

**The Ministry of Education of  
Azerbaijan Republic**

**Diversification as a New Direction  
of the new economic model of  
Azerbaijan**

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## **Abstract**

Purpose – this article is about diversification trends and its role in modernization proses in Azerbaijan.

Design/methodology – diversification of economy has several dimensions in Azerbaijan: diversification of gDP mainly focusing on non-oil sector, diversification of export upgrading the share of the innovative-led goods and services, diversification of partners relying on developed economies, diversification of institutional endowments including natural capital, physical capital, human capital and institutional capital, and diversification of economy over the regions. Domestic Resource Cost, Revealed Comparative Advantage, Net Export Ratio and other research methods have been applied.

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## **Introduction**

United Nations defines, that *economic diversification* in its standard usage, either in terms of the diversity of economic activities or markets, is a significant issue for many developing countries, as their economies are generally characterized by the lack of it. gelb A. (2010) indicates, that in the 1960's, some 80% of developing country exports were primary commodities; today, almost 80% are industrial products. According to him, this massive transformation in export structure has been associated with the rise of major industrial power-houses; China most prominently, but also countries such as Korea, India, Brazil, Malaysia, Vietnam, Indonesia and Mexico.

Currently oil and gas sector dominates the economy of Azerbaijan. In 2012 the oil sector accounted for about 47 percent of GDP, more than 90 percent of total exports, and about 70 percent of state budget revenues. Booming oil prices in recent years helped the country to take advantage from its enormous natural resource wealth. Why does Azerbaijan have to diversify its economy in the first place? Will this lead to its particular comparative advantage? There are two fundamental reasons that justify the avoidance from the reliance on hydrocarbon resources. First of all, oil prices are very difficult to predict. Between 2003-2012, after sharply increasing of oil income in Azerbaijan, according to our estimations the coefficient of variation of oil prices has been 0.4 and standard deviation 27.9 US dollar per barrel. Such kind of high volatility makes it inevitable to think about diversification. If oil prices would be stable, even the forecasting decrease in oil production would be enough, to ramify economy based on non-oil sectors in Azerbaijan. Revenue from oil will start declining permanently in 2016. On the other hand, diversified economies perform better over the long-run. Diversification is not more than a good idea in oilreach country like Azerbaijan, but it is also a new reality linked to modernization.

### **1.1 Findings**

Modernization and diversification are two issues of vital relevance to the sustainable economic development of Azerbaijan. This research finds the functionality of the existing linkages between innovation and economic growth through identifying and quantifying major constraints and challenges. Azerbaijan's economic diversification and modernization away from

dependence on oil and gas should be a priority of the government of Azerbaijan.

### ***1.2 Research limitations***

the main research limitation is the hardness to compile appropriate length of time-series because of shortage of statistics.

### ***1.3 Practical implications***

President of Azerbaijan Ilham Aliyev emphasized that the country has to shift focus from natural resources to human capital. Informational technologies, tourism, logistics, transport, food processing, petrochemical industry are just some of the priority fields the government plans to develop. Nonoil growth has been the main driver of Azerbaijan's gross Domestic Product (gDP) over 2011-2013 despite shrinking oil *output*.

### **1.4 Originality/value**

this article is the first comprehensive approach to the economic diversification and its role in accelerating modernization in Azerbaijan.

### ***1.5 Diversification of goods and services***

The share of oil and gas sector decreased from 54.7 percent in 2008 to 49.7 percent in 2011. In the first place, the social and other service activities have filled in the vacuum after subdued dynamics of oil and gas sector.

Between 2008-2011 construction increased its share by 1.3 percent strengthening its position as the 3<sup>rd</sup> largest sector after oil-gas and social services. During mentioned time period, sectors like non-oil industry, trade, ICT, accommodation and public catering improved their share in gDP.



