluation of the target indicators defined in the Strategic Roadmap for the National Economy of the Republic of Azerbaijan up to 2025 confirm this.[106]

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[105] Speech by President of the Republic of Azerbaijan Ilham Aliyev at the meeting, September 26, 2024, https://president.az/az/articles/view/66934

[106] Ibadoghlu, Gubad and Bayramov, Ibad, Evaluation of the target indicators of the Strategic Roadmap: the effects of "twin deficits" and "spending of unearned money" (June 20, 2024). Available at SSRN: https://ssrn.com/abstract=4871213 or http://dx.doi.org/10.2139/ssrn.4871213

Azerbaijan’s economic trajectory reflects a paradox of stability amid vulnerability. While macro-fiscal balances remain sound and public debt levels are among the lowest in the region, the underlying growth model remains narrowly based and structurally fragile. The country’s long-term resilience will depend on its capacity to transform hydrocarbon wealth into human capital, innovation, and sustainable industries.

Absent deep institutional and structural reforms, Azerbaijan risks entering a prolonged period of stagnation—characterized by modest growth, declining productivity, and mounting fiscal rigidity. However, with decisive policy action, transparent governance, and renewed regional cooperation, Azerbaijan can leverage its financial buffers and strategic location to achieve a more diversified, inclusive, and future-ready economy.

The success of this policy depends on the state's completion of the transition to a market economy, supporting freedoms and competition, ensuring the independence of the judicial and legal system, reducing the tax burden and corruption in business, and legalizing the shadow economy.

References

Asian Development Bank (ADB). (2023). “Country partnership strategy: Azerbaijan 2024–2028”. Manila, Philippines: Asian Development Bank.

Atlas Sentry. (2024). “Azerbaijan: Aliyev empire – Atlas project: Two sisters, 148 companies, a $13 billion fortune.” https://atlas.thesentry.org/azerbaijan-aliyev-empire/

Auty, R. M. (2001). “Resource abundance and economic development.” Oxford, UK: Oxford University Press.

Coffin, M., & Grant, A. (2021). “Petrostates of decline: Oil and gas producers face growing fiscal risks as the energy transition unfolds.” Carbon Tracker Initiative. https://carbontracker.org/reports/petrostates-energy-transition-report/

Das, U. S., Cerovic, S., & Mahvash, S. (2022). “Azerbaijan: Selected issues on fiscal sustainability and energy dependence.” Washington, DC: International Monetary Fund.

EVN Report. (2025). “Armenia’s 2024–2026 defense and security budget: Trends and strategic implications.” Yerevan, Armenia: EVN Report.

European Bank for Reconstruction and Development (EBRD). (2024). “Regional economic prospects: South Caucasus outlook.” London, UK: European Bank for Reconstruction and Development.

European Parliament. (2024, October 17). “MEPs denounce violations of human rights and international law by Azerbaijan.” https://www.europarl.europa.eu/news/en/press-room/20241017IPR24740/meps-denounce-violations-of-human-rights-and-international-law-by-azerbaijan

Fitch Solutions. (2025). “Azerbaijan country risk report: Macroeconomic outlook 2025–2027.” London, UK: Fitch Solutions.

Gelb, A. (1988). “Oil windfalls: Blessing or curse?” New York, NY: Oxford University Press.

Hadenius, A., & Teorell, J. (2006). “Authoritarian regimes: Stability, change, and pathways to democracy, 1972–2003” (Version 1). University of Notre Dame. https://doi.org/10.7274/26126128.v1

ING Group. (2025). “CIS energy exporters and oil price sensitivity: Azerbaijan and Kazakhstan outlook 2025–2026.” Amsterdam, Netherlands: ING Research.

Iacovone, L., et al. (2025). “Climbing the income ladder: Convergence prospects in Eastern Europe, the South Caucasus, and Central Asia.” Washington, DC: World Bank.

Ibadoghlu, Gubad (2021), Corruption Risks in the State Budget of Azerbaijan and Their Management (June 21, 2021). Available at SSRN: https://ssrn.com/abstract=3871136 or http://dx.doi.org/10.2139/ssrn.3871136

Ibadoghlu, G. (2024). “Current state of Azerbaijan’s gas & oil cooperation with Europe: Opportunities and challenges.” SSRN. https://doi.org/10.2139/ssrn.4931082

Ibadoghlu, G. (2024). “Devaluation of manat: Expectations and realities” (July 15, 2024). SSRN. https://ssrn.com/abstract=4895347

Ibadoghlu, G (2024)**,** U.S. Presidential Elections: Which Party's Leadership is More Favorable for Azerbaijan? https://ssrn.com/abstract=4908188 or http://dx.doi.org/10.2139/ssrn.4908188

Ibadoghlu, G. (2025). “The mechanisms and tools of authoritarian control in resource-rich states: A case study of Azerbaijan” (April 16, 2025). SSRN. https://doi.org/10.2139/ssrn.5219272

Ibadoghlu, G., & Bayramov, I. (2024). “Evaluation of the target indicators of the strategic roadmap: The effects of “twin deficits” and “spending of unearned money.” SSRN. https://doi.org/10.2139/ssrn.4871213

Ibadoghlu, G., & Niftiyev, I. (2022a). “A retrospective analysis of the Azerbaijani economy during 30 years of independence”. Post-Soviet Issues, 9(4), 377–396.

Ibadoghlu, G., & Niftiyev, I. (2022b). “An assessment of the thirty-year post-Soviet transition quality in Azerbaijan from an economic and social liberalization perspective”. Journal of Life Economics, 9(3), 265–282.

Ibadoghlu, G., & Sadigov, R. (2023). “The economics of petro-authoritarianism: Post-Soviet transitions and democratization”. Resources Policy, 85 (Part B), 103752. https://doi.org/10.1016/j.resourpol.2023.103752

Niftiyev, I.; Ibadoghlu (2023), G. Longitudinal Principal Component and Cluster Analysis of Azerbaijan’s Agricultural Productivity in Crop Commodities. *Commodities* 2023, *2*, 147-167. https://doi.org/10.3390/commodities2020009

International Institute for Strategic Studies (IISS). (2025). “The military balance 2025.” London, UK: International Institute for Strategic Studies.

International Monetary Fund (IMF). (2024). “Republic of Azerbaijan: 2024 Article IV consultation—Staff report.” Washington, DC: International Monetary Fund.

International Monetary Fund (IMF). (2025). “World economic outlook: Global economy in flux, prospects remain dim.* Washington, DC: International Monetary Fund.

Ministry of Economy of the Republic of Azerbaijan. (2025). “Macroeconomic forecasts 2025–2028.” Baku, Azerbaijan: Ministry of Economy.

Ministry of Finance of the Republic of Azerbaijan. (2025). “Draft state budget 2025 and medium-term expenditure framework 2025–2028.” Baku, Azerbaijan: Ministry of Finance.

Rookwood, D. (2021). “Petro-authoritarian consolidation and fiscal vulnerability: The case of Azerbaijan”. Europe-Asia Studies, 73(9), 1654–1679.

Ross, C. (2023).”Will Azerbaijan meet Europe’s 2027 gas demand deadline?” S&P Global Commodity Insights. https://www.spglobal.com/commodityinsights/en/ci/research-analysis/will-azerbaijan-meet-europes-2027-gas-demand-deadline.html

Ross, M. L. (2012). “The oil curse: How petroleum wealth shapes the development of nations.” Princeton, NJ: Princeton University Press.

Sachs, J. D., & Warner, A. M. (2001). “The curse of natural resources.” European Economic Review, 4*(4–6), 827–838.

State Oil Fund of the Republic of Azerbaijan (SOFAZ). (2024). Annual report 2024. Baku, Azerbaijan: SOFAZ.

State Statistical Committee of the Republic of Azerbaijan (SSCA). (2024). “Food balances of Azerbaijan 2020–2024”. Baku, Azerbaijan: SSCA.

State Statistical Committee of the Republic of Azerbaijan (SSCA). (2025a). “Statistical yearbook: Digital development of Azerbaijan 2025.” Baku, Azerbaijan: SSCA.

State Statistical Committee of the Republic of Azerbaijan (SSCA). (2025b). “Industry, transport, tourism and services indicators of Azerbaijan, 2020–2025.” Baku, Azerbaijan: SSCA.

State Statistical Committee of the Republic of Azerbaijan (SSCA). (2025c). “Foreign trade of the Republic of Azerbaijan 2024.* Baku, Azerbaijan: SSCA.

Susan Ratcliffe (2016)**,** Oxford Essential Quotations (4 ed.) ttps://www.oxfordreference.com/display/10.1093/acref/9780191826719.001.0001/q-oro-ed4-00017466

United Nations World Tourism Organization (UNWTO). (2023). “International recommendations for tourism statistics 2008 (Revision and implementation guidance).” Madrid, Spain: UNWTO.

World Bank. (2022, September). “Azerbaijan country economic memorandum.” https://documents1.worldbank.org/curated/en/099100009222236784/pdf/P17532606988e2056084e603c9c48ddc618.pdf

World Bank. (2023, November). “Country climate and development report: Azerbaijan.” https://documents1.worldbank.org/curated/en/099112723161524095/pdf/P17904806938f5083093a707fa0352e87a5.pdf

World Bank. (2024). “Azerbaijan: Economic update, spring 2024.” Washington, DC: World Bank.

World Bank. (2025b). “South Caucasus economic outlook: Fiscal pressures, security risks, and diversification constraints.” Washington, DC: World Bank.

World Intellectual Property Organization (WIPO). (2025). “Global innovation index 2025: Who will finance innovation?” Geneva, Switzerland: World Intellectual Property Organization.

World Trade Organization (WTO) & United Nations World Tourism Organization (UNWTO). (2024). “Tourism expenditure and cross-border mobility in post-pandemic economies: South Caucasus focus chapter.” Geneva/Madrid: WTO and UNWTO Joint Note.