

December 13, 2018
Discussion Paper v80

Contents

tra	ategy concept	7
•	Evaluation of the current development level of the Republic of Uzbekistan	8
•	Dynamic development scenario for the Republic of Uzbekistan	10
•	Global trends affecting the development of the Republic of Uzbekistan	12
•	Key development challenges of the Republic of Uzbekistan	16
•	Concept of the Development Strategy of the Republic of Uzbekistan until 2035	19
•	Establishment of the Reform Management Center of the Republic of Uzbekistan	22
•	Macroeconomy and financial support of the development of the Republic of Uzbekistan	24
	- Macroeconomic parameters	24
	- Tax system	27
	- Investment	30
	- State budget	32
	- Capital amnesty	33
	- Privatization and the Unified National Fund	39
•	Trade development	43
•	Urbanization	45
•	Target development indicators of the Republic of Uzbekistan in 2035	46
•	Key milestones of the Strategy: "Strategic ladder"	50
•	Necessary steps for implementing the Strategy in 2019–2020	51
•	National security	52
•	National idea	60

Contents

Development Strategy by focus area	63	
1. Development of public governance	64	
1.1 Executive authority 1.2 Legislative authority 1.3 Judicial authority	. 65 . 77	
2. Economic development	94	
2.1 Agriculture 2.2 Industry 2.2.1 Textile industry 2.2.2 Fuel and energy industry 2.2.3 Mining and metallurgical industry 2.2.4 Automotive industry 2.2.5 Chemical industry 2.2.6 Transport 2.3 Construction industry, utility and communications infrastructure 2.4 Tourism 2.5 Small business and private entrepreneurship 2.6 Financial system 2.6.1 Banking system and compliance 2.6.2 Insurance and pension system 2.6.3 Capital markets	113 120 140 156 162 169 187 200 207 229 230	
3. Social development	273	
3.1 Health care 3.2 Social policy 3.3 Human capital 3.4 Culture 3.5 Environment	313	
4. Development of technology and innovations	347	
4.1 Science, technology, and innovations	. 348	
5. Appendix to the Breakdown	372	
5.1 Tax system	. 373	

Contents

Appendices	389

Appendix 1: Glossary	y
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390

Appendix 2: Forecast of the Target Development Indicators of Uzbekistan until 2035 402

2.1 Purpose of the forecast model	404
2.2 Principles of building the forecasting model	405
2.3 Main parameters of the forecasting model	406
2.4 Main blocks of the forecasting model	407
2.5 Results of the calculation	408
2.6 Additional calculations	415
2.6.1 State budget of the Republic of Uzbekistan in 2018–2035	416
2.6.2 Investment: Areas and sources ·····	426
2.6.3 Analytical summary on privatization of state assets	434

Strategy concept

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Evaluation of the current development level of the Republic of Uzbekistan





Employment by sector









GDP per capita

1,485

global ranking

Inflation

14%

FDI

0.91

Tax receipts

5.4 USD billion

Social indicators³, 2017

32.8 million people

Population growth rate

Under 25 years old

72.3 years Average life expectancy

8.9% of able-bodied population

Registered unemployment

51%

International ratings, 2017



165

74 of 190

114

of 193

UN Telecommunication Infrastructure Index (TII), 2018

150

of 209

Bank Governance Indicators



of 193

E-Government Development Index, 2018





Evaluation of the current development level of the Republic of Uzbekistan

Current indicators of the Republic of Uzbekistan compared with other countries, 2017

Economic development



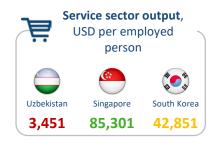




Economic output







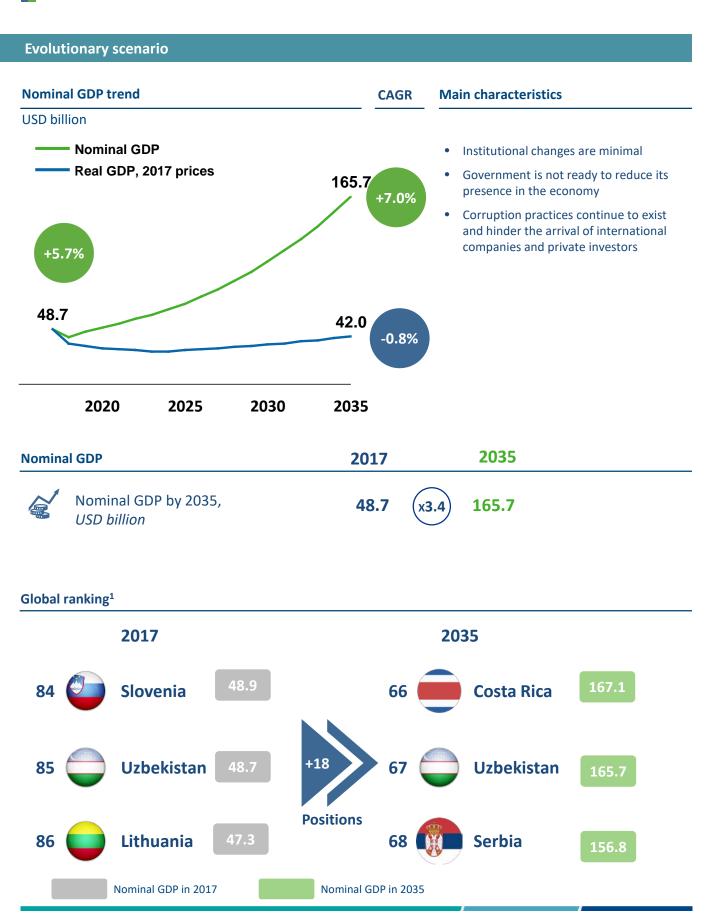
Quality of life



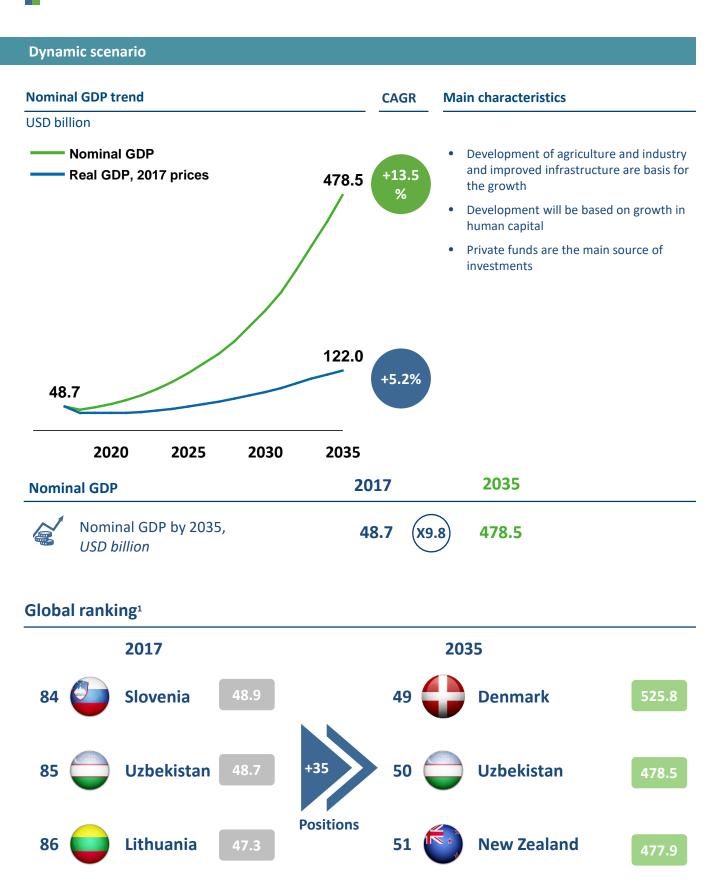




Dynamic development scenario for the Republic of Uzbekistan

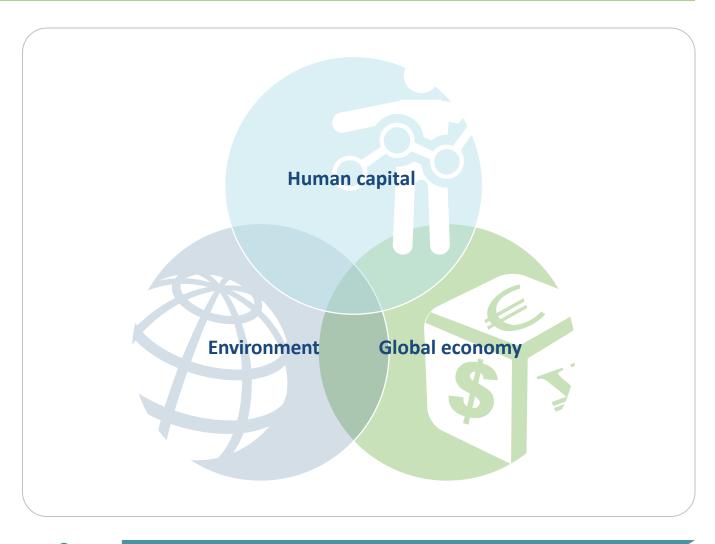


Dynamic development scenario for the Republic of Uzbekistan



Global trends affecting the development of the Republic of Uzbekistan

Megatrends





Demography

Personal development

Technological potential



Economic interrelations

Public debt

Change in economic centers



Climate change

Scarcity of resources

Urbanization

Human capital

Human capital

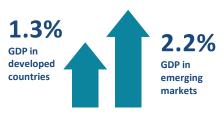


Demography

Will the state be able to provide respectable pay to pensioners?

Increased life expectancy and declining birth rates increase the share of elderly people around the world, which reduces the paying capacity of the social security systems, including pensions and health care.

In 2011–2035, pension support around the world will **grow** by:

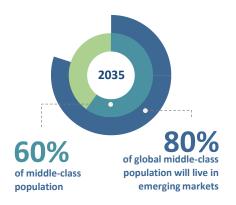


Some regions face the problem of integrating a large number of young people into saturated labor markets.

Personal development

How does the state improve provision of services? How can I affect this process?

Achievements in education, health care, and technology helped raise a new generation that makes higher demands for transparency and wants to take part in the decision-making process. These changes will continue, and by 2035, there will be more middle-class people than poor.



Technological potential

What will my children do in 2035?



of global information has been created in the last two years

Information and communications technology (ICT) has transformed society over the last 30 years. A new wave of technological achievements today creates new opportunities and tests the state's ability to use technological advantages and provide reasonable oversight of technology's development.

More pensioners

If the current population growth rate maintains, the population of Uzbekistan by 2035 will be 42.1 million people, while the number of working people per 1 pensioner¹ will decline. While in 2017 there were 6 working people² per one pensioner, by 2035 this ratio will drop to 1:4. The pension fund amount of the Republic of Uzbekistan is USD 743 per one pensioner. (in South Korea: USD 80,000 per 1 pensioner).

Middle-class reserve

The middle class is not the dominant class in Uzbekistan; its current share in Uzbekistan is about 28–30%. However, the largest population group (45–48%) consists of a middle-class reserve – citizens who will become the major class in the country subject to further growth in prosperity and economic growth. One of the main problems in the middle-class reserve's development is the absence of social ladders.

Innovations and ICT

In Uzbekistan, the ecosystem facilitating the development of innovation and ICT is practically nonexistent. In particular, technology parks, business incubators, crowdfunding platforms, and other necessary elements of innovative infrastructure are at the initial stage of development. Use of ICT is also at the development stage: Uzbekistan is ranked 95th in the world in the ICT Development Index.

Note: 1 – males older than 60 and females older than 55; 2 – males aged between 15 and 59 and females aged between 15 and 54

Global economy

Global economy



Economic interrelations

How will the state facilitate the development of international relations?

An interconnected global economy will demonstrate further growth in international commerce and investments, but it requires development of international cooperation for progress and mutually advantageous economic

benefits



Exports from Asia are expected to double to:

39%

of total global exports by 2035

Public debt

How does the state balance the decline in foreign debt and stimulation of economic growth?

Should the existing trends continue, **global government debt** will reach



98%

GDP by 2035.

Government debt is expected to become a significant limitation for governments. Governments' ability to control foreign debt and at the same time find new ways to provide public services will determine the success of the response by the governments of these countries to the main social, economic, and environmental problems.

Change in economic centers

How does the state adjust to a new economic order?

The level of prosperity in emerging markets is growing, which creates a significant influence on the global economy. Thanks to changes in the balance of economic points of growth, national governments must pay more attention to supporting the transparency of their activities and increasing inclusiveness.



Emerging markets will comprise 440 clusters responsible for

47% global GDP growth in 2035.

Growth in international trade

In 2017, Uzbekistan had commercial relations with over 160 countries. The trade balance is positive: USD 880 million. The country's foreign trade turnover in 2017 grew by 11% to USD 26.9 billion. Export from Uzbekistan amounts to USD 13.9 billion and has been stable since 2010. Methodical work is conducted to get prepared for accession to the WTO, and a respective road map has been adopted.