## 1.6 Export diversification

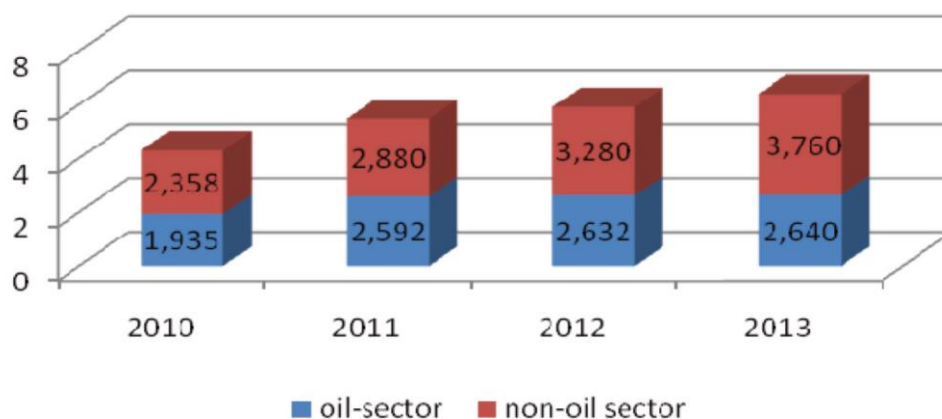
There are plenty of researches that prove the plausibility of the hypothesis linking export diversification and growth. The growth rate of the non-oil export outpaces the growth rate of the non-oil sector in Azerbaijan. It proves the pro-export nature of the non-oil development. Although the non-oil export increased by 2.1 times between 2005-2011 years, the export diversification remains challenge. As hydrocarbons consist of more than 90 percent of the export, the concentration ratio of export is very high in Azerbaijan. Since State Oil Company of Azerbaijan (SOCAR) and Azerbaijan International Oil Consortium (AIOC) are main exporters Herfindahl-Hirschman Index indicates high market concentration in Azerbaijan. Thus export diversification will lead Azerbaijan to perfect competition too. The success stories of East Asian “Tigers” evidence export promotion and outward orientation. In these countries diversification efforts capitalized on the abundant labor supply and were based on the export of high volume manufactures. Since Azerbaijan is heavily dependant on oil exports, a key challenge is to avoid dependance on oil in export revenues and stabilize export earnings. At this end Azerbaijan can draw lessons from the experience of China, India and other East Asian “Tigers”. Samen S. A. (2010) considers that the success story of high performing Asian economies that experienced substantial increases in exports, and specially exports of manufactures goods, and high growth rates of their gDP over many decades has prompted many analysts to view export development and diversification as the new engine of growth. Because export diversification is associated with long-run growth

and technology spillovers that raise productivity and income. The focus on exports was a common characteristic in countries that have diversified successfully. Azerbaijan strives to the sustainable long term export growth in the level of horizontal (e.g. adding new petrochemical products on existing oil and gas dominance), and vertical (e.g. move from raw oil and gas to higher value added industrial products and services) diversification.

## 2 Basic information

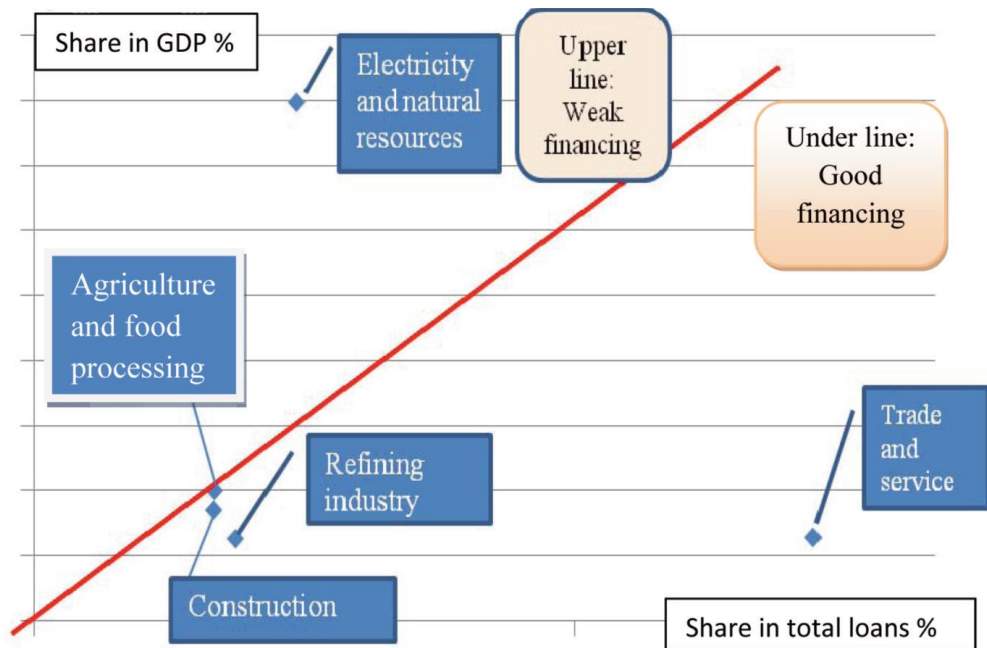
### 2.1 Diversification in terms of Finance

One of indicators of the diversification in Azerbaijani economy is the evidence of increasing amount of taxes from non-oil sector. Non-oil sector tax revenues in Azerbaijani state budget will rise by 15 per cent in 2013. The non-oil sector will ensure transferring 3,760 million AZN to the state budget, which exceeds the same figure by 59 percent in 2011.



