A GROWTH DIAGNOSTICS OF AZERBAIJAN: TOWARDS A MORE DIVERSIFIED AND SUSTAINABLE ECONOMY

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A Growth Diagnostics of Azerbaijan: towards a more diversified and sustainable economy

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SUMMARY

Azerbaijan has benefited from oil export, which has been a fundamental contributor to the country’s economic growth in recent decades. However, reliance on oil exports has left the country vulnerable to fluctuations in global commodity prices and created challenges for the sustainability of growth. The Government aims to diversify the economy and increase non-oil/gas exports to achieve high, sustainable, inclusive, and primarily private-led economic growth. Using the Growth Diagnostics Framework, this paper analyses the high cost of finance as one of the most binding constraints to non-oil/gas GDP growth and economic diversification opportunities in Azerbaijan. The analysis suggests that the Government and the Central Bank can work collaboratively and holistically by addressing various aspects of the financial and economic ecosystem to effectively reduce cost of finance, lower lending rates, and promote private investments.

Keywords: economic growth, growth diagnostics, economic diversification, structural transformation, sustainable development

JEL kodu: E61, H00, O11, O23, O47, Q32

INTRODUCTION

The hydrocarbon industry has played a crucial role in the economic life of Azerbaijan and economic growth has been correlated with oil price dynamics over the last two decades. The country has gained huge windfalls from oil export since 2006 which allowed it to increase GDP per capita from US$ 310 in 1995 to $7819 in 2022. As a result of measures aimed at improving the standard of living of the population in the context of positive demographic growth, the poverty level in the country has significantly reduced from 44.7% in 2003 to a mere 5.1% during the given period.

However, the country’s growth trajectory demonstrates the drawbacks of relying on natural resources to drive development. The economy faced three major contractions, in 2009 due to the global financial crisis, in 2015 as a result of the dramatic fall in oil prices and in 2020 due to COVID-19 pandemic. The prevalence of oil in Azerbaijan’s economy has created challenges, both in terms of dependence on volatile oil prices and the sustainability of growth. Having benefitted from the accumulation of oil wealth in the economy, non-tradable sectors (construction, social and other services) expanded. Their growth rates were faster than agriculture and manufacturing. Oil wealth was transferred to non-tradable sectors of the economy via large public spending which led to the dependence of the non-oil private sector on public investment. As a result, private sector output in non-extractive industries is exposed significantly to volatility in the oil price and to fiscal policy variations.

Oil sector’s share in budget revenues and export still remains high. In 2022, the oil and gas sector accounted for 47.8% of GDP, 92.0% of exports and 50% of state budget revenues. However, approximately 36.3% of employed population are in agriculture, which accounted for only 4.8% of GDP last year.

Diversifying the economy and increasing non-oil/gas exports to achieve high, sustainable, inclusive, and primarily private-led economic growth is a policy objective that is well-identified in 2030 National Priorities and Socio-Economic Development Strategy of the country for 2022-
2026. The Strategy aims to achieve an average annual economic growth rate of 3-4% during 2022-2026. Additionally, the non-oil/gas sector is targeted to grow by an average of 5% annually, and the private sector’s share in the economy is targeted to reach 88%. Furthermore, it is targeted to increase non-oil/gas exports by 85% by 2026 compared to 2021.

To achieve these targets and foster long-term non-oil economic growth Azerbaijan needs to deal with the challenges of diversifying the economy and increasing private investments. Using the Growth Diagnostics Framework, this paper analyses the high cost of finance as one of the most binding constraints to non-oil/gas GDP growth and economic diversification opportunities in Azerbaijan.

**METHODOLOGY**

The paper uses the Growth Diagnostics Framework to examine the most binding constraints to non-oil/gas sector growth and export diversification. This concept was first introduced by economists Ricardo Hausmann, Dani Rodrik, and Andrés Velasco in a research paper titled “Growth Diagnostics” published in 2005. The framework is designed to pinpoint the most significant barriers hindering private investment and economic growth in a country. This involves considering the country’s historical growth paths and thoroughly examining current constraints. Given that not all constraints carry the same weight, and considering limited policy resources and state capacity, successful reforms will only be achieved if they focus on addressing the areas with the highest potential impact.

Since its inception, Growth Diagnostics has proven to be an invaluable tool for policymakers, development practitioners, and economists alike. It enables us to diagnose the precise challenges faced by countries and develop focused policy interventions that foster sustainable and inclusive economic growth.

The methodology uses a Growth Diagnostic Tree (Fig. 1) as a guide to categorize potential obstacles that might impede private investment and economic growth in an economy. However, it is important to note that the tree is not exhaustive, and specific contexts may have unique issues that need evaluation. The diagnostic process begins by investigating the reasons for low investment and entrepreneurship levels. From there, the tree branches into two main issues: productivity constraints (on the left-hand side) and finance constraints (on the right-hand side) to identify if there is low productivity or returns to economic activity or return high, but access to finance is prohibitive. Subsequently, within productivity constraints, the analysis examines whether the issue is related to low social returns (attributed to low human capital or deficient infrastructure) or low appropriability (resulting from government and collective know-how failures). Depending on the most relevant branch describing the constraints at a particular point, the diagnostic tree suggests potential areas for further investigation.
GROWTH TRAJECTORY

Over the past 20 years, Azerbaijan economy has undergone significant transformational growth, resulting in 3.8 times increase in real GDP between 2003 and 2022. Since the late 1990s, Azerbaijan’s economic development has been closely linked to the performance of the oil and gas sector.

An examination of growth dynamics since 2000 finds seven unique periods. Figure 2 displays these periods and provides a detailed analysis of the factors impacting growth.

Azerbaijan economy’s vulnerability to volatility in oil production was seen in 2011 and 2012, when decreasing oil production resulted in annual GDP growth decreasing to 0.1% and 2.2%, respectively.

Despite avoiding the 2008 global financial crisis, Azerbaijan experienced a substantial deceleration in economic growth since 2010 due to lingering structural economic rigidities. Since the beginning of 2010, Azerbaijan’s economic growth slowed substantially, with an average annual growth rate of around 2.9% between 2010 and 2014.

During the period, the expansionary fiscal policy accelerated rapidly, with spending increasing. The government was able to launch ambitious public investment projects and raise wages and social transfers benefitting from rising oil revenues.

As a result, the economy developed, and its infrastructure improved. Oil and gas production increased, fueling economic growth, and helping many areas including public administration, services, and construction.

**The period of low oil prices (2014-2016).** The dramatic drop in oil prices had a negative impact on Azerbaijan’s economy. The initial effects of this influence were seen in the balance of payments, which later influenced economic activity through financial channels. The national currency significantly declined in value as compared to USD, which resulted in an increase in the budgetary burden of servicing the public debt. Before 2015, Azerbaijan struggled to diversify its economy because of the high value of its currency, which made non-oil exports less competitive despite the government’s support efforts. However, in recent years, the situation has improved, and the country has been making progress in developing its non-oil sector. Although the expansion of non-hydrocarbon industries was primarily limited to exports of metal and chemicals, other industries have gradually grown as well.

**Recovery period (2017 - March 2020).** The economy made significant progress throughout the recovery period. The year of 2019 saw developments in social, economic, and governmental administration. During the period, comprehensive economic reforms and diversification initiatives were critical in driving growth and resilience. The government’s attempts to improve the business environment, attract foreign investment, and stimulate innovation contributed to the growth of many industries. The pandemic prevented the economy from reaching the peak of its growth cycle. Following the general trend, Azerbaijan’s GDP experienced a recession in 2020 and declined by 4.3%.

COVID-19 Pandemic period. Azerbaijan successfully addressed the recession caused by the pandemic between March 2020 and April 2021. To address the challenges, the implementation of a countercyclical fiscal policy, including the temporary suspension of the fiscal rule, proved effective in combating the pandemic crisis. Azerbaijan reduced the the effect of economic downturn, promoted employment, helped entrepreneurs, increased social initiatives, adjusted bank loans, and gave guarantees and subsidies by mobilizing AZN 3.5 billion (4.8% of 2020 GDP) against the pandemic.

Additionally, significant efforts have been taken to promote the expansion of the non-hydrocarbon industry. These efforts have produced fruitful economic outcomes, including an observed acceleration in economic growth in 2021.

In 2022, the economy expanded by 4.6% in real terms compared to 2021, reaching a total of AZN 133.8 billion (USD 78.7 billion). Real GDP in the non-hydrocarbon sector increased by 9.1% in 2022. Conversely, the hydrocarbon sector’s GDP contracted by 2.7% in 2022, mainly due to a decrease in oil production of 5.6%, which was only partly offset by an increase in gas production of 7.3%. It’s crucial to note that there is still room for improvement in the country’s degree of development.

According to the Economic Complexity Framework, there is a significant relationship between a country’s Economic Complexity Index (ECI) and its per-capita income. This correlation is shown in Figure 3. The underlying idea behind the relationship lies in the concept that a higher level of economic complexity indicates a greater accumulation of specialized knowledge and capabilities within an economy. Countries with a more complex economic structure require a deeper understanding of innovation, cutting-edge technologies, and managerial skills. Such economies may create high-value goods and services more effectively as a
result, which raises productivity, competitiveness, and ultimately per-capita income levels. As a result, this ongoing cycle of rising complexity promotes a country’s long-term economic development trajectory.

Figure 3. GDP per capita PPP and ECI, 2020

Source: World Bank WDI and Atlas of Economic Complexity

In the development path, the Government of Azerbaijan has been making efforts to diversify its export portfolio and lessen its reliance on the export of oil and gas, with an emphasis on non-oil exports such as chemicals, cotton, fruits, and vegetables. This shift was also evident in the changing trade flows, with the net exports of agricultural products such as tomatoes, fruits, hazelnuts, and cotton, as well as non-monetary gold and services.

Looking into detailed numbers, the value of exported goods amounted to USD 41.7 billion, experiencing 8.7% real growth in 2022. Despite the dominance of low-value-added exports in Azerbaijan’s non-oil/gas sector, there have been some positive developments in recent years. The value of non-oil/gas product exports has increased, from around USD 2.0 million in 2019 to almost USD 3.1 billion in 2022. Exports of electricity, chemical products, cement, tea, sugar, ferrous metals and products, aluminum and products, fruits, and vegetables, as well as alcoholic and non-alcoholic beverages, demonstrated a growth in value.

Figure 4. Export of Goods: Main Commodities, Percent of Total Export, 2022

Source: The State Customs Committee of the Republic of Azerbaijan
However, the current level of development in the non-oil sector might not be enough to sustain the current volume of imports in the future in the case that oil revenue declines.

In order to resolve this issue, steps must be done to increase financing imports, primarily through developing the non-oil sector rather than relying on gradually decreasing oil revenues. In this situation, the focus should be both on attempts to replace imports with domestic production and the expansion of non-oil export-oriented industries. It is commonly acknowledged that up to 2026, increased exports will be a key engine of economic growth.

**THE MOST BINDING CONSTRAINTS PREVENTING THE OPPORTUNITIES**

While there are significant opportunities for structural transformation and export diversification in Azerbaijan, there are also several binding constraints that need to be addressed to fully realize these opportunities.

**High cost of finance.** In order to find the binding constraint of inadequate growth of non-oil sector we will first examine whether cost of finance is high in Azerbaijan or not and if high, what are the reasons of it.

When compared to peers, Azerbaijan has a smaller financial sector regarding its economy. In 2022, banks’ loan portfolio increased by AZN 2.9 billion or 17.6%, while business loans’ proportion in the total loan portfolio of banks amounted to 55.4%, equivalent to AZN 10.9 billion. Business loans increased by 11.4% (AZN 1.1 billion), consumer loans increased by 27.3% (AZN 1.2 billion), and mortgage loans increased by 24.3% (AZN 0.5 billion) compared to 2021. The proportion of non-performing loans (NPL) in the total loan portfolio decreased by 1.3% since the beginning of the year, resulting in an overall portfolio NPL ratio of 2.9%.

In 2022, the dollarization of deposits continued to decline. The level of dollarization witnessed a slight decrease in 2022, as proportion of foreign currency-denominated savings and deposits in total savings and deposits dropped by 0.5% to 44.9%. At the end of the year, the share of foreign currency in deposits held by legal entities was 52.8%. Meanwhile, the dollarization of savings held by individuals stood at 39.2%, representing a decline of 1.8 percentage points compared to 2021.

As seen from the graph below the deposit rates were 9.0% in 2022. It is relatively higher compared to most resource-rich countries and neighboring similar countries.

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**Figure 5. Deposit interest rate, %**

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Lending rates (14.6% in 2022) are also higher than most of the resource-rich and neighboring countries (Fig.6).

**Figure 6. Lending interest rate, %**

As lending rates are relatively higher than the world average and other similar countries it indicates that the cost of capital is high in Azerbaijan. But it is not because of low savings. In 2000-2022, Azerbaijan’s savings correlated with its per capita GDP growth that mainly came from oil export. Saving as a percent of GDP was 42.0% in 2022, higher than most of the similar countries. It was also higher than the world average (27.0% in 2021).

**Figure 7. Savings as a share of GDP, %**

Although the cost of capital is relatively high, Azerbaijan has a positive current account balance (CAB). However, the hydrocarbon sector is mainly responsible for this positive balance, making the economy vulnerable to volatility in oil export levels. A sustainable economy requires
to decrease dependence on oil sector through diversification.

**Figure 8. Current Account Balance, (% of GDP)**

Source: IMF

Analysis shows that **interest rate spread** was 5.6% in 2022 which is relatively higher than most of other resource-rich countries. As graph below reflects, the spread has always been historically high in Azerbaijan. It is an indicator of risk and inefficiency in the finance sector. It should be noted that this is not because of high inflation or uncertainty over exchange rates, the spread has remained high regardless of the level of both. The reason is the considerable risk, high operating costs, and taxation of financial intermediation in Azerbaijan.

**Figure 9. Interest rate spread (lending rate minus deposit rate, %)**

Source: World Bank
Thus, according to the analysis of the right side of the decision tree we can say that high cost of finance can be associated with risks, operating costs in the local banking sector which led to high lending rates.

As a result of high cost of capital **domestic credits to private sector by banks (as % of GDP)** was 17.6% in 2022 which is lower than most peer countries. It shows that banks are not active in financing projects in private sector. Firms in Azerbaijan prefer to use internal rather external sources of financing for their investment needs. According to the State Statistical Committee, only 2.6% of investment is financed through banks, while a significant 49.3% coming from firms’ internal sources and an additional 36.4% is derived from state budget allocations. If we look retrospectively despite the lending rates decreased from 19.7% in 2000 to 14.6 in 2022, **domestic credits to private sector by banks** (as % of GDP) increased significantly from 5.9% in 2000 to 17.6% in 2022. It proves that high lending rates are really a constraint for growth.

**Figure 10. Domestic credit to private sector by banks (% of GDP)**

Source: World Bank

Thus, low and expensive lending might reduce the return on investment, posing a challenge to business creation and expansion. The World Economic Forum’s Executive Opinion Survey, IMF Article IV reports and other several sources suggest that the availability of affordable finance is a significant obstacle to economic growth in Azerbaijan. The data indicate that, in comparison to comparable countries, the private sector’s access to domestic credit in the non-oil sector is much less.

To foster private sector growth in Azerbaijan, the paper highlights the significance of addressing the limited access to finance, which is the major binding constraint.

As to the left side of the decision tree, we focused mainly on three directions: geographic conditions, infrastructure and human capital.

**Geographic conditions.** Geographic conditions are not poor in Azerbaijan. Even though Azerbaijan is a landlocked country it has an 800 km coastline with the Caspian Sea. Located at the crossroads of Eastern Europe and Western Asia, Azerbaijan is becoming the biggest transit, logistics and important transport hub in the region due to its active involvement in a number of large regional transport projects and the development of the country’s transport sector. The international transport corridors passing through Azerbaijan’s territory have been completely reconstructed and brought up to European standards. Azerbaijan put into operation Baku-Tbilisi-Kars railway which provides the shortest rail link between Europe and Asia. It plays an important role in the implementation of China’s "One Belt, One Road" strategy and the
International North-South Transport Corridor project.

**Infrastructure.** Azerbaijan’s infrastructure is relatively high quality in comparison to Eurasian countries and upper-middle-income countries. Its infrastructure matches or exceeds the performance of Russia and Türkiye’s infrastructure on most indicators, with the notable exceptions of airport and road connectivity. However, Azerbaijan’s road and rail networks need modernization and increased spending on maintenance. Cross-border connectivity projects are top priorities for the government and make up most of Azerbaijan’s transport investments, but focusing more on secondary and local roads could improve domestic connectivity and bring down travel costs.

Despite its relatively good infrastructure, Azerbaijan ranks poorly in the World Bank’s Aggregated Logistics Performance Index 2012-2018 (123rd out of 167 countries) due primarily to its ‘soft’ trade infrastructure, such as the competence and quality of its logistics services.

According to the results of the World Economic Forum’s Executive Opinion Survey Quality of port infrastructure in Azerbaijan was higher than most of the peer countries in 2017.

**Figure 11. Logistics Performance Index:**
Quality of trade and transport-related infrastructure (1=low to 5=high)

Source: World Bank

It should be noted that, in 2020 Azerbaijan liberated its territories that were under occupation for more than 30 years. After the liberation, the Government has started “The Great Return” program that envisages the wide scale reconstruction in the newly liberated areas of Karabakh and East Zangazur economic regions and the return of more than 1 million internally displaced people and refugees to their native villages, towns, and cities.

During the years of occupation, all the infrastructure in these areas has been devastated, assets looted, and an enormous number of landmines have been planted in these territories. Right after the liberation Azerbaijan has mobilized all its resources and initiated a comprehensive de-mining and restoration process. During the past two and half years after the war ended more than 200 people died in these areas because of the exploded landmines. Every year we devote a vast amount of resources to rebuild from scratch the region’s physical infrastructure, including road and rail network connections, airports, power generation and transmission, water supply and housing. The Government of Azerbaijan is determined to unlock the region’s vast economic potential considering its strategic geographic location that will not only benefit itself but also many countries in the region. The Government’s efforts in building new and alternative transportation routes across the region will serve the interests of the many Central Asian countries considering the recent geopolitical dynamics. In this regard, Azerbaijan’s vision overlaps with the Asian Development Bank’s Central Asia Regional Economic Cooperation Program’s (CAREC) overarching vision of “Good Neighbors, Good Partners, Good Prospects”. The
deepening of regional cooperation and integration will contribute to long-lasting peace and contribute to the welfare and prosperity of the people in the region.

Moreover, tax incentives were introduced to promote economic growth in the region. These efforts will create new opportunities to support priority sectors effectively, leading to potential growth and prosperity in the region in the coming years in terms of the reintegration of liberated regions.

**Human capital.** Azerbaijan's gross enrollment ratios in secondary and tertiary education are lower than most of the peers. Secondary school enrollment ratio was 94.0%, tertiary enrollment was 38.0% in 2021.

In 2015, the average level of schooling was 12.8 years. Very few 15-64-year-olds have no schooling. In fact, 69% of the labor force has a secondary school education. Only 10% have only primary, while 20% have tertiary education. Sizable differences in earnings only appear at the tertiary level.

*Figure 12. School enrollment
Secondary – Gross*

*Source: World Bank*

*Figure 12. School enrollment
Tertiary – Gross*

*Source: World Bank*
2021 European Union Business Climate Survey shows that employers are concerned about the shortage of skilled labor in Azerbaijan. The skills shortage suggests the education system is not responding to the demands of employers. The mismatch reflects weak cooperation between national and public bodies, and between industry and learning institutions, and is aggravated by a lack of adequate labor market information.

CONCLUSION

The results of growth diagnostics show that high cost of finance associated with high lending rates and low domestic credits to private sector by banks was the most binding constraint to the development of non-oil/gas sector and export diversification in Azerbaijan. In fact, Government and Central Bank have already carried out several important activities like the restructuring of NPLs, closing troubled banks and restructuring the state-run International Bank of Azerbaijan to address this problem.

However, to reduce cost of capital and facilitate access to finance the following policy recommendations can be reviewed:

1. **The expansion of financial markets**, which includes the improvement of a stock exchange and the expansion of banking services, can make it easy to mobilize domestic financing and steer them toward profitable ventures. This entails expanding credit availability to both small and medium-sized businesses (SMEs), as well as enhancing the effectiveness of payment systems. Undertaking comprehensive regulatory reforms can stimulate competition and innovation within the financial sector which in turn can enhance financial market efficiency, increase access to affordable financing, and reduce the overall cost of capital.

2. **Promoting Public-Private Partnerships (PPPs) for Infrastructure Development**. By facilitating PPPs for critical infrastructure projects, providing a transparent and streamlined framework for PPP procurement and project implementation, coupled with clear risk-sharing mechanisms and leveraging private sector expertise and capital, Azerbaijan can accelerate infrastructure development without solely relying on public funds. It can directly reduce the burden on the government budget, attract foreign investment, and enhance the overall investment climate, leading to lower capital costs and improved economic prospects.

3. In combination with the above suggested measures the government should ensure **macroeconomic stability and sustainable public finance to promote a healthy investment climate**. One of the primary objectives defined by the Socio-Economic Development Strategy for 2022-2026 is to enhance resilience against both internal and external risks. In Azerbaijan, macroeconomic stability is particularly important for a disciplined fiscal policy and managing oil revenues. Investors operating in a credible, transparent, and competitive environment will carry less risk, and will therefore be able to tap finance with low interest rates.

Fiscal and monetary coordination in the framework of the Economic Council helps stabilize the economy by aligning government spending with monetary policy objectives. By coordinating their efforts, the government and central bank contribute to ensuring that the economy remains stable and that shocks are effectively managed.

Implementation of a rule-based fiscal framework also plays a crucial role in safeguarding macroeconomic stability and maintaining fiscal sustainability in the face of evolving economic conditions.

By continuing the implementation of these strategies, the government can actively address the mentioned binding constraint while encouraging private sector participation and sustainable economic diversification.

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AZƏRBAYCANIN ARTIM DİAQNOSTİKASI: ÇOXŞAXƏLİ VƏ DAYANIQLI İQTİSIDİYATA DOĞRU
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XÜLASƏ

 Açar sözlər: iqtisadi artım, artım diaqnostikası, iqtisadi diversifikasiya, struktur transformasiyası, davamlı inkişaf.

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