Foreign debt

Uzbekistan's foreign debt at the end of 2017 was about USD 16.9 billion. The Republic of Uzbekistan is ranked 99th in the world by gross foreign debt.
National debt to GDP ratio is low, 16%. It might increase, which would reduce the lending cost by attracting international loans.

Public governance efficacy

There are factors in the Republic of Uzbekistan that negatively affect the efficacy of the system of executive authority, which include a high level of corruption, the absence of a comprehensive goal achievement control system, low effectiveness of parliamentary control, excessive control over mass media, and the absence of a developed system for training senior executives, which reduces the results of government projects and leads to inefficient use of funds.

Environment

Environment



Climate change

How will the government ensure the protection of personal and business assets from the consequences of climate change?

Greenhouse gas emissions, which increase the average annual temperature, as well as desertification and other climate changes impose additional costs on the state.

By 2035, global government spending on fighting the consequences of climate change may reach

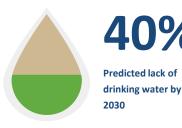
1% of global GDP each year

For most countries, achieving the right combination of a climate change adaptation policy and mitigation of its consequences by 2035 will be a difficult challenge.

Scarcity of resources

How do we provide children with enough food, drinking water, and energy?

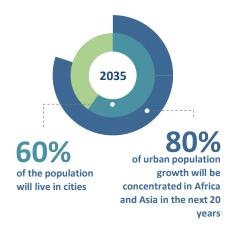
Population growth, economic growth, and climate change will increase the burden on the main natural resources, including water, food, crop lands, and energy. Sustainable management of resources will be central to new government programs.



Urbanization

How should we design infrastructure to make it modern, efficient, and eco-friendly?

Nearly 2/3 of the global population will live in cities by 2035.
Urbanization creates significant opportunities for socioeconomic development and a more stable life, but it also increases the burden on infrastructure and resources, especially on water and energy resources.



Rising air temperature

The air temperature growth rate in Uzbekistan is twice the global rate and reached 0.29 degrees per decade since the 1950s. The frequency of extreme weather phenomena is the highest in the area of Karakalpakstan. The Aral catastrophe aggravated the climatic conditions in the region: in the Aral Sea region, the number of days with a temperature above 40 degrees has doubled (vs. 1.5 times on average around the country).

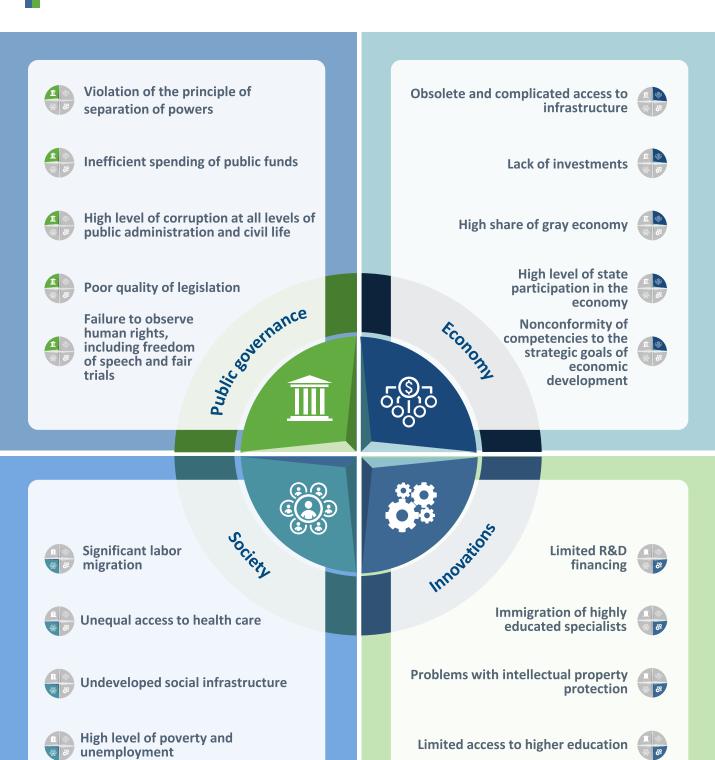
Access to water

Over 30% of households do not have quality drinking water, and over 1,000 settlements have no drinking water at all. The water quality is low, and water is contaminated with microbes and chemicals due to poor waste water treatment and water purification infrastructure. Contamination increases amid high temperatures and leads to an increased number of gastrointestinal illnesses during the summer.

Share of urban population

In recent years, the share of the urban population in the total population slightly decreased (2011: 51.2%; 2017: 50.6%). This is due to extra natural growth of the rural population over the urban population and the absence of artificial conversion of some rural settlements into urban settlements.

Key challenges of the Republic of Uzbekistan



Water shortage

Poor development of high-tech and

science-based production

Key challenges of the Republic of Uzbekistan



Political challenges

- Violation of the principle of separation of powers
- The Republic of Uzbekistan is ranked 158th out of 165 countries in the Democracy Index 2017
- 1 Inefficient spending of public funds
- There are no modern project management systems
- High level of corruption at all levels of public administration and civil life
- The Republic of Uzbekistan is ranked 157th out of 180 countries in the Corruption Perceptions Index 2017.

1 Poor quality of legislation

- Few specifics, ambiguous interpretations
- Failure to observe human rights, including freedom of speech and fair trials
- The Republic of Uzbekistan is ranked 165th out of 180 countries in the World Press Freedom Index 2018.



Economic challenges

- Obsolete and complicated access to infrastructure
- Over 35% of water lines and water supply networks need urgent repairs, internet speed is 19 Mbps compared to the average global speed of 32.5 Mbps, electricity loss rate during transmission is 15%

12 Lack of investments

 In 2017, gross fixed capital formation amounted to USD 12 billion, which accounted for 25% of GDP, while in other countries, such as Turkey and South Korea, the amount of investments equals or exceeds 30% of GDP

13 High share of gray economy

- As estimated by experts and representatives of public authorities, the share of the gray economy in certain sectors may reach up to 50%
- High level of state participation in the economy
- The share of state ownership exceeds 50% in the following sectors: banking, mining, energy industry, food industry, cotton industry
- Nonconformity of competencies to the strategic goals of economic development
- Lack of able-bodied population with skills in engineering, economics, and business: 36%

Key challenges of the Republic of Uzbekistan



Social challenges

- **01** Significant labor migration
- 17 Unequal access to health care
- 03 Undeveloped social infrastructure
- **04** High level of poverty and unemployment
- **05** Water shortage

- A significant portion (almost 1/3) of the able-bodied population of the country works abroad (85% of them in the Russian Federation)
- The health care financing system mostly relies on private payments. Personal expenditures in the healthcare system account for up to 45%
- Uzbekistan is an outsider in the rating of capital investments in health care, and there is no ICT mainstreaming
- About 10% of the population of Uzbekistan live in conditions of extreme poverty (less than USD 1.95 per day), and the estimated level of unregistered unemployment is 35%
- Over 10% of the rural population do not have access to drinking water



Technology challenges

- 1 Lack of highly educated specialists
- 12 Limited R&D financing
- Problems with intellectual property protection
- 04 Limited access to preschool and higher education
- Poor development of high-tech and science-based production

- In the employed population of Uzbekistan, research scientists account for 0.12% compared to the median of 0.65% in the leading countries
- R&D financing in Uzbekistan amounted to USD 133 million in 2015 (in Sweden: USD 16.2 billion, in the USA: USD 599 billion)
- Unfair competition occurs often in the field of intellectual property, including duplication of products of international companies
- The level of access to higher education in Uzbekistan is low: 9.2% of the population (in Japan: 63%)
- The share of innovative enterprises in 2016 was
 0.85% of the total number of companies (in EU: about 49%)

Development Strategy of the Republic of Uzbekistan until 2035





Development of public governance

- Executive authority: strict compliance with laws and focus on the result
- Independent legislative and judicial authority



Economic development

- High-tech and export-oriented agroindustrial complex (AIC)
- Industry: sustainable transition to industry 4.0
- Tourism without limits
- Modern infrastructure
- SME support and development1
- Free financial market



Social development

- Public-private health care
- Targeted social policy
- Human capital as the main growth factor
- Culture: bring up a generation
- Environment: change of paradigms and transformation of views



Development of innovations and technology

 Science, technology, and innovations: on the path toward innovative development



Macroeconomics and financial support

- Fiscal policy for business growth
- Balanced monetary policy
- Floating rate currency policy
- Unique opportunities for investments
- Phased privatization



Key milestones of the Strategy

Preliminary stage (2019–2020) and three 5-year milestones

(2020 – 2025 – 2030 – 2035)

Stage C

Development Strategy of the Republic of Uzbekistan until 2035





Development of public governance

- Executive authority: implementation of top-down initiatives, strict compliance with laws and focus on the result, transparency and control, creation of the Reform Management Center of the Republic of Uzbekistan (under the President's Administration)
- Legislative authority: independence of the branches of powers, optimization of the legislative framework
- Judicial authority: protection of human rights and the rule of law



Economic development

- Agriculture: high-tech agriculture through the development of medium-sized farms and agroclusters
- Industry:
 - Textile industry: specialization in branded products using available raw materials
 - **Energy industry:** increasing the share of renewable energy sources (RES) and setting up a water-power consortium
 - **Fuel industry and mining and metallurgical industry:** privatization and attraction of international players
 - **Automotive industry:** attraction of a large number of international automotive concerns and exportoriented production using new technology
 - Transport: arrival of private players, privatization of non-core assets, and reduction in cost of logistics
- Infrastructure: renovation and construction through public-private partnership (PPP)
- **Tourism:** implementation of tourism's potential, facilitation of visa scheme, and creation of infrastructure through PPP
- **SME and private entrepreneurship:** mixed financial and nonfinancial support to reduce the shadow economy and to increase the number of enterprises and ensure their growth
- Financial system:
 - **Banking system:** gradual liberalization of the banking sector along with the creation of development institutes at the intermediate stage
 - Pension system: transition to a three-level pension system similar to Australia and the USA
 - **Insurance system:** development of compulsory forms of insurance to increase the overall prosperity of citizens and to reduce the state's influence

Development Strategy of the Republic of Uzbekistan until 2035





Social development

- **Health care:** mixed public-private model: availability of compulsory health insurance, development of private service providers, focus of the state on the needy
- **Social policy:** high targeted coverage through nonfinancial measures and development of corporate social responsibility (CSR)
- Human capital: maintaining affordable public education along with development of private providers, export of highly skilled workforce
- **Culture:** bringing up a cultural generation and formation of the country's national brand by developing the highest-level demand for intellectual services, art, and creative work
- **Environment:** elimination of accumulated damage and migration to careful use of natural resources by introducing restrictive government measures and raising people's environmental awareness



Development of innovations and technology

• **Science, technology, and innovations:** creation and development of an innovation center in the sectors driving Uzbekistan's economic growth by involving international companies and experts



Macroeconomics and financial support

- Fiscal policy: reducing the share of indirect taxes and implementation of long term tax administration
- Monetary policy: gradual decline in the key rate from 16 to 9% and increase debt from 16 to 38.7%
- Currency policy: floating exchange rate
- Investment:
 - Total amount: USD 993-1,213 billion for 17 years
 - Main sources: direct investment, including PPP, public investment, and investment from corporate securities
 - Main expenses: agriculture and industry, infrastructure, education, health care, and social sphere
- Privatization: phased complete privatization and creation of a state operator with migration to financial holding
- Budget policy: limiting the growth rate of budget expenditures to 13.5%, implementation of tax reform, budget surplus from 2024 onwards

Development Strategy of the Republic of Uzbekistan until 2035



Initiatives within the matrix of the key management solutions will help to achieve the goal to enter the Top							
	lobal econd			21116	ant solutions will licip to delil	eve	the goal to effect the 10p
	1		By 2025		By 2030		By 2035
	Economic development	•	Long-term rights to land use "Made in Uzbekistan" brand in agriculture and textiles Infrastructure modernization Support of entrepreneurship Production localization Renewable energy sources Initial public offering of the key mining and metallurgical companies	•	Land privatization Increase in labor output (agriculture) Processing depth (agriculture, MMI1, FEC2) Insurance development Energy efficiency Export-oriented clusters Water and energy balance Electric vehicles and gasoline	•	Economy digitalization Agriculture automation Sustainable production that helps minimize adverse environmental impact
2021							
Action strategy for 2017–2021	Development of innovations and technology	•	Basic science Intellectual property protection Engagement of international companies in creation of R&D centers and design engineering bureaus	•	Creation of an innovative ecosystem	•	Infrastructure facilitating the expanded use of technology (technology transfer centers)
Action stra	Social development	•	Compulsory medical insurance Development of private education "Water" national project Implementation of measures to prevent the consequences of climate change	•	Implementation of pension reform Targeted social support Urbanization of the population	•	Raising environmental awareness
	Development of public governance	•	Reform Management Center Development institutes National Privatization Fund Furthering democratic reforms	•	Meritocracy Zero tolerance to corruption "Smart regulation" Freedom of speech and independent media	•	E-government Pluralism of opinions Enhanced role of democratic institutions
	ncing	•	Privatization Capital amnesty Implementation of tax reform	•	Public-private partnership Private investments Development of capital markets	٠	Private investments