70 percent of investments, in other words 12.6 billion out of 18 billion US dollar will be directed to non-oil sector in 2013. Refining industry, construction, trade and services are financed well by the commercial banks of Azerbaijan. government of Azerbaijan actively supports the private sector with the assistance

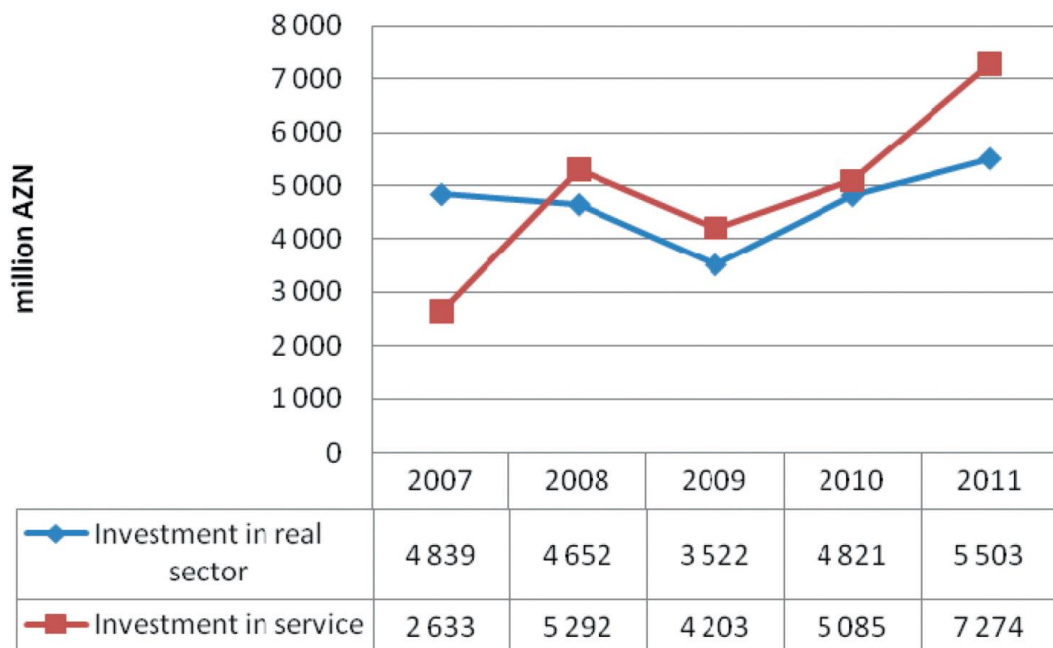
of the National Fund for Entrepreneurship Support. About 270 millions USD of preferential credits have been granted by the fund to more than 2327 investment projects in 2012. Directions of use of the finance of the National Fund for Entrepreneurship Support (NFES) coincides with the purpose of the government to diversify economy. Thus funds from NFES mainly stream to the production of agricultural products, production of competitive and export oriented food and other industrial products with usage of modern technologies and establishment of modern cold storage complex. In this way the government supports development of small and medium entrepreneurship in regions.



**figure 4. Comparison of percentages of sectors in loans and gdp (2000-2009)**

The government of Azerbaijan strives to push economy forward based on innovation, creativity and high value sources of growth, like some kind of services (tourism, transport, logistics etc.) in which Azerbaijan has strong advantages. As land-locked country Azerbaijan needs to develop fields, like services which are not

subject to the trade barriers that physical exports have to overcome. The services sector assumes an increasing share of gDP as the economy matures, as is evident in the case of developed countries. Even success story in case of emerging economy like India proves that industrialization is not the only reasonable way to rapid economic development. For example, unlike China, India relies on service sector in its booming economy. Azerbaijan strives towards to become a developed country, so greater stress has to be focused on the development of the services sector, along with some non-oil manufacturing sectors. Thus investment in service sector outpaces other fields. Investments in the services sector in 2011 totalled 7.3 billion AZN in Azerbaijan.



In future, in order to serve the diversification of the economy investments should be partially driven by the private sector and focus on small-scale support along with large-scale “white elephant” projects. By diversifying of investment Azerbaijan

might reduce the likelihood of any single investment having a major influence on portfolio. Investing in a different sorts of assets will protect economy against a significant loss.

Azerbaijan might extract a useful lesson from South Korean experience between 1950-1980s. Chung Y. (2007) shows that investment in South Korea was carried out by both the public and private sectors but, unlike the situation in many developed economies of the West, the volume of public investment in the country has been relatively large and the government has played an active, positive, and critical role in the nation's investment. Like its neighboring northeast Asian countries, South Korean government did not hesitate to use public enterprises, most direct and interventionist tool, as a way to direct the nation's resources toward investment. In the early years, the government believed that it was essential to invest in public enterprises and operate them itself, since capital-poor private entrepreneurs lacked the wherewithal or expertise, or both, as well as the experience, to launch the critical industries thought to be necessary for economic growth and the nation's well-being. From the perspective of capital budgeting, public expenditures increase public assets. In the future government will be able to privatize some of this assets, in other words, government builds assets, then operates and transfers it to private sector.

According to Chung Y. (2007) one of the most conspicuous development in investment in South Korea after the Korean War was not only the skewed investment pattern toward the modern and industrial sectors but also the heavy emphasis on capital- and technologically intensive industries over time.

Like South Korea at the first stage of economic rise in Azerbaijan the initial orientation was investment in labor-intensive fields, in which Azerbaijan has a competitive advantages. But, when the low-value-added and labor-intensive industrial structure faced increasing competition, economy reacted to the problem by investing in high-value-added and capital-intensive industries in non-oil sector. On the other hand, openness to technologically intensive FDI in the field of oil and gas empowered export growth and mechanism for technological upgrading. Thus Baku, the capital of Azerbaijan, has kept its status as Oil Academy.

## **2.2 Conclusion**

Over the past ten years Azerbaijan has witnessed an unprecedented economic growth. While many European countries are in crises, Azerbaijan's economy is growing at an enviable pace. Oil income has been used to modernize infrastructure, diversify economy and improve social well-being. Recently, construction and service sectors grew at higher rates, reshaping the current structure of economy. Fiscal expansion has been the leverage to keep economic growth, as well as diversification, while monetary policy stands ready to ensure stability of national currency and manage inflation. But non-oil primary deficit and expected decreasing oil production after 2016 oblige to accelerate diversification of economy. Azerbaijan has done well through the global economic crisis, but the question is that whether this strong performance will last. Thus a well-sequenced reform strategy should synchronize the development level of hardware (*infrastructure*) and software (*business climate*) of economy to contribute diversification in Azerbaijan. Resource-rich countries, like Chile, Indonesia and Malaysia have done well in

terms of diversification, but find difficulties in escaping the middle-income trap. To some extent their achievements, to attain developed manufacturing and service sectors, could be success story for Azerbaijan. After Malaysia, Azerbaijan strives to become the second predominantly Muslim and resource-rich country which has succeeded through something other than the utilization of natural resources. Arip et. al. (2000) argue that, in order to sustain future economic growth under the static effect of multilateral and regional trade liberalization, Malaysia should diversify its export commodities and develop greater social and economic cooperation with the rest of the world. As an export-oriented economy, in the long run, this strategy could help stabilizing Malaysia's export income.

At the same time Azerbaijan should look forward to countries which passed the threshold to become high-income economies, like South Korea. There are many explanations for the rapid growth and structural changes in South Korea after the Korean War. Chung Y. (2007) argues that among them are the people's will to develop the nation's economy; Confucianism and the extended family system; the existence and speedy establishment of the crucial institutional reform suitable for investment and economic development; the high-quality and adaptive labor force with low wages; and the positive role of a strong, stable, and able government. Prophet Joseph had been gathering wheat when Egypt had faced seven years of prosperity and then used these reserves when the country suffered seven years of starvation. It is historical example, how fairly natural endowment should be distributed between generations to keep sustainable development. Based on permanent oil

income hypothesis IMF suggests to Azerbaijan, that even if oil prices turn out to be higher than budgeted, additional oil fund resources should not be used to increase government spending given (i) the available room to improve the quality and efficiency of spending, and (ii) the need to significantly reduce the non-oil deficit to secure medium-term fiscal sustainability. But the other side of this medal is the demand for modernization of infrastructure which leads to diversification.

Capital intensity  
- the term for the amount of fixed capital present in relation to labor - in Azerbaijan lags behind developed countries. Azerbaijan is in its way to reach to the level of the golden Rule capital-labor ratio that maximizes consumption per worker in the steady state. Thus the common denominator must be found to comprise two points of views based on filling the gap in the non-oil deficit and capital stock raise. Armington assumption of nationally differentiated products has been implemented within the Computable general Equilibrium Model for Azerbaijan to define demands for domestically produced and imported goods. High elasticity proves that the superior growth of non-oil sector will boost import-substitution. International community has been elaborating the trend of the sustainable development of non-oil sector in Azerbaijan. International rating agencies have raised independent rating of Azerbaijan to investment rating. Also as a result of strategy aimed at diversification of economy and sustainable development Azerbaijan was ranked on 46th place for competitiveness of the economy over the world and 1st in the CIS area.

The government of Azerbaijan should design diversification strategy relevant to the concept paper entitled "Azerbaijan 2020: The Vision into the Future". Diversification strategy may cover institutional reforms for enabling good governance fostering



ramification of economy, sector-specific support and policy for the improvement of infrastructure.

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### **2.2.2 Country Context**

Azerbaijan is in the process of redefining its medium-term development strategy in the face of a new, constitutionally mandated vice president position and some critical challenges stemming from the fall in oil prices, high inflation, and the crisis in the financial sector.

The Government is trying to address these challenges by accelerating reforms to improve the environment for private sector development. In December 2016, it launched a Strategic Roadmap for the development of the national economy and 11 key sectors. These strategy documents set medium- and long-term goals for reforms and sustained development.

Azerbaijan is trying to benefit from regional connectivity initiatives to boost transit and trade. In particular, the country is one of the sponsors of the East–West and North–South transport corridors. Construction of

the Baku–Tbilisi–Kars railway line, which will connect the Caspian region with Turkey, is expected to be completed in 2017. The Trans-Anatolian Natural Gas Pipeline (TANAP) and Trans-Adriatic Pipeline (TAP) will deliver natural gas from Azerbaijan’s Shah Deniz gas field to Turkey and Europe.

Social conditions continue to be a major source of concern, although poverty is relatively low in Azerbaijan (4.9% in 2015 measured at the national poverty line). Nominal wage growth of 5% in the first half of 2017 was not sufficient to compensate for higher prices. Households continue to experience a decline of their real purchasing power, especially for imported consumption items such as food, which undermines future poverty reduction.

### **2.3 At a Glance**

The Azerbaijan economy declined 1.7% (year-on-year) in the first half of 2017, driven by a decline in oil GDP (7.2%) as production volumes were cut in line with the OPEC agreement. On the upside, the non-oil economy expanded by 1.7% for the first time in over a year, supported by the strong performance of the agriculture and manufacturing sectors.

Annual inflation remained high at 13.9% in June 2017, driven mainly by an increase in government-controlled tariffs for electricity, water, and gas, and in domestic food prices, reflecting higher demand in Russia for Azerbaijani food.

Although the economy is expected to recover in 2018, the immediate challenge for the Government is to safeguard macroeconomic stability to support economic recovery and poverty reduction. Another challenge is to improve the business environment and government transparency to enable the further diversification of the non-oil economy.

Azerbaijan and the World Bank celebrated the 25th anniversary of their partnership in 2017. The Bank is working with the Government and its development partners to support the country on a path to sustainable, inclusive, and diversified development.

## **2.4 The World Bank and Azerbaijan**

The Country Partnership Framework (CPF) 2015–20 for Azerbaijan was endorsed by the Board of Directors on July 21, 2015. It is a joint strategy of the World Bank Group (WBG) aiming to support Azerbaijan on its path toward sustainable, inclusive, and private sector–led growth. Currently, the CPF is undergoing a mid-term review that, among other outcomes, will identify an investment program for the next three years.

The CPF is underpinned by the Systematic Country Diagnostic (SCD) for Azerbaijan, the WBG’s comprehensive analysis of the country’s economic conditions, challenges, and constraints in the short and longer term.

The Bank program in Azerbaijan is helping to address a selected set of those constraints. It is also well aligned with Azerbaijan’s own development priorities and the WBG’s global twin goals of reducing poverty and boosting shared prosperity. The program has two main focus areas: (i) public sector management and service delivery and (ii) economic competitiveness.

The Bank is also supporting the country to strengthen public resource management, facilitate public service delivery, improve the quality of environmental assets, improve selected infrastructure networks, increase the country’s financial inclusion, reduce the regulatory burden on the private sector, and bolster economic activities in rural areas.