

## ECONOMIC FIGURES AND INDICATORS

Abadov Masim Kazim oglu

Ganja State University, as.prof.

E-mail: [abadovmk@gmail.com](mailto:abadovmk@gmail.com)

<https://doi.org/10.5281/zenodo.13925612>

**Abstract:** To date, a unified coordination system has not been created for the rapid implementation of the topic of digital currency creation and other areas created by the new industrial revolution. The promotion of digital transformations in the pilot mode should be started without delay by attracting specialists with relevant professionalism in this field from every region of Azerbaijan, and as Mr. President mentioned, Azerbaijan should be a leader in this field. Because, other countries are already advancing by taking large steps in the existing field. Falling behind this trend is dangerous.

There are many important issues that central banks and regulators must consider when implementing digital currencies. Each country has to find different answers and develop strategies in this matter. Implementing digital currencies is a complex process and requires careful planning.

The impact of cryptocurrencies on the economy is multifaceted and has both positive and negative aspects. How cryptocurrencies will affect economies in the future depends mainly on their regulation, technological developments and how they will be accepted by the general public.

**Keywords:** National currency, international competition, information technology, electronic money, financial stability, Generative Artificial Intelligence, digital currencies, Azkoin, local personnel.

## ЭКОНОМИЧЕСКИЕ ЦИФРЫ И ПОКАЗАТЕЛИ

Абадов Масим Казим оглу

Гянджинский государственный университет

E-mail: [abadovmk@gmail.com](mailto:abadovmk@gmail.com)

**Аннотация:** На сегодняшний день не создана единая координационная система для быстрой реализации темы создания цифровой валюты и других направлений, созданных новой промышленной революцией. Продвижение цифровых преобразований в пилотном режиме должно быть начато без промедления с привлечения специалистов, обладающих соответствующим профессионализмом в этой области, из каждого региона Азербайджана, и, как отметил господин Президент, Азербайджан должен быть лидером в этой области. Потому что другие страны уже продвигаются вперед, делая большие шаги в существующей области. Отставать от этой тенденции опасно.

Существует множество важных вопросов, которые центральные банки и регулирующие органы должны учитывать при внедрении цифровых валют. Каждой стране приходится искать разные ответы и разрабатывать стратегии в этом вопросе. Внедрение цифровых валют — сложный процесс, требующий тщательного планирования.

Влияние криптовалют на экономику многогранно и имеет как положительные, так и отрицательные стороны. То, как криптовалюты повлияют на экономику в будущем, зависит главным образом от их регулирования, технологических разработок и того, как они будут приняты широкой общественностью.

**Ключевые слова:** Национальная валюта, международная конкуренция, информационные технологии, электронные деньги, финансовая стабильность, Генеративный искусственный интеллект, цифровые валюты, Азкойн, местный персонал

## INTRODUCTION

The government of Azerbaijan is trying to use the opportunities created by the Fourth Industrial Revolution. In this context, it focuses on the development of the information technology sector and the promotion of digital transformation. The country is investing in efforts to develop its capabilities in information technology, software development and all types of communications. As a clear example of these, the following state bodies and institutions, established and improved by the relevant decrees of the Honorable Mr. President, can be cited: Ministry of Economy (2016) Ministry of Digital Development and Transport (2021) Central Bank (2009) State Statistics Committee, Special State Service of Communication and Information Security (2012), Electronic Security Service (2012), Innovation and Digital Development Agency (2021), High Technologies Park of ANAS (2016), Electronic Government - Digital Azerbaijan (2011), Government cloud (2019) , Fourth Industrial Revolution Analysis and Coordination Center (2021), Information Technologies and Information Management Center (2009), Azerbaijan Cyber Security Center (2023), Economic Scientific Research Institute (2021).

1. Technological Developments: The rapid development of blockchain technology and digital payment systems in recent years makes the creation of digital national currencies possible and necessary. These technologies ensure that digital currencies are safe, transparent and efficient.

2. The Rise of Cryptocurrencies: The rise in popularity of Bitcoin and other cryptocurrencies is forcing nations to explore the potential of digital currencies. The speed, security, and anonymity features offered by cryptocurrencies are driving the need for nations to create their own digital currencies.

3. Strengthening Control: Central banks can better monitor and control money flow and economic activity through digital national currencies. This is an important tool to prevent illegal financial transactions and tax evasion.

4. Global Economic Competition: The creation of digital national currencies helps countries gain an advantage in global economic competition. The use of digital currencies makes international trade and financial transactions more efficient and cheaper.

## MAIN PART

### AzCoin's Impact on the Economy

1. Increasing Economic Activity: AzCoin promotes economic activity by increasing the speed and efficiency of financial transactions. Faster and cheaper implementation of internal and external trade operations supports economic growth.

2. Innovation and Technological Development: AzCoin promotes the development of digital technologies and innovative solutions. It strengthens the country's tech ecosystem by creating new opportunities for startups and tech companies.

### Economic Figures and Indicators

Gross Domestic Product (GDP) growth fluctuated, but stabilized after 2017.

- The inflation rate has been volatile due to fluctuations in oil prices and devaluations.
- The share of energy exports in the foreign trade balance became dominant, but the non-oil sector also developed at an increasing pace.

In recent years, the economy of Azerbaijan has faced various challenges, but it has tried to diversify its economy by reducing the influence of the oil and gas sector. Large infrastructure projects and regional development programs have accelerated economic development. Measures taken for stability and stabilization in the financial and banking sector, as well as the development of the tourism sector, contributed to the strengthening of the economy. In particular, special

attention was paid to the development of the non-oil sector, agricultural sector, transport and logistics system.

Azerbaijan's digital economy has developed significantly in recent years. Digital transformation and technological innovations have played an important role in the economic and social development of the country. The joint efforts of the state, private sector and international partners are important in these processes. We can characterize the main features and development of the digital economy of Azerbaijan:

1. State Strategies and Programs: The government of Azerbaijan has adopted a number of strategic documents and programs in order to develop the digital economy. The document "Azerbaijan 2030: National Priorities for Socio-Economic Development" puts digital transformation in the foreground.

Important steps have been taken in the direction of digitalization of government services for citizens and businesses through the "Electronic Government" portal.

2. ICT Infrastructure Development: Large infrastructure projects have been implemented in order to expand broadband internet services and increase internet accessibility in the country. Fast internet services have been provided by the expansion of fiber optic networks.

Mobile operators have increased the quality of mobile internet services by applying 4G and 5G technologies.

3. Startups and Innovation Ecosystem: In recent years, the startup ecosystem has developed and a number of innovative projects have been implemented. Technoparks and incubators supported the development of startups.

The Innovation and Digital Development Agency, established in 2020, provides support and resources for startups and digital businesses.

4. Fintech and E-Commerce: In the Fintech sector, new projects and applications have entered the market, and digital payment systems have expanded. Banks and fintech companies have developed mobile payments and online banking services.

The e-commerce sector has developed rapidly in recent years, especially during the pandemic, online shopping has become popular. A number of local and international e-commerce platforms operate.

5. Cyber Security: Along with the development of the digital economy, special attention has been paid to cyber security issues. National cyber security strategies and measures have been implemented.

The state and private sector apply modern technologies and solutions in the field of cyber security.

6. Education and ICT Knowledge Enhancement: It is important to increase education and knowledge in the field of ICT for the development of the digital economy. Universities and vocational training institutions offer programs and courses in the field of ICT.

Within the framework of state programs and private initiatives, various trainings and seminars are organized for the development of digital skills of young people.

Future Prospects: There are wider development prospects for the digital economy of Azerbaijan in the future. In this area, the continuous support of the state, improvement of the ICT infrastructure, strengthening of the startup and innovation ecosystem will be important. Implementation of strategic goals related to digital transformation can make Azerbaijan one of the digital leaders in the region.

The development of the digital economy will also help ensure economic diversification and achieve sustainable economic development. This will serve the general welfare of the country and increase its international competitiveness.

Another direction of economic development in Azerbaijan - the green energy (renewable energy) sector has entered a significant stage of development in recent years. The development of this field is of great importance in terms of increasing the country's energy security, environmental protection and economic diversification. The planning of COP 29 in Azerbaijan and Europe's need for environmentally friendly energy have highlighted and increased the importance of the main characteristics and development of green energy (renewable energy):

1. State Strategies and Programs: The government of Azerbaijan has adopted a number of strategic documents and programs supporting the development of the green energy sector. In the document "Azerbaijan 2030: National Priorities for Socio-Economic Development", expansion of the use of renewable energy sources is indicated as one of the main directions.

"Energy Strategy of the Republic of Azerbaijan for 2020-2030" presents important plans for the development of the green energy sector.

2. Wind Energy: Azerbaijan is one of the countries with high wind energy potential. Wind energy projects are being implemented in regions such as the Caspian Sea coast and the Absheron Peninsula.

In 2020, an agreement was signed with ACWA Power of Saudi Arabia for the construction of a 240 MW wind power plant in Azerbaijan.

3. Solar Energy: Azerbaijan is also rich in solar energy potential. In particular, the Nakhchivan Autonomous Republic and the Absheron Peninsula are favorable regions for the use of solar energy.

A number of solar power plants have been built and new projects are planned. Solar power plants in Masazir and Samukh are one of the leading projects in this field.

4. Hydropower: Hydropower plants have been built in the mountainous regions of Azerbaijan. Small hydropower plants occupy an important place among renewable energy sources.

Mingachevir hydropower station is the largest hydropower station in the country and plays an important role in energy supply.

5. Biomass Energy: Biomass energy sector in Azerbaijan is still at the stage of development. There is potential for using agricultural and forestry residues as an energy source.

Pilot projects and experiments are carried out in this field, but large-scale projects are still few.

6. Foreign Investments and International Cooperation: Foreign investments and international cooperation are important in the green energy sector. A number of projects are implemented with the participation of international financial institutions and companies.

In 2021, an agreement was signed with the Masdar company of the United Arab Emirates for the construction of a 230 MW solar power plant in Azerbaijan.

Future Prospects. There is great potential for the development of the green energy sector in Azerbaijan. In the future, increasing the share of renewable energy sources and ensuring energy diversification are the main goals. The following measures can play an important role in this direction:

Improving the investment environment: Creating a favorable investment environment for attracting foreign and domestic investments to the renewable energy sector.

Technological innovations and research: Application of new technologies and expansion of research in this field.

Education and awareness: Public awareness and education programs on green energy.

International cooperation: Strengthening cooperation relations with international organizations and countries.

The development of Azerbaijan's green energy sector will contribute to environmental protection and sustainable economic development, in addition to increasing the country's energy security.

Due to the fact that the relevant parties and related organizations in the world, the international competition network, and the management circular of the states do not agree with the centrifugation system in order to protect the control mechanism, this issue is delayed. On December 15, 2017, Mr. Ilham Aliyev stated during the opening of the data processing, recording and transmission center in the Sumgait Chemical Industrial Park that; "Blockchain technology is an area of great interest. Many countries and companies are working and operating to bring this technology to their countries. Here, too, Azerbaijan is at the forefront." On February 3, 2020, Mr. President said in his speech at the conference dedicated to the results of the first year of the implementation of the "State Program for the Socio-Economic Development of its Regions in 2019-2023": "Azerbaijan should be a leader in the Fourth Industrial Revolution. Just as the Davos Forum sees us as leaders, we must be leaders. Because this means our future development."

At the same time, on August 9, 2023, the President approved the new law "On Payment Services and Payment Systems". The law contains points related to the regulatory process related to electronic money, the terms of notification regarding the provision of payment services and opened payment accounts, the execution of the payment order and the responsibility of the parties.

The activities of each of the institutions I have mentioned are important in our country. However, to date, a unified coordination system has not been created for the rapid implementation of the topic of digital currency creation and other areas created by the new industrial revolution. The promotion of digital transformations in the pilot mode should be started without delay by attracting specialists with appropriate professionalism in this field from every region of Azerbaijan, and as Mr. President mentioned, Azerbaijan should be a leader in this field. Because other countries are already advancing by taking large steps in the existing field. Falling behind this trend is as dangerous as falling behind the general development and falling away from modern technologies.

There are many important issues that central banks and regulators must consider when implementing digital currencies. Each country has to find different answers and develop strategies in this matter. The implementation of digital currencies is an important, complex, and at the same time dangerous process that requires careful planning. One of them is the questions of financial engineers-architects, others are the speculative composition (regarding buying and selling) and consumers, which covers a large mass. Of course, there are also questions generated from the world crowd (Generative Artificial Intelligence) The questions that Generative Artificial Intelligence (Chat GPT) determines about the open questions generated are:

- Privacy and Security: Can the use of digital currencies violate the privacy of individuals' financial information? In general, how will the security and protection of digital currencies be ensured?

- Abuse: How can digital currencies be used for illegal activities and how can such abuse be prevented?

- Regulation: How should digital currencies be regulated? What types of tax policies should be implemented?

- Financial Stability: Will it ensure financial stability by seeing and assessing progress correctly?

- Technological Infrastructure: How ready is the technological infrastructure required for the implementation of digital currencies? Can this infrastructure provide enough security and scalability to support widespread use?

- Digital inequality: Could the proliferation of digital currencies increase technological inequalities? How to protect people who do not have access to digital payment systems?

- International impacts: How do digital currencies affect the international financial system? Specifically, how are cross-border transactions and payments regulated?

- Technological Risks: If security vulnerabilities or technical problems arise in the infrastructure of digital currencies, what problems could this cause?

- Competition with other digital currencies: How do central bank digital currencies compete with existing CBDCs of other countries and what is the relationship between these two digital assets?

- Social Acceptance: What is the social acceptance of digital currencies? How quickly do people adopt this new technology?

One of the important stages is to see and evaluate the progress. A lot of discussion, a lot of analysis is necessary. Gradually, states and people will find answers to all the interesting questions.

Cryptocurrencies, especially popular ones like Bitcoin and Ethereum, have various effects on the global economy. These effects can be both positive and negative and manifest in different aspects. Let's examine the effects of cryptocurrencies on the economy under the following headings:

#### 1. Financial Innovations and Technological Development:

Cryptocurrencies and blockchain technology have led to innovation in the financial sector.

Through these technologies:

- Financial services have become more accessible and efficient.
- Interbank and international payments can be made faster and cheaper.
- Various financial transactions are automated through smart contracts.

#### 2. Investment and Capital Markets:

Cryptocurrencies are seen as a new investment vehicle, and as a result:

• New investment opportunities have emerged. People and companies can make huge profits by investing in cryptocurrencies.

• Risk and volatility have increased. This market carries high risk as the prices of cryptocurrencies change frequently.

#### 3. Monetary Policy and Central Banks:

• Wide spread and use of cryptocurrencies affects the monetary policy of central banks:

• Control over the money supply decreases. Cryptocurrencies offer a financial system beyond the control of central banks.

• The effectiveness of monetary policy decreases. With the rise of cryptocurrencies, the impact of central banks' interest rates and monetary policy decisions on the economy may weaken.

#### 4. Regulatory and Legal Framework:

• The legal status and regulation of cryptocurrencies differs from country to country:

- The need for regulation is increasing. Governments and central banks should develop new laws and regulations to regulate the use and trading of cryptocurrencies.
- Fight against illegal activities. The anonymity of cryptocurrencies can in some cases be used for money laundering, tax evasion and other illegal activities.

#### 5. Macroeconomic Effects:

- Cryptocurrencies can also affect macroeconomic indicators:
  - Inflationary and deflationary pressures. The use of cryptocurrencies may lead to inflationary pressures in some countries or, conversely, the threat of deflation.
  - Economic growth. Cryptocurrencies and blockchain technology can influence economic growth by creating new jobs and sectors.

Cryptocurrency (cryptocurrency) is a digital or virtual currency that provides security using encryption technology. They are mainly decentralized currencies, meaning they are not controlled by any central bank or government. The most popular example of cryptocurrencies is Bitcoin, but there are also Ethereum, Ripple, Litecoin, and numerous other types.

**Key Features of Cryptocurrency**  
**Decentralization:** Cryptocurrencies are not governed by centralized authorities, but instead operate through global computer networks based on blockchain technology. **Encryption:** Sophisticated encryption algorithms are used to ensure the security of transactions. **Blockchain:** This technology ensures transparency and immutability of transactions. Each transaction is stored in a chain block. **Anonymity:** Users' identities can be kept private, but transactions are public and traceable.

**Global Accessibility:** Anyone with an internet connection can use cryptocurrencies from anywhere in the world.

#### **CONCLUSION**

**Cryptocurrency Advantages**  
**Security:** Encryption and blockchain technology ensure the security and immutability of transactions. **Low Transaction Costs:** No high commission fees charged by banks and other financial institutions. **Speed:** Transactions can be done faster than traditional banking transactions.

**Anonymity:** Users cannot be identified, which protects privacy.

**Digital Use of Cryptocurrency.** Cryptocurrencies can be used in various fields. It can be used for online shopping, investing, transferring funds and even in some cases paying for services and products. Also, buying and selling transactions are carried out through cryptocurrency markets.

#### **Literature**

1. "Strategic Roadmap for the perspective of the National Economy of the Republic of Azerbaijan" approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016. Baku, 2016.
2. "State Program for the Development of Industry in the Republic of Azerbaijan for 2015-2020" approved by the Decree of the President of the Republic of Azerbaijan dated December 26, 2014. Baku, 2014.
3. "Azerbaijan 2020: vision of the future" development concept approved by the Decree of the President of the Republic of Azerbaijan dated December 29, 2012. Baku, 2012.
4. The methodology of forecasting and modeling of state revenues approved by the decision No. Q-05 of the Ministry of Finance of the Republic of Azerbaijan dated May 10, 2012. Baku, 2012.