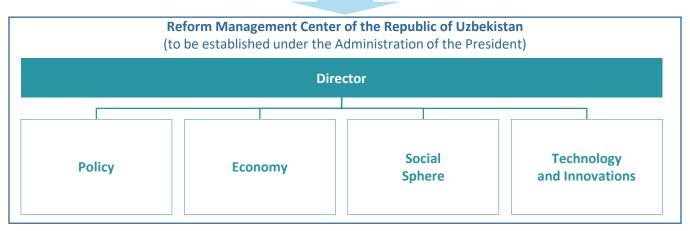
Note: 1 = mining and metallurgical industry; 2 = fuel and energy complex

Source: international benchmarking, analysis of the working group

Creation of the Reform Management Center of the Republic of Uzbekistan (in the structure of President's Administration)

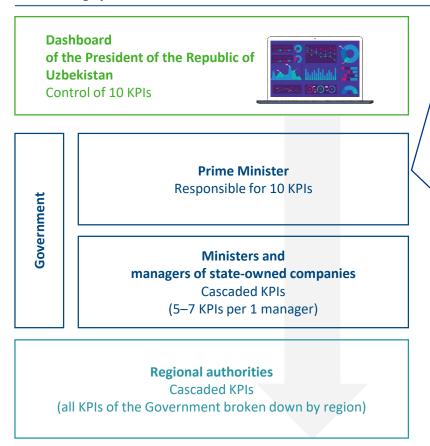
Structure of the Reform Management Center of the Republic of Uzbekistan

President of the Republic of Uzbekistan



Does not require additional costs to establish: the Project Office is organized under the Administration of the President, and current competencies are sufficient to launch it

KPIs setting system



10 KPIs of the Government

- 1. GDP
- 2. GDP per capita
- 3. Inflation
- 4. Amount of investment
- 5. Unemployment
- 6. Share of disadvantaged population
- 7. Doing Business Index
- 8. Corruption Perceptions Index
- 9. Health care expenses
- 10. Education expenses

The total base of KPIs will comprise over 1,000 KPI: cascaded KPIs from 10 KPIs of the President of the Republic of Uzbekistan

Macroeconomic parameters

Fiscal policy

2017

2035

Total tax burden, % of income



38%



29%



Public expenses, % of GDP



16.1%



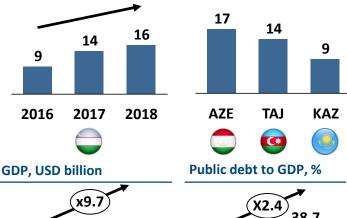
17.8%



- Uzbekistan must reduce the tax burden on businesses to stimulate private sector growth
- At the same time, it is necessary to increase public transfers to improve societal living standards

Monetary policy

Refinancing rate, 2018



- 38.7
- 16.0 2017 2035
- Uzbekistan must reduce its refinancing rate gradually because a high rate significantly restricts business development and household consumption. Gradual decline of the refinancing rate from 16 to 9% (2016 level): with economic growth and decreased volatility of the national currency exchange rate
- Decrease in the cost of lending may become possible by attracting international loans. The debt burden must increase from 16.0 to 38.7%. With the growth of nominal GDP, the opportunities for Uzbekistan to increase its state debt will grow as well

Currency policy

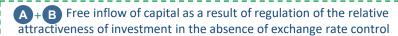
48.7

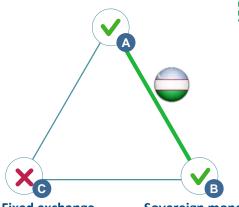
2017

Free flow of capital

478.5

2035





Sovereign monetary **Fixed exchange** rate policy

- **B** + **C** Control of the exchange rate and monetary policy of the country, but capital outflow in case of nonconformity of the monetary
- A + C Control of the exchange rate and flow of capital, but impossibility to influence the country's monetary policy

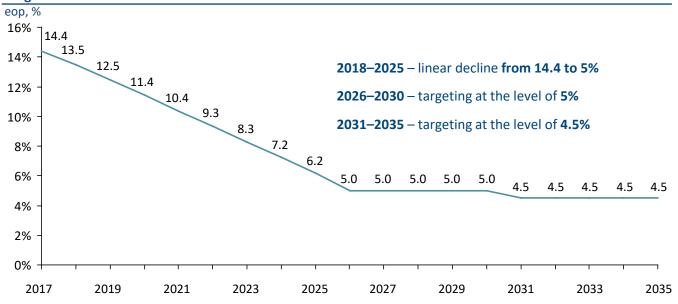
policy conditions to the level of relative competitiveness

Uzbekistan must retain a floating exchange rate since it favors the inflow of foreign capital and at the same time maintains the possibility to implement an independent monetary policy

Macroeconomic parameters

Target inflation levels amid the targeting policy

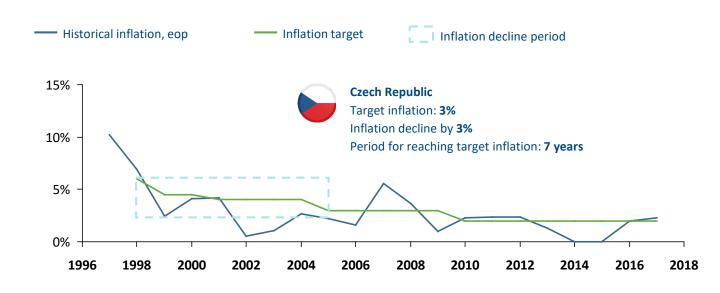
Target inflation levels in Uzbekistan



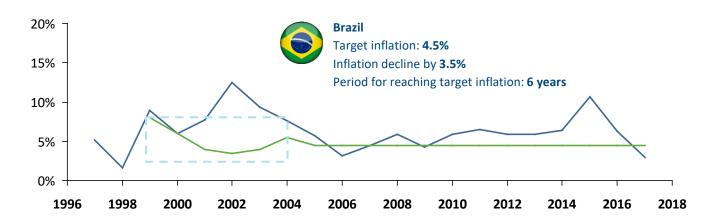
- Price growth for key imported goods. Target inflation by 2035 will be 4.5%. This indicator was calculated based on international benchmarks, including Singapore and Brazil
- In the longer term, the target inflation indicator may be 2–3%, which is an optimal value amid a stable economy
- The period for reaching the target inflation rate in the Republic of Uzbekistan will be about 7 years after the start of the targeting policy. A similar period of inflation decline was observed in the Czech Republic and in Brazil
- The suggested scenario for reaching the target inflation is more conservative compared to Mexico, where target inflation was reached within 3 years
- The interest rate of the central bank on short-term loans remains the main tool of inflation targeting. The increase in this rate will reduce lending to the real sector of the economy. As a result, the population and business reduce their expenses and the demand for goods and services declines, which contributes to the slowdown of price growth
- The preservation of a high interest rate may have an adverse effect on the national economy. Based on the example of Brazil, inflation targeting by the high key rate instruments caused a decline in economic growth and the deterioration of a number of macroeconomic indicators, including those of the state debt
- Additional inflation targeting instruments facilitating the reduction in lending to the real sector may include an increase in required reserves and withdrawal of funds from the financial market through the sale of government securities
- Successful targeting requires a number of external factors affecting inflation to be considered:
 - Growth of prices for agricultural goods caused by a bad harvest
 - State regulation of prices for certain goods
 - Increase in government expenditures
 - Existence of monopolies in some industries

Macroeconomic parameters

International examples of inflation targeting







Tax system

Current level of development



Key challenges

- High tax burden
- Frequent changes in tax rates
- Complexity and instability of the tax legislation (The Tax Code is not a directly applicable law.)
- Significant difference in the level of tax burden between the simplified tax system and the common tax system
- Wide use of "tax schemes" to evade taxation
- Widespread practice of supporting business entities through tax and customs benefits
- Lack of taxation concepts recognized at the international level
- Imperfection of tax control and administration

Key findings

- Indirect taxes provide 54% of the budget. Their share in the tax revenue increases, and the share of direct taxes decreases. (VAT provides more than one-third of the budget.)
- The main taxpayer is industry that provides 65.7% of tax payments among large entities. In industry, more than 52% of taxes are provided by the food and fuel industries.
- Frequent changes in tax rates negatively affect the investment climate.
- The Tax Code is not a directly applicable law, which leads to a significant number of bylaws. Tax rates are annually established by decisions of the president of the Republic of Uzbekistan.
- The Republic of Uzbekistan has a high tax burden that hinders the development of the economy, in particular, the marginal rate on investments is 49% (23% in Georgia).
- The high tax rate on the wages fund leads to concealing the real number of employees and the wages fund by taxpayers (about 50% of the nominal salary level).
- The practice of supporting business entities through tax and customs benefits, including individual ones, which negatively affects fair competition due to the absence of an effective system of monitoring and control of the efficacy of such benefits (the total amount of targeted fiscal benefits in 2017 is more than UZS 48 trillion).
- Significant difference in the tax burden level between the business entities that pay taxes under the simplified and common tax systems
- The widespread use of "tax schemes" for tax evasion expressed primarily
 in the artificial splitting of a business into small companies that can apply
 a more favorable simplified tax system (confirmed by the ratio of the
 number of entities applying the "simplified tax system" to the number of
 entities applying the standard regime, 1 to 10)
- Significant share of the shadow economy as well as developed corrupt practices
- Uzbekistan ranks 64th among 190 countries in the Tax System Efficiency section of the Doing Business rating.
- Imperfect information exchange mechanisms between the government bodies and organizations, forms and methods of electronic tax administration and tax control

Tax system

Tax policy reform concept

On June 29, 2018, the president of the Republic of Uzbekistan with his Decree No. UP-5468 approved the Tax Policy Reformation Concept of the Republic of Uzbekistan.

According to the President's Decree, from January 1, 2019:

- Reduction of the tax burden on the labor remuneration fund through
- Improved taxation of the payers of common and simplified taxes with the optimization of turnover (revenue) taxes and improved criteria for starting application of the simplified tax system
- Implementation of measures to mitigate the adverse impact of tax policy improvement on the taxpayers of the simplified tax system
- · Improvement of the calculation and payment procedure of value added tax and excise tax

The main areas of tax policy improvement according to the President's Decree are:

- Reduction of the tax burden on the economy
- Elimination of disproportions in the tax burden level between the business entities that pay taxes under the simplified and common tax systems
- Optimization of the number of taxes through their unification and consolidation
- Assurance of macroeconomic stability
- Simplification of tax laws, elimination of discrepancies and collisions
- Assurance of tax legislation stability and direct application of the Tax Code
- Retention of a favorable regime for foreign investors
- Improvement of tax control forms and mechanisms



- The concept does not affirm the principles of long-term tax administration. (Further changes in tax rates are possible.)
- There are no specific time frames and volumes for reduction of tax and customs benefits.
- The predominance of indirect taxes in the structure of tax revenues of the budget remains.
- There is no source of financing the off-budget funds after cancellation of payments to them.

Comparison of the current and suggested tax rates and other mandatory payments

Tax/mandatory payment	Current rates	Proposed rates	Difference
Income tax	14%	12%	-2%
Tax on income in the form of dividends and interest	10%	5%	-5%
Unified tax payment	5%	4%	-1%
Mandatory contributions to state special- purpose funds	3.2%	0%	-3.2%
VAT	20%	20%	0%
Property tax	5%	2%	-3%
Personal income tax	7.5%–22.5%	12%	
Unified social tax	25% / 15%	12%	-3%
Insurance contributions of citizens	8%	0%	-8%

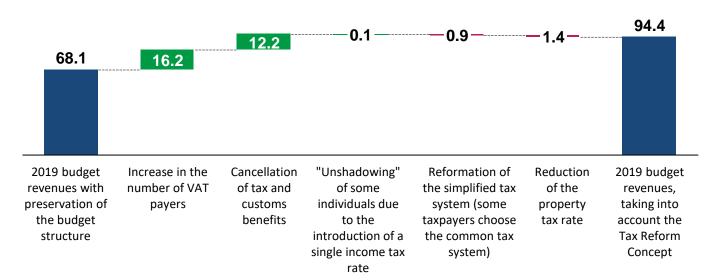
Sources: data from open sources, analysis of the working group.



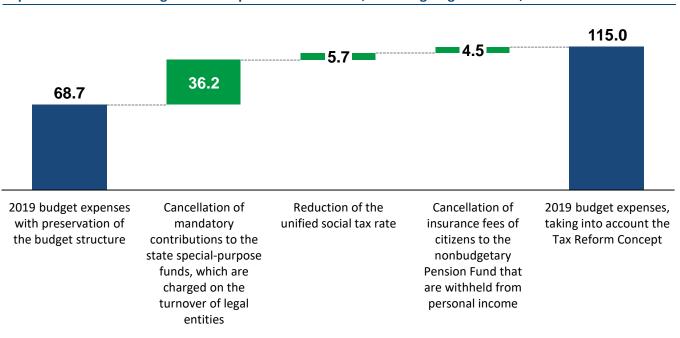
Impact of the Tax Reform Concept on the budget

Implementation of the Tax Reform Concept will increase budget revenues by UZS 26.3 trillion in 2019. However, it will require expenses to be increased by UZS 46.3 trillion in the same period.

Revenues of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



Expenses of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



Tax system

Strategic options

Anglo-Saxon option

Characteristics: Prevalence of direct taxes



Target development option

Examples of countries:



Relative stability and predictability



Tax burden imposed on citizens

Mixed option

Characteristics:

- Combines the features of various models
- Diversification of the revenue structure of the state budget



- Independence of the budget revenues from specific taxes or group of taxes and, as a result, flexible tax and budget policy



South Korea

- Potentially high expenditures on tax administration
- The mixed model is optimal for economies in which budget revenues are highly dependent on the situation in foreign markets.
- The mixed model allows rapid adaptation to changes in external factors by manipulating interest rates, expanding the base of taxpayers, granting/canceling benefits, etc.

Continental option

Characteristics:

- Priority of indirect taxes
- High contributions to social insurance





Latin American option

Characteristics:

- Typical of inflation economies
- High share of indirect taxes



Protection from inflation phenomena



High tax burden



Due to the specifics of indirect tax collection, savings on tax administration



Target vision of the tax system in 2035

Goal:

Creation of the modern soft tax system stimulating growth of investments and revenues of the budget of the Republic of Uzbekistan

Objectives:

- Further optimization of the tax burden by reducing the share of indirect taxes to 35%
- Compliance with a tax regime that ensures growth in tax revenues to the budget and allows competing in capital markets to attract foreign investments
- Transition to the principles of long-term tax administration
- Development of a special mechanism for investors with freezing of tax rates
- Development of an effective mechanism for granting benefits to taxpayers engaged in priority sectors of Uzbekistan's economy
- Further optimization and simplification of the tax legislation to ensure its stability and predictability for taxpayers

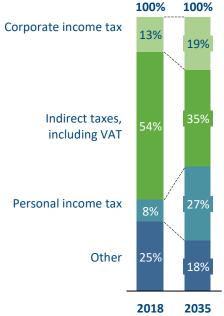
Figures				
	2017/2018	2035		
Doing Business rating	74	Top 20		
Taxation rating (Doing Business, DB)	64	Top 20		
Index of procedures after filing reports and paying taxes (0 = the lowest, 100 = the highest)	48.17 points	> 80 points		
Share of indirect taxes in tax revenues of the budget	54%	<35%		

Tax structure,

% of tax revenues of the budget

Areas of tax system reformation:

- General tax system structure: transition to long-term tax administration; improvement of taxation principles and the legal regulation of the tax system
- Tax structure: reduction in the share of indirect taxes; increase in the share of personal income tax in the long term
- System of taxes and fees: identification of conceptual problems broken down by individual taxes, implementation of the best global practices and trends in the field of taxation (BEPS, automatic tax information exchange, MLI, CbCr, CFC, TP, etc.)*
- Tax and customs benefits: cancellation of targeted benefits; introduction of industry benefits to stimulate certain industries
- Special mechanisms for investors: development of special mechanisms (similar to SPIC)** with freezing of tax rates for investors to attract long-term investments
- Tax control and administration: improvement of tax control procedures and settlement of tax disputes through the introduction of ICT and automation tools as well as advanced training of employees of tax authorities
- **System of legal liability:** improvement in the system of legal liability for the violation of tax legislation



Changes in the tax structure:

- The target state is calculated based on the benchmark of Japan and South Korea
- Increased personal income tax is associated with a 1.4-fold increase in the number of employed people by 2035, the legalization of incomes, and the increased level of wages. (An increase in personal income tax is the practice of developed countries.)

Investment: main areas

Source	s of expenditures	2019–2035 USD billion
1	Executive authority	0.7 – 0.8
2	Legislative authority	0.5 – 0.6
3	Judicial authority	-
4	Agriculture	67.6 – 82.7
5	Textile industry	21.5 – 26.2
6	Fuel and energy complex	73.8 – 90.2
7	Mining and metallurgical industry	45.0 – 55.1
8	Automotive industry	41.6 – 50.9
9	Chemical industry	40.5 – 49.5
10	Transport	40.6 – 49.7
11	Construction industry and infrastructure	128.64 – 156.9
12	Tourism	37.8 – 46.2
13	Small business and private entrepreneurs	30.1 – 36.8
14	Banks and compliance	17.2 – 21.0
15	Insurance system	1.8 – 2.2
16	Pension system	3.8 – 4.6
17	Capital markets	12.2 – 14.9
18	Health care	172.6 – 210.9
19	Social policy	42.2 – 51.6
20	Human capital	144.0 – 176.0
21	Culture	10.8 – 13.2
22	Environment	6.4 – 7.8
23	Science, technology, and innovations	53.5 – 65.4

Sources: World Bank data, open data of the UN, the Central Bank of Uzbekistan, analysis of the working group

Total expenses: (USD billion)

993 – 1,213

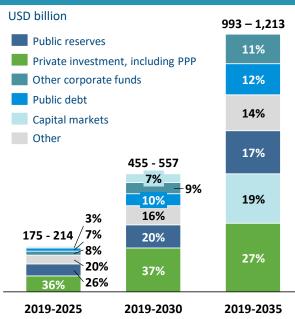
Investment: main sources

			scenario
So	urces of financing	- USD billion	2019–2035 USD billion
1	Private investment, including PPP (direct foreign, corporate and private investment, investment of PPP)	4.0 Including PPP	263–322
2	Public reserves	4.8	166–202
3	Capital markets (investment in corporate securities)	0.082	192–234
4	Other corporate funds (investment of insurance funds and deposits of legal entities)	1.1	112–137
5	Other funds of individuals (deposits of individuals and international money transfers)	1.7	113–138
6	Public debt (borrowings in the foreign market)	0.9	122–149
7	Funds from privatization (proceeds from the sale of state property)	5.4	25–31
8	Funds under the programs of international organizations (transfers and grants under the programs of international organizations)	0.004	0.05-0.06
	Average GDP growth rate: Total investment received:		13.5%

993-1,213

Dynamic

Investment attraction trend for the period

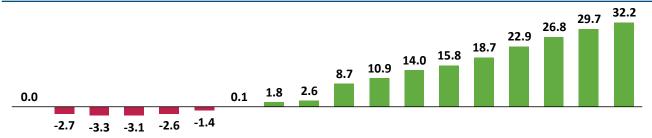


- At the early stages, in 2020–2025, considerable investment flow will be observed both under PPP programs and thanks to the arrival of international companies in the market. High economic growth makes public borrowings at a relatively low cost possible
- In 2026–2030, the state will play a less significant role. Local banks and capital markets increase their influence gradually by supporting economic growth together with corporate investors
- In 2031–2035, thanks to the active development of market mechanisms and establishment of the financial system, the role of project financing and indirect investment in the corporate sector through the capital market grows

State budget

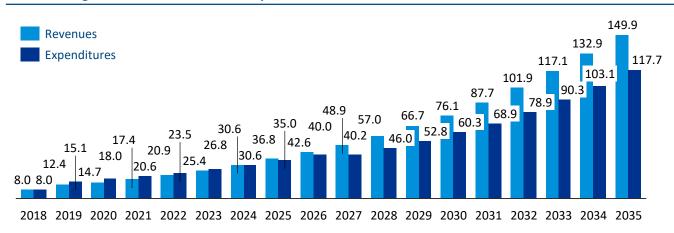
Forecast of the state budget of the Republic of Uzbekistan

Forecast of the surplus/shortage of the state budget with retention of the budget structure* and with due regard for the tax reform concept, USD billion



2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

Forecast of the surplus/shortage of the state budget with retention of the budget structure* and with due regard for the tax reform concept, USD billion



- Budget shortage will be observed for the first 6 years
- Implementation of tax reform stipulates a significant increase in budget expenditures in 2019
- In order to reach a budget surplus within 6 years, starting from 2025 it will be necessary to limit the growth rate of budget expenditures to 13.5% annually
- The tax reform concept provides for a significant increase in the burden on the state budget, in particular, due to the
 cancellation of mandatory contributions to state special-purpose funds, which are charged on the turnover (revenue) of
 legal entities; cancellation of insurance fees of citizens to the non-budgetary Pension Fund; reduction of the unified
 social tax rate for business entities from 25% (15%) to 12%, which will require UZS 46.3 trillion (USD 6 billion) to be
 allocated from the budget to cover the expenses that were previously covered from non-budgetary funds
- The main increase in budget revenues is provided through the expansion of the circle of VAT payers (UZS +16.2 trillion in 2019, or USD 2.1 billion) and cancellation of targeted fiscal benefits (upon cancellation of 25% benefits, the cumulative increase in budget revenues will make UZS +12.2 trillion or USD +1.6 billion)

Capital amnesty

Current situation



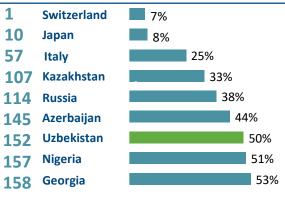
Key challenges

- High share of informal economy: up to **50%** of GDP
- Low inflow of foreign investments: USD **0.91** billion (for 2017)
- Excess of import over export: net export USD -1.7 billion (for 2017)
- Low lending from the banking sector: only 11% of fixed capital investment are financed by commercial banks (for 2017)

Key findings

- The Republic of Uzbekistan has a high share of the informal economy, that is, business activity that takes place outside the legal framework and is not subject to taxes and duties. According to the Ministry of Economy, the informal economy's share may be up to 50% of the current GDP level and is ranked 152nd in the world by this indicator (IMF rating)
- Such high proportion of the informal economy is a significant obstacle to the development of the financial system and the economy as a whole because it does not contribute to the volume of bank assets and tax base
- The high share of the informal economy is due to a number of factors, including:
 - Low level of confidence in the financial system
 - High level of corruption
 - High level of legal nihilism
 - Lack of privacy in the banking system and tax authorities

Size of informal economy as % of GDP and world ranking (of 159 countries in the list)



The IMF calculates the size of the informal economy and publishes the annual trends. As a specialized unit of the UN, the IMF is an authoritative source in the field of evaluation and forecasting of macroeconomic statistics

- The Republic of Uzbekistan is not officially included in the rating of countries by the level of the informal economy and is included in the IMF rating based on the Ministry of Economy's assessment
- The share of the informal economy reaches 50% of GDP, while the average is 32% based on the estimate of 159 countries

Share of funds in accounts and deposits and cash as % of the money supply at the start of 2018

Noncash money	Cash money	Ratio
15%	27%	0.55
49%	20%	2.45

Potential growth of funds in the banking system by reducing the circulation of cash

x4.45

• The high proportion of cash impedes the implementation of measures against corruption, informal economy, and tax evasion

• In the Republic of Uzbekistan, there is a high share of cash in the structure of the money supply and a low share of noncash funds

The ratio of noncash money to cash (0.55) is very low even compared to Russia (2.45), which is one of the most important indicators of the high share of the informal economy according to the IMF's methodology

Strategic options

1

_____ Target option for amnesty

Confidential amnesty of capital

Capital legalization through the payment of a tax in the amount of 2.5% of assets value or through the acquisition of state securities in the amount of 12% of the value. The state guarantees full confidentiality and cessation of prosecution by the tax authorities







Strong results of the amnesty program



- Legalization of funds obtained by criminal means is possible
- High level of public criticism, including demonstrations

Strong results of programs for capital legalization within the country and offshore capital repatriation

2

Amnesty of funds and property with mandatory declaration of their sources

Legalization of capital, affecting both cash assets and real estate and other assets. Return of funds to the national banking system is untaxed (provided that the funds will be maintained in accounts for 5 years), real estate is taxed as a one-time fee of 10% of the value. Civil servants are exempt from prosecution. The source of funds must be disclosed





Kazakhstan



Significant results of the program for capital amnesty within the country



 Low effectiveness of the program for capital repatriation from abroad

Strong results of programs for capital legalization within the country

3

Capital amnesty with mandatory declaration of sources of income not applicable to officials

It is possible to deposit funds into the banking system with payment of 1% to the state budget. Mandatory declaration of sources of funds. Persons who gained their income by criminal means and officials of the country are not allowed amnesty

Examples of countries:



Georgia



 Legalization of capital gained by criminal means is not allowed



 Low effectiveness of the amnesty program (collected funds are 100 times less than the expected amount)

Low effectiveness of the program with mandatory declaration of sources of income and not applicable to officials



Target vision of capital amnesty in the Republic of Uzbekistan



The basis of successful capital amnesty is anonymity and decriminalization as well as early warning of increased liability for tax evasion

Solution

- Signing of the law on tax amnesty and capital repatriation is carried out from March to December 2019
- Public speech by the President of Uzbekistan announcing the beginning of capital amnesty

Stages and methods of legalization

The return of capital under the amnesty program is possible through:

- **Placement of funds in resident banks** of Uzbekistan with the condition of keeping funds in accounts for at least 5 years and the right to receive interest on the balance in any available currency
- Purchase of securities of issuers of Uzbekistan or securities of the central government with the condition of holding them for at least 3 years
- Purchase of assets in the framework of the state program of privatization
- Or instead of the abovementioned measures, payment of compensation in the amount of 5% of the value of the amnestied property/asset

It is necessary to guarantee the following:

- exemption from filing a declaration, payment of tax debts, and verification of funds obtained before legalization
- liquidation of tax debt records, fines, and penalties for assets submitted for legalization
- complete confidentiality of all asset transfers to tax authorities and other government bodies and other persons

All current and former citizens of the Republic of Uzbekistan, including self-employed persons, entrepreneurs, and officials, **are admitted to the capital legalization program**

Work must begin on signing an agreement on tax information exchange and cooperation in the field of combating tax fraud with friendly jurisdictions (Luxembourg, Switzerland, and others)

- Additional fund raising to the banking system and capital markets of Uzbekistan in the amount of USD 15–25
 billion
- Reduced share of the informal economy and reduced corruption

Capital amnesty

Best practices in the world and Central Asia



Italy

Description of the situation and problems

- High proportion of income concealed from taxation
- Significant amount of expatriate capital
- Need for additional financing of the state budget
- High level of corruption in administrative bodies

Solution

The Italian Senate approved Law No. 186 dated December 15, 2014, which provides for voluntary disclosure of information, possibility of legalizing assets located abroad, and significant reduction in fines

Stages and methods of legalization

The 2014 program (Law No. 186 dated 2014) is designed specifically for capital repatriation from abroad as well as combating offshore tax evasion and illegal receipt of funds. This program **lasted for one year** and can be considered **the most progressive and comprehensive**

Assets disclosed under this law **were taxed at the full rate** with significant exceptions regarding monetary penalties for undeclared taxes and immunity from prosecution for tax crimes. However, participating taxpayers were required to provide their name and bank information and name intermediaries to allow the authorities to verify the origin of the assets

In 2015, Italy also **signed an agreement with Switzerland**, a privileged location for tax evaders from Italy, which provides for **measures for tax information exchange and cooperation in combating tax fraud.** In 2018, a system of automatic tax information exchange between the two countries was introduced. Under this agreement, Italy removed Switzerland from its blacklist of countries, with respect to which companies had to provide additional evidence on their transactions with companies

- As of the end of 2014, income from repatriated assets and declared taxes under the program reached EUR 4 billion
- In total, over EUR 70 billion was collected under the capital legalization programs

Capital amnesty

Best practices in the world and Central Asia



Kazakhstan

Description of the situation and problems

- High share of the informal economy
- Reduction in the inflow of foreign investment
- Decrease in trade balance and current account balance
- Reduction in lending by the banking sector

Solution

On June 30, 2014, the President signed a law on amnesty for citizens of the Republic of Kazakhstan, oralmen¹, and people with a residence permit in the Republic of Kazakhstan in connection with the legalization of their property

Stages and methods of legalization

Legalization began on September 1, 2014, and was to end on December 31, 2015, but the deadline was extended to December 31, 2016. All basic material assets – money, securities, shares in companies, real estate – were subject to legalization

At the first stage of legalization, an owner of shadow funds must transfer them to special savings accounts in second-tier banks or in Kazpost and then choose a scenario for further amnesty

The main scenario assumes that **the legalized funds will be held in accounts in banks** or Kazpost **for five vears**

If the owner does not want to hold the funds in accounts for five years, any securities placed on the Kazakhstan stock exchange may be purchased

According to the third scenario, it is possible to legalize funds by buying objects in the second stage of state privatization

An accelerated version of legalization is possible: capital amnesty by paying the state 10% of the value of legalized property

Civil servants are also exempt from disciplinary liability for violations of the rules for declaration of property and income

- The total amount of legalized property reached USD 20 billion, USD 7.8 billion of which was cash
- Significant results were achieved in the legalization of property within the country, but not in the expatriation of property moved from abroad

Capital amnesty

Best practices in the world and Central Asia



Georgia

Description of the situation and problems

- Large number of taxes and low transparency of legislation
- Low level of confidence in the current administration
- Need for additional financing of the state budget

Solution

On December 24, 2014, the President of Georgia signed a Law on amnesty and legalization of undeclared tax liabilities and property

Stages and methods of legalization

Amnesty meant the termination of proceedings initiated in all investigative bodies of cases related to violations of tax legislation for persons who voluntarily participated in this program

The cancellation of criminal records in connection with tax crimes in the manner established by law was also announced

A person taking part in the amnesty program had the right until the end of the year:

- to submit to the tax authorities a declaration reflecting their property status and to pay a fine in the amount of 1% of the market value of the concealed property
- to transfer funds in national or foreign currency to fixed term or savings deposits in commercial resident banks in Georgia by depositing cash or transferring funds from abroad

The law was not applied to:

- a) persons who obtained income (property) by criminal means, such as drug and arms trafficking, terrorism, human trafficking, and other transnational crimes
- b) officials

- Instead of the expected USD 4 million, the national budget receives only USD 35,000 from businessmen who evaded taxes
- Amnesty failed not because the relevant law was defective but because of businessmen's distrust of the government

Privatization and the Unified National Fund



Government property

Privatization and the Unified National Fund



Liquid assets

 Highly liquid assets, such as: shares and interest in companies, especially in fuel and energy, extraction and processing of resources



Nonliquid assets

 Low-liquid or nonliquid assets such as obsolete buildings, nonfunctioning property complexes



Strategic assets

 Assets in sectors critical to the development strategy of the Republic of Uzbekistan: industry, fuel and energy, infrastructure



Nonstrategic assets

 Assets beyond the scope of the development strategy

- Sale of assets at minimum cost
- Maintaining the production profile of the asset for 3–5 years after sale to a private investor
- Investor's assumption of investment obligations in connection with the acquired asset. For example, the creation and maintenance of jobs for citizens of Uzbekistan

Key objective: growth and development of Uzbekistan's economy; reduction in the government's share

Suggested steps:

- Attraction of active investors to co-investing
- Privatization in three stages (25% + 25% + 50% - 1)
- Control of persons who are allowed to participate in privatization

Key objective: cash inflow to the budget of the Republic of Uzbekistan; reduction in costs of the state budget

Suggested steps:

- Attraction of strategic/
- portfolio investors
- Phased privatization
- No strict control of persons who are allowed to participate in privatization

Share of the state in key sectors of the economy

2018-2035



Strategic investor's criteria

- International company
- Presence of significant experience in this industry
- Presence of relevant assets in the strategic portfolio (horizontal or vertical integration)
- Developed CSR

- Observance of sustainable development principles
- Access to funding sources and expert reviews
- "History of Success"

Privatization and the Unified National Fund

Privatization stages

Average annual growth of GDP in the dynamic scenario

"Wholesale privatization"

- Wholesale privatization will not provide for the maximum cost of assets being sold
- It will allow **property transfer** to potentially **undesirable**
- It will lead to **shock phenomena** in the key economic areas

Retention of state property

- It will hinder access to additional sources of investment at the beginning of development
- **It impedes** private international investment
- It requires additional financing for ineffective entities

Phased complete privatization

> "50% − 1" •

- Sends investors a signal about economic "denationalization"
- Allows one to **obtain a "fair" value** for the block of shares of the asset being sold
- Allows one to get rid of ineffective assets without shock phenomena

Investor enters the capital of the asset and facilitates

Investor has no veto

power

its enhanced performance.

Investor will increase

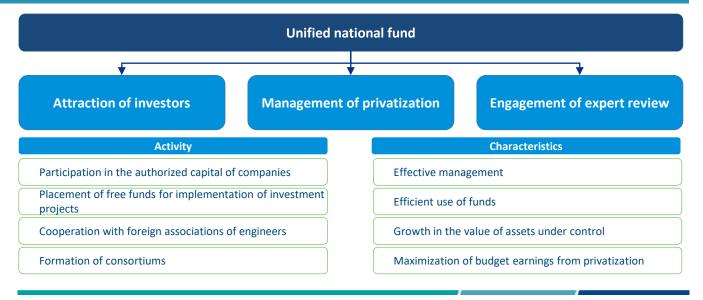
the ownership share and will facilitate the increase in market potential and value. The state reserves the right to a final decision

Investor will buy back the property from the state. The state reserves the "golden share", that is, veto power and dividends, but disengages itself from operational control.

"Golden share"

Implementation of phased privatization requires establishment of the Unified National Fund for the Management of State Assets and Privatization, which will also attract individual and corporate investors to the country and coordinate work with industry consultants

Structure and functions of the Unified National Fund for the Management of State Assets and Privatization



Trade development

Stimulation of internal and external trade

Incentives for stimulating internal and external trade





Internal

Development of an institutional environment

Stimulation of investment flows

Support of business activity of the population



Creation of favorable conditions for export

Support of national exporters

Establishment of foreign trade development institutes

Stimulation of export development



Financial support



Nonfinancial support

1 Insurance

7 Financing

3 Warranties

4 Settlement/currency

Information and educational block

2 Search for partners

3 Research

Support of export supplies (customs, IS, logistics, adaptation)

Unified Export Support Center

OR

Export-Import Bank

Export Loans
Insurance
Agency

Fund for Support of Export of Small Businesses and Private Enterprises

Uzimpexaloka

National Export Promotion Agency

Trade development

Stimulation of internal and external trade

Support instruments broken down by export cycle stages and blocks of nonfinancial support measures

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	
Blocks of support measures	Notification of export advantages, dynamics of readiness to export	Export planning, search for markets and partners, strategy development	Conclusion of contracts, product adaptation, manufacture	Certification, licensing, delivery of goods	Final procedures and accounting	
1 Formation of competencies		Educational products				
2 Launch of new markets		Search for potential partners		Representation of exporter's interests in government bodies		
		Ensuring participation in foreign exhibitions, business missions, product promotion				
	Industry analysis	Assistance in formation of				
3 Research	Country analysis	an export strategy				
J	Analysis of global trade	Launch of online platforms				
	Conducting patent research	Intellectual property protection		Logistics support		
4 Support of export supplies		Tender participation Certification and a support		nd adaptation	Representation of exporter's interests in government bodies	
		Consulting on certification and adaptation	Assistance with document management	Customs administration		

Accelerator for exporters

Financial support tools

Insurance

- Insurance of a supplier's loan
- Insurance of a loan to exportoriented production
- Insurance of Uzbek investments abroad
- Insurance of a loan to a buver
- Insurance of a confirmed letter of credit (SR)
- Insurance of export factoring
- Insurance of a loan for replenishing an exporter's working capital
- Insurance of guarantees
- Insurance of security deposits
- Insurance of a confirmed letter of credit (Multiple)
- Insurance of a risk of non-return of leasing objects
- Insurance of a risk of non-return of goods
- Insurance of a guarantor (counter guarantee)
- Insurance of an untied loan to a foreign buyer

Financing

- Financing of expenses under an export contract
- Financing of current expenses under export supplies
- Financing of an exporter's commercial loan
- Financing of commercial turnover with foreign buyers
- Direct loan to a foreign buyer
- Financing through a confirmed letter of credit
- Loan to a foreign buyer's bank
- Financing of an exporter's commercial loan
- Financing of factoring
- Investments into exporters' debt instruments
- Investment loans for local development

Warranties

- Tender guarantee
- Advance repayment guarantee
- Guarantee of proper performance under an export contract
- Payment guarantee
- Other guarantees
- Guarantees for the issuance of debt instruments

Settlement/currency

· Currency risk hedging

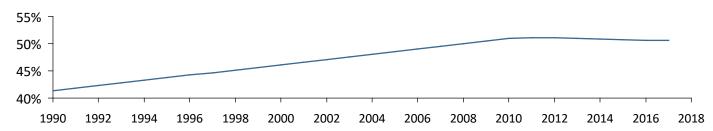
Urbanization

Urbanization

As estimated by UN, by 2050 68% of the world population will live in cities, and the urban population in Asia and Africa may increase by 90%. Urbanization is also expected to affect the population of Uzbekistan and produce a positive effect on the national economy

Uzbekistan has prerequisites for increasing the level of urbanization

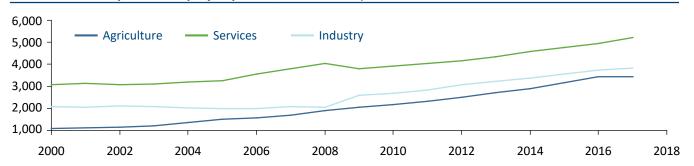
Share of the urban population, %



- As of 2017, Uzbekistan meets three main prerequisites contributing to increased urbanization:
 - Low urbanization the share of the urban population is 51%
- Low GDP level per capita the indicator is 6,865 international dollars by purchasing power parity
- Low level of economic industrialization over 19.2% of the economy is composed of agriculture1
- The main barriers constraining urbanization in Uzbekistan remain as follows:
- Restrictive administrative measures, e.g., registration system creating barriers to internal migration
- Absence of a large number of career opportunities in the cities
- Low industrialization in the cities

Urbanization may become one of the economic growth drivers

Real added value per one employed person, USD, in 2010 prices



- Urbanization contributes to change in the GDP structure towards an increase in the share of industries with a higher
 labor output, which also stimulates economic growth. Based on the example of China and India, urbanization growth by
 1% corresponded to growth of GDP per capital by 10% and 13%, respectively
- Despite a high level of state subsidies, **agriculture in Uzbekistan remains a less productive industry**. In particular, in 2017 the added value per one person employed in agriculture **was USD 1,800 less** than in service industries

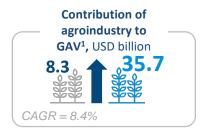
Target development indicators of the Republic of Uzbekistan in 2035

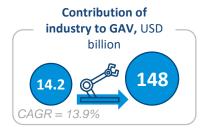
Stable macroeconomy



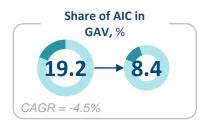


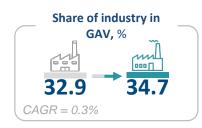


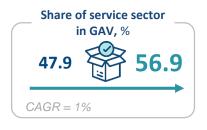








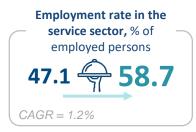


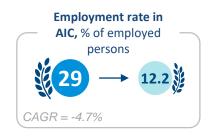


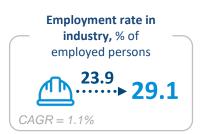






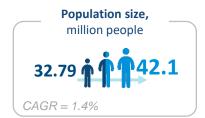


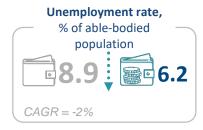




Target development indicators of the Republic of Uzbekistan in 2035

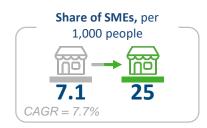
Stable macroeconomy





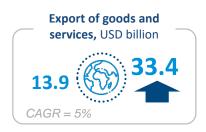














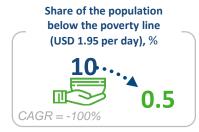




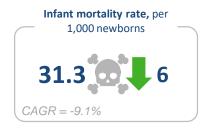


Target development indicators of the Republic of Uzbekistan in 2035

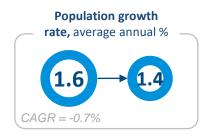
Living standards



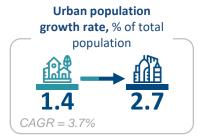




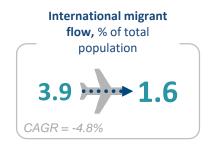




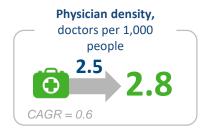














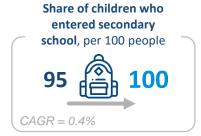
Target development indicators of the Republic of **Uzbekistan in 2035**

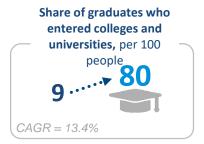
Living standards

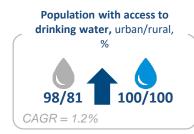
Share of children who entered primary school,

per 100 people









Infrastructure and resource efficiency

Water resources yield capacity, GDP/m3 of pure water



Annual water intake for agricultural needs, % of total amount



Subscribers connected to mobile communications,

subscribers per 100 people



Progress Index of the UN Sustainable Development Goals, score (of 100)



Communications subscribers who use mobile internet,



R&D expenses, % of **GDP**



Key milestones of the Strategy: "Strategic ladder" Step 3 2035 Enter Top 50 Integration leading economies of the world Migration to mature market economy Step 2 2030 Build technological **Innovations** economy with high-labor productivity Realization of economic and technological potential Step 1 2025 Investment Attract investment for a Active investment in powerful economic the strategic development impulse development goals **Foundation** 2020 **Institutions** Construction of systemand reforms wide and institutional

Action strategy for 2017–2021

foundation

2019

Institutions

- **Creation of the Reform Management Center of the** Republic of Uzbekistan (in the structure of President's Administration)
- Establishment of Development Institutions:
 - Unified SME support institution
 - Development bank
 - Invest in Uzbekistan
- Establishment of a national fund for privatization

• Privatization • Capital amnesty

Finance

- Implementation of tax reform

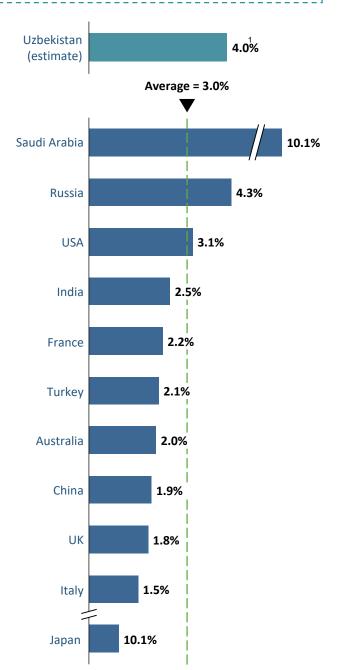
Society

- Introduction of compulsory medical insurance
- Preparation of pension reform
- Reform of public and development of private education
- "Water" national project
- **Furthering democratic reforms**

Expenses on supporting Uzbekistan's military-industrial complex are high compared to other countries

Share of military spending in the country's GDP, 2017

The share of military spending in GDP in Uzbekistan exceeds the average military spending of some of the top 15 countries in the world



Comments

USD billion

1.4

69

66

610

64

58

18

28

228

47

29

45

High level of military spending in Uzbekistan will allow the following goals to be achieved:

- Increase combat readiness and fighting capability of troops
- Provide troops with modern weapons and military equipment
- Modernize existing weapons
- Promote military and militarytechnical cooperation with countries of the region and the world as a whole
- Develop infrastructure of military camps, systems for technical and logistical support of troops
- Social security of military personnel, their families, and veterans of the armed forces

Military spending, USD billion, 2017

- - - Average share of military expenses in GDP

The main principles of Uzbekistan's national security, which are set out in the Defense Doctrine, are the maintenance of defense sufficiency and preservation of neutrality, but there is a need to finalize a number of key documents

Main national security documents

Key principles of the defense policy of Uzbekistan

1. National security concept

Status: document version from 1997 is currently used; a new concept is being developed



2. Defense doctrine

Status: approved by Law of the Republic of Uzbekistan No. ZRU-458 dated January 9, 2018



3. Economic security doctrine

Status: no information available



4. Food security doctrine

Status: no information available



5. Cyber security doctrine

Status: no information available



- Nonuse of military force against other countries, except in cases of suppression and deflection of military aggression
- Indivisibility of security; prohibition on strengthening our own security at the expense of the security of other countries
- Noninterference in the internal affairs of other countries; peaceful settlement of possible disputes
- Nonparticipation in military-political blocs; reserving the right to withdraw from any interstate organization in the event of its transformation into a military-political bloc
- Defense sufficiency
- Adequacy of military capabilities to the nature of modern military conflicts
- Renunciation of production, acquisition, storage, proliferation, and deployment of nuclear and other weapons of mass destruction
- Commitment to the principles of the Nuclear-Weapon-Free Zone Treaty in Central Asia
- Prevention of the deployment of foreign military bases and facilities on our territory
- Nonparticipation of the armed forces in peacekeeping operations and military conflicts abroad
- Reliance on spiritual and moral values and cultural and civilizational identity of the people



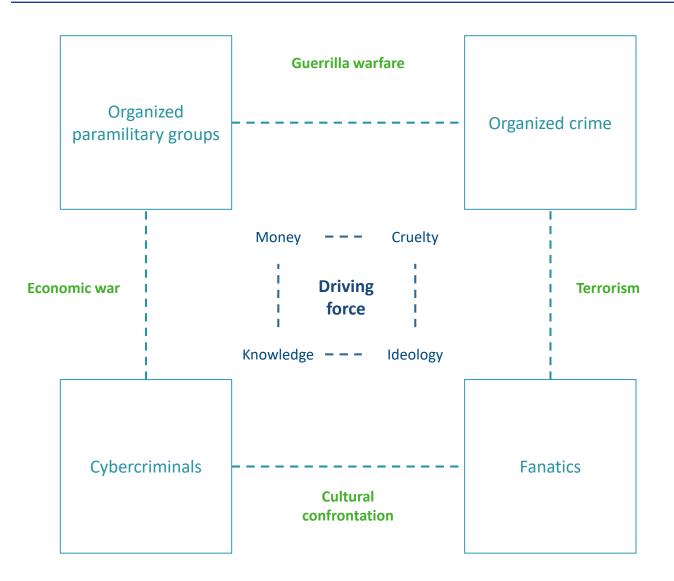




Implementation of the main principles of Uzbekistan's national security will allow timely identification of and response to threats.

Depending on the driving forces, different combinations of threats are possible: from guerrilla warfare to cultural confrontation, from terrorism to economic war

National security threats



Examples of cyber crimes

At the present time, cyber crimes pose a new threat to Uzbekistan. Among the examples of such crimes we can point out the following:

- In 2014, the system of the US retail store chain Home Depot was hacked, and data from 50 million credit cards were
 disclosed
- In 2015, unauthorized access to the US Internal Revenue Service's system led to theft of over 700,000 social security numbers and other confidential information
- In mid-2017, the WannaCry virus affected more than 500,000 computers and the computer system of the UK's National Health Service

Dynamic scenario

A wide range of potential threats affect various elements of national security

Example of potential threats to national security

National security elements

Remote military operations, including by means of drones

Armed conflicts for resources

- Civil or guerrilla war
- Invasion by a foreign country's armed forces
- Terrorism directed at the population and key infrastructure
- Growth in organized crime and drug traffic
- Environmental and natural disasters





Physical security

Cyberattacks on the national financial system

Rise in unemployment and reduction in incomes of the population

- Depreciation of the national currency
- Economic instability of key industries
- Economic sanctions, including by embargoes imposed on national products





Economic security

Cyberattacks aimed at sabotaging the political system

- Political pressure from another country
- Radical political groups
- **Religious conflicts**
- Information wars and espionage



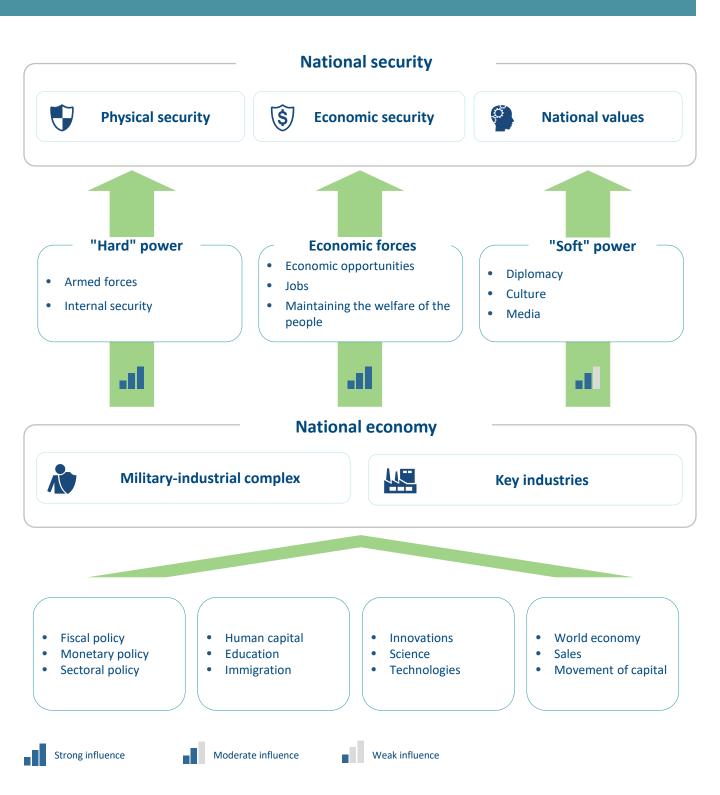


National values



More pressing threats against Uzbekistan

A stable economy provides the necessary support for key elements of national security



Focus of the economic security doctrine of developed and developing countries

Developed countries in their economic doctrines pay more attention to the fight against external threats, while developing countries focus on the fight against internal threats

Internal threats

- Instability of economic growth
- Poverty of the population
- High inflation
- High unemployment
- Low education
- Administrative and fiscal barriers to business development
- Low investment activity

External threats

- Foreign competition for sales markets
- High dependence on foreign trade conditions
- Lagging behind in the development and implementation of advanced technologies
- Restrictive economic measures of foreign countries

Examples of countries:



Russian Federation



Kazakhstan



USA



Japan



France

Components of the economic security doctrine

According to international practice, economic security doctrines include the following main elements:

Achieve internal economic stability and strengthen positions on the international level

- Domestic **economic stability** is an important part of economic security that contributes to **stable growth** and makes it possible to **avoid crisis phenomena**
- Strengthening of positions in international markets indicates increased competitiveness of the country's economy

Possibility of state control over the movement and use of national resources

- Efficient **use of resources** is the basis for the effective functioning of the economy; significant violation of the use of resources leads to a crisis
- Control over the sale of resources abroad is necessary to reduce the dependence on fluctuations in international markets and the loss of strategic resources

Meet the economic needs of the population

- Human capital is the basis of the economy, and the development of this resource can significantly increase the country's potential
- Creation of a sustainable social environment is one of the prerequisites for the country's economic prosperity

Economic security

United States (as part of the National Security Strategy of the United States of America, December 2017)

Objectives	Guidelines for action			
Stimulating the national economy	 Reducing the regulatory burden Promoting tax reform Upgrading and modernizing the infrastructure of the U.S. Reducing debt through changes in fiscal policy Maintaining educational scholarship programs 			
Promoting free, fair, and mutually beneficial economic relations	 Signing new trade and investment agreements and renewing current ones Counteracting unfair trade practices Counteracting foreign corruption Working with partner countries Promoting new market opportunities 			
Leadership in research, technology, invention, and innovation	 Developing an understanding and forecasting of global trends in science and technology Attracting and retaining inventors and innovators Using private capital and experience to create and implement innovations Rapid implementation of inventions and innovations 			
Developing and protecting the U.S. innovation base	 Identifying and monitoring threats to the innovation base Intellectual property protection Tightening visa procedures for foreigners to preserve intellectual property Protecting data and related infrastructure 			
Stimulating the national economy	 Reducing regulatory barriers Promoting exports Ensuring energy security Ensuring people and businesses have access to energy Increasing the U.S. technological advantage in energy 			
Economic security				

Objectives	Guidelines for action		
Prosperity of Japan and its citizens through economic development	 Strengthening the free trade scheme for economic development through free trade and competition Maintaining an environment that provides stability, transparency, and predictability 		
Strengthening and expanding Japan's role and capabilities in the world	 Strengthening cyber security International cooperation in the field of defensive weapons and technologies Ensuring the sustainable use of outer space and supporting its use for security purposes Enhancing technological capabilities 		
Strengthening national security and promoting domestic and global peace	 Maintenance and strengthening of the defense production and technological bases Developing an intellectual base (in particular through interaction of the state, higher educational institutions, and research centers) 		

Theses of the economic security doctrine of the Republic of Uzbekistan

Economic security is an integral part of national security. Implementation of goals will allow achievement of sustainable economic development independent from internal and external threats

Objectives



Achieve internal economic stability and strengthen positions on the international level

Guidelines for action

- Continuous economic growth and optimal economic structure
- Effective monetary and fiscal policy
- Sociopolitical stability and economic sovereignty
- No restrictions on international trade
- High scientific and technical potential
- Support for export and exporters



Possibility of state control over the movement and use of national resources

- Effective system of public governance
- Rational allocation of resources
- Food security
- Sufficient level of the resource base and diversification of sources



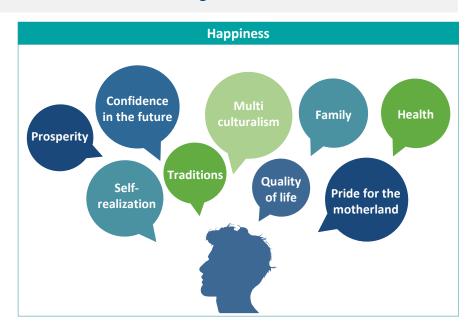
Meet the economic needs of the population

- Stable employment
- Access to social security
- High level of human capital development

National idea

The national idea should unite Uzbeks and ensure a common goal

- It is a national challenge to solve the task of entering the Top 50 countries
- It requires motivation and a uniting idea for the whole country
- The national idea is a common goal that is clear and valuable for each citizen of Uzbekistan
- The task of the Strategy 2035 is to ensure happiness for each citizen of Uzbekistan





Shavkat Mirziyoyev

President of the Republic of Uzbekistan

Rich people – rich state: "Based on the principle 'If the people are rich, the state will be rich and powerful' and to ensure the sustainable development of the country, new opportunities and incentives are being created for the development of entrepreneurship and radical improvement of the business environment."

Government for the citizens: "We make every decision concerning the life of the country on the basis of direct dialog with the people, taking into account the views of society. The cornerstone of our work is the following principle: 'It is not the people who serve the state bodies but the state bodies who serve the people'."

Macroeconomic stability and entrepreneurship: "The most important priority is to further strengthen macroeconomic stability and maintain high rates of economic growth, including balance of the state budget at all levels, stability of the national currency, and the price level in the domestic market... It is necessary for the entire macroeconomics to ensure that constant field visits become normal, to study the possibilities of each family to engage in business activities, to solve problems of expanding financing, and to provide practical assistance to entrepreneurs."

Safety for everyone: "Based on the concept 'Safe city – safe country,' we are carrying out large-scale work aimed at ensuring public order in the country. That is why a new structure was created – the National Guard."

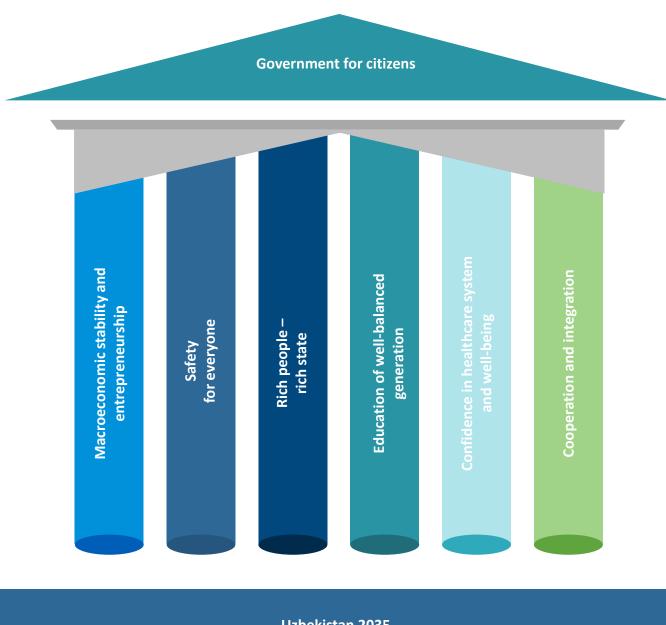
Raising a well-balanced generation: "Bringing up a healthy and harmoniously developed generation, purposeful and energetic youth, able to take responsibility for the fate and future of the motherland and to direct all their knowledge and potential to this, is a vital issue for us."

Confidence in healthcare system and well-being: "When it comes to healthcare, we must remember one true statement: health workers are the guardians of our health. The people must trust them, and they must win the trust of the people. Ensuring the observance of constitutional norms in the protection of the health of citizens who are our greatest wealth must become a priority of state policy."

Cooperation and integration: "I consider it necessary to affirm once again Uzbekistan's readiness to expand and deepen the open, mutually beneficial and close cooperation with the countries of our region. This is the main priority of our foreign policy."

National idea

Uzbekistan 2035 is aimed at implementing the basic principles of public governance established by the President



Detailed Information by Area

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



1. Development of public governance

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Development of public governance



Current level of development



Key challenges

- Personnel shortage, poor staff training, and lack of motivational stimuli
- Internal control of executive authority bodies is underdeveloped
- External control of executive authority bodies by legislative authority and society is underdeveloped
- Poor availability of electronic public services for the population
- Ineffective implementation of government programs and projects
- High level of corruption

Key findings

- There is no comprehensive system for strategic planning and setting of long-term and mid-term goals for government bodies in the Republic of Uzbekistan
- There are factors that negatively affect the efficacy of the executive authority system, including the following:
 - The absence of a comprehensive system for monitoring goal achievement for government bodies and their chief executives
 - Poor resulting quality of parliamentary control due to the lack of independence of legislative authority
 - Lack of freedom of mass media hinders public control of the executive authority's activities
 - The absence of a developed administrative staff training system
 - Deficiencies in the project management system reduce the resulting quality of government projects and lead to inefficient use of funds
- In general, an unfavorable investment climate is observed due to the high level of corruption, which also hinders economic development

Government Effectiveness Index



World Bank

Public governance efficiency rating, 2016



- services, quality of civil service, quality of elaboration and implementation of government policies, and adherence of the government to the elaborated policies

This index shows the perception of the quality of government

The concept of administrative reform approved by Decree of the President of the Republic of Uzbekistan UP-5185 dated September 8, 2017, meets the above challenges and contains the necessary sets of elements for optimizing the public administration system. However, implementation of this concept is slow in coming. It is necessary to create and launch a mechanism for accelerated implementation of the concept of administrative reform

Corruption Perceptions Index



Corruption Perceptions Index, 2017



out of 180 countries

- This index shows the level of corruption perception
- The existing anticorruption program for 2017–2018 is the start of work on fighting corruption, but extensive measures need to be taken to implement a long-term policy in this area

Current level of development

Press Freedom Index



Worldwide Press Freedom Index, 2018



out of 180 countries

- This index shows the degree of media freedom, quality of the legislative framework in the field of mass media, and the level of pressure on journalists
- The media is an important institute of public control over the
 activities of executive authorities. The absence of a free and
 independent media in the Republic of Uzbekistan hinders the
 work of the mechanism for improving performance of the
 executive authority by public control

Telecommunications Infrastructure Index



UN Telecommunication Infrastructure Index (TII), 2018



out of 193 countries

- This index is a part of the E-Government Development Index and shows the level of telecommunications infrastructure development in the country
- Low level of telecommunications infrastructure in the Republic of Uzbekistan (internet speed in the country is 10 times slower than the average speed in the CIS) hinders widespread use of electronic public services by population

Doing Business Index



Doing Business Index (ranking), 2018



out of 190 countries

- Each country is assigned a corresponding rank in the ease of doing business rating. The higher the country position for this rating, the more favorable the business environment for opening and running an enterprise. The rank of each country is determined by ordering the cumulative scoring in ten areas.
- Uzbekistan has the lowest rating in "Obtaining construction permits" and "International trade"

Telecommunications Infrastructure Index



E-Government Development Index, 2018



out of 193 countries

- E-Government Development Index (EGDI) is prepared every two years by the UN Department for Economic and Social Development. The index consists of three subindices characterizing the state of ICT infrastructure, human capital, and online government services.
- The telecommunications infrastructure level has the lowest rating among all subindices in Uzbekistan

Current level of development

There is a problem with the lack of highly educated personnel in the executive authority system



It is necessary to form a pool of high-skilled personnel for new government bodies

Over the last **2** years, the Republic of Uzbekistan created at the republic level:

- 3 ministries
- 4 state committees
- **3** agencies





During the interview, **80%** of ministries and departments mentioned the personnel problem as one of the most pressing ones

15% of departments¹ have vacant positions for deputy head

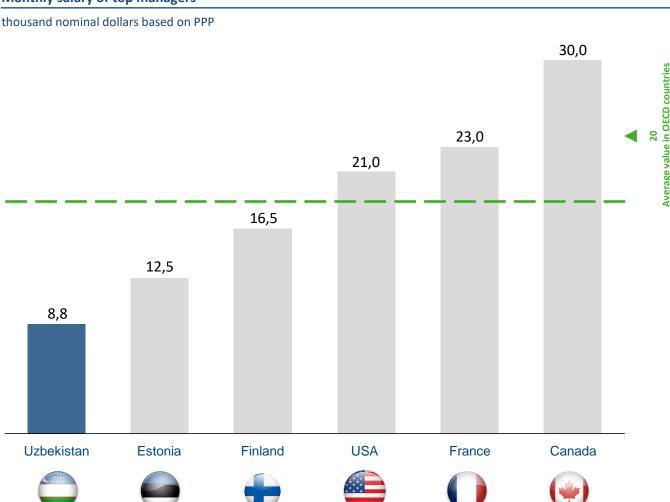


Due to the lack of highly educated staff, officials are transferred between departments too **quickly**²

Current level of development

Low level of financial compensation for civil servants hinders the attraction of high-skilled staff

Monthly salary of top managers¹



- The problem with low pay for employees of government bodies was noted in Decree of the President of the Republic of Uzbekistan No. UP-5185 dated September 8, 2017.
- The level of compensation for civil servants in Uzbekistan is less than half the average compensation in developed countries by purchasing power parity, which:
 - Leads to a mismatch of the social position of civil servants to the level of responsibility imposed on them
 - Reduces the "prestige" of public service and hinders attraction of high-skilled personnel
 - Contributes to staff outflow
 - Increases the risk of corruption
 - Different wages are observed in different departments in positions of the same level

Notes: 1 = based on data of Government at a Glance (2017 edition), data on Uzbekistan are given based on an interview with government bodies (USD 2,000 adjusted based on PPP)

Current level of development

The existing educational system for civil servants is selective and does not allow for a prompt "quality" breakthrough in increasing the skill level of the government apparatus (1/2)



Educational institutes for civil servants



Global experience



Civil Service College (CSC)

in Singapore offers **468** training programs covering over **43,000** students



Singapore



These institutes also actively provide consultancy services for government bodies.

ΛNZSOG

The Australia and New Zealand School of Government In the 2017 academic year, training at ANZSOG was completed by **7,300 people**



New Zealand



Australia



Uzbekistan



- Uzbekistan has the Academy of Public Administration under the President of the Republic of Uzbekistan
- The Academy offers only 3 training programs
- Training is completed by **180 people a year**, which is **less than 0.1%** of the total number of civil servants
- Foreign cooperation is undeveloped
- Provision of consultancy services for government bodies is undeveloped





Current level of development

The existing educational system for civil servants is a points-based system that does not allow for a prompt "quality" breakthrough in increasing the skill level of the government apparatus (2/2)



Educational institutes for civil servants



Singapore



Global experience

Public Service Commission in Singapore develops and supports talent in the field of public service:

- The commission issues 16 types of scholarships for education in Singapore and abroad, which cover the cost of education, accommodation, and transportation
- Programs for accelerated career development in government bodies upon completion of education



USA

- 1. Mayor's Graduate Scholarship Program (New York City)
- 2. Federal Employee Education and Assistance Fund Scholarship Program
 The programs cover expenses for part-time and full-time education of civil servants



UAE

Study Leave Program for Abu Dhabi Government Employees

• The program covers expenses for civil servants' full-time studies abroad



Uzbekistan



Uzbekistan has selective programs supporting education of civil servants.

Example: JDS Program. It provides an opportunity for civil servants to earn a master's or doctorate degree at Japanese universities. In 2018, Japan allocated USD 2.4 million to finance this program. During 18 years of its existence, 311 civil servants completed training under it



Some ministries and departments implement personnel training programs on their own, which are short-term advanced training courses



There is no comprehensive system of educational support for civil servants based on national and/or foreign higher educational institutions

3

There are no accelerated programs for career development after receiving an education





Negative factors

Current level of development

There is a system of personnel development elaborated in Uzbekistan, but adoption of the necessary laws is being delayed



Creation of the National Personnel Reserve

Personnel reserve is the institute providing centralized selection, training, retraining, and advanced training of personnel for public service as well as monitoring and facilitating career development of civil servants. The training base of the national personnel reserve will be built based on a government order for educational services to higher educational institutions.



Organization of regular advanced training of civil servants with government funds

Training programs for the personnel reserve will allow one to obtain a master's degree.

Upon completion of studies, civil servants will be required to work for a certain time in the government bodies or will have to compensate the cost of education in proportion to their nonfulfilled obligations.



Creation of the National Agency for Public Service Affairs

The National Agency will coordinate and provide methodical guidance for the activities of advanced training organizations and will approve training programs



Assignment of qualification ranks only upon completion of relevant training programs

Career advancement will directly depend on the education and expertise of civil servants

The law is intended to solve the key problems in the staffing system, yet it has remained a draft law for about a year!

Current level of development

The government of the Republic of Uzbekistan realizes the importance of the corruption problem and is taking steps aimed at elaborating a comprehensive approach to fighting corruption

Law "On Countering Corruption"



On January 3, 2017, the Law of the Republic of Uzbekistan No. 419 "On Countering Corruption" was adopted. The main areas for fighting corruption are:

- Formation of zero tolerance to corruption in society
- Implementation of measures to prevent corruption
- Ensuring the principle of inevitable liability for corruption

Government Program For Countering Corruption for 2017–2018



On February 2, 2017, the Government Program for Countering Corruption for 2017–2018 was adopted

The Program contains the road map consisting of 51 steps¹

The status of program implementation will be determined after receiving data from the government bodies

Interdepartmental Commissions



To implement the Government Program for Countering Corruption, the following interdepartmental commissions were set up²:

- Republican Interdepartmental Commission
- Interdepartmental Commission in the Republic of Karakalpakstan
- Interdepartmental Commission in Tashkent



Positive factors



Negative factors

Strategic options for improved performance of the executive authority

1

----- Target development option ----

Model based on the top-down approach to initiative implementation

The model provides for identification of the key areas at the highest administration level of the executive authority, elaboration of goals for each department, development of detailed KPIs, strict control of their achievement on a weekly basis, establishment of an individual body of executive authority to control the results of reforms, independent audit, and public control



Examples of countries:

Government Transformation Program (GTP) is the program implemented in **Malaysia** in 2010.



- Ability to deliver great results
- High speed of implementation
- Clear development priorities
- · Openness and transparency for society



- Concentration of a wide scope of powers in the controlling body
- Resolution of a limited circle of problems identified as priority problems

Quick achievement of results using the body that implements and monitors the reform process

2

Model based on the bottom-up approach to initiative implementation

The model provides for elaboration of long-term goals (5 years) by the departments, annual plans for their achievement, and presentation of annual reports. The departments set goals and determine ways to achieve them on their own. Control over the system is exercised by the legislative and executive authority. The model involves elements of nongovernmental control.



Examples of countries:

Government Performance and Results Act (GPRA) is the system implemented in the **USA** in 1997.



- Commitment to results
- Comprehensive approach
- Nongovernmental control
- Little labor effort
- Limited powers of the controlling body



- Slow implementation
- Control lacks toughness
- Risk of blurring priorities in goal setting
- Possible lack of coordination of goals and activities of various departments
- Potential inconsistency

Achievement of results in a developed economy by the ministries and departments on their own

3

Mixed model

The system constitutes the scope of agreements between the controlling body of executive authority, financial regulatory body of executive authority, and line ministries and sets mid-term (3 years) goals, indicators for their achievement, the necessary resources, and a "value-for-money" estimate. Control is exercised on a semiannual basis. The system involves an independent audit



Examples of countries:

Public Service Agreements is the system implemented in **the UK** in 1998–2010.



- Commitment to results
- · Independent audit
- Comprehensive approach
- Low labor input
- Assessment of cost effectiveness



- Slow implementation
- Control lacks toughness
- Poor coordination of activities of various departments

Joint work on setting goals and elaborating the ways to achieve them at the top level of executive authority and line ministries

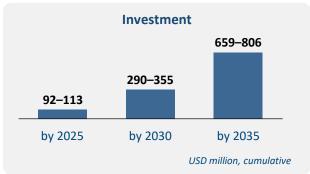
Executive authority

Target vision 2035

Implementing a comprehensive system for setting goals and tasks for the executive authorities, improving the resulting quality of the government projects and programs, developing a system of internal and external control of the executive authorities, developing a comprehensive staffing system, fighting corruption, improving the availability of public services for the population, and complying with the principles of alternation of power and retention of constitutional foundations

- Creating the mechanism for continuous control of the achievement of target performance indicators of the government bodies
- Increasing the independence of the media and developing nongovernmental control
- Creating a personnel pool, high-quality training and retraining of government staff
- Developing telecommunications infrastructure and digitalization of the executive authority
- Reducing corruption through anticorruption programs and process optimization





Executive authority

Key strategic initiatives

2025

- Implementation of the concept of administrative reform approved by Decree of the President of the Republic of Uzbekistan No. UP-5185 dated September 8, 2017
- Creation of a government body in charge of elaboration and implementation of goal-achievement programs and monitoring of their fulfillment
- Implementation of education reform for civil servants (increasing the number of graduates from 180 to 8,000 people, updating educational programs, increasing the number of educational programs from 3 to 400)
- Implementation of a comprehensive staffing system (identification of hiring needs, attraction of specialists with international experience)
- Development of a culture of meritocracy in the government bodies (transparent stages of selection and implementation of criteria of conformity to positions)
- Implementation of the Government Program for Countering Corruption approved by Decree of the President of the Republic of Uzbekistan No. PP-2752 dated February 2, 2017
- Improvement in the legislative framework, elimination of duplicate legal acts
- Improvement in legal culture and zero tolerance to corruption in society (enter Top 110 of the Corruption Perceptions Index)
- Increase in freedom of speech and nongovernmental control through the media (enter Top 120 of World Press Freedom Index)
- Increase in the internet speed by 8 times, development of mobile internet (enter Top 90 of Telecommunication Infrastructure Index)
- Introduction of a National Identification Number to simplify data tracking tax payments, use of medical services, etc.

Increase in the level of education for civil servants (implementation of international practical trainings, bringing educational programs in

line with international practices)

2030

- Implementation of an up-or-out system for civil servants, increasing competition for filling vacant positions inside the government bodies
- Formation of an environment where corruption makes no economic sense for business
- Bringing up new staff in the public service system, formation of zero tolerance to corruption, change in the "image" of government bodies through educational programs, holding internal training, toughening of legislation, and cooperation with the media (enter Top 80 of Corruption Perceptions Index)
- Comprehensive digitalization of public services, including through artificial intelligence and blockchain technology, implementation of ICT to organize the work of ministries and departments, decision making based on big data analysis (enter Top 50 of E-Government Development Index and Top 70 of Telecommunication Infrastructure Index)
- Formation of independent institutions of nongovernmental control (grants for nongovernment organizations, independent media, etc.) (enter Top 80 of World Press Freedom Index)

International accreditation of educational institutions training future civil servants

2035

- Elaboration of zero tolerance to corruption in society, changing society's mindset (collaboration with the media and educational institutions) (enter Top 50 of Corruption Perceptions Index)
- Migration to electronic delivery of public services, including comprehensive use of artificial intelligence and blockchain technology in project management and in delivery of public services (enter Top 30 of E-Government Development Index and Top 50 of Telecommunication Infrastructure Index)
- Drastic increase in performance of the executive authority (enter Top 50 of Government Effectiveness Index)
- Creation of a favorable environment for conducting business (enter Top 20 of Doing Business Index)
- Support for independent media, freedom of speech, creation of a developed system of nongovernmental control of the activities of executive authorities (involvement of organizations in discussions on the current work of ministries and departments, taking into account their opinions in the adoption of laws) (enter Top 50 of World Press Freedom Index)

personnel



finance



technologies



legislation and state regulation



infrastructure

Development of public governance



Current level of development

Key challenges

- The legislative authority in the Republic of Uzbekistan is not fully independent
- The level of political culture in the Republic of Uzbekistan lags behind democratically developed countries
- The quality of the legislative framework is not stable and requires improvement
- The scant application of evidencebased policy instruments and "smart regulation" principles in the development of legislative acts reduce their quality
- The lack of coordination of government bodies in the course of law-making and the low level of scientific support of the government bodies reduce the quality of the regulatory legal acts
- Poor development of parliamentary control
- Poor accessibility to public platforms for discussion of laws

Key findings

- There are a number of restrictions on free formation of the representative authorities and their powers in the Republic of Uzbekistan. These restrictions reduce the independence of the legislative authority
- Poor quality of the legislative framework due to the lack of "directly applicable" laws. Poor detailing of the legal rules in the primary legislative acts leads to the need for their detailed elaboration in the acts of the executive authorities that are not always able to elaborate them deeply enough because of heavy workload
- Discrepancies in the legislation due to the lack of coordination between the government bodies in the course of legislative activity
- Excessive administrative load on the population and poor efficiency and resulting quality of the legislation due to the lack of application of evidence-based policy instruments, such as Regulatory Impact Analysis (RIA) and "smart regulation" principles
- Poor quality of the elaborated regulatory acts due to the lack of scientific support, low professional skills, and poor provision of resources to the parliamentarians
- Due to the lack of a digital database of international contracts, their provisions are not always taken into account in the elaboration of legislative acts
- Poorly developed telecommunications infrastructure and deficiencies in the digitalization of the legislative framework complicate the population's access to the legislative acts and hinder public discussion of legislative initiatives

Democracy Index



Democracy Index, 2017



out of 167 countries

- This index shows the level of democracy in the country and covers such areas as elections, political pluralism, civil liberties, government functioning, participation in political processes, and development of political culture in the country.
- Political culture in the Republic of Uzbekistan requires further development.
 There are restrictions on free registration of political parties and limitations on independence of the representative government bodies in the country; heads of executive and legislative authorities practice concurrent service at a regional level, which hinders independence of the legislative authority

Global indicators of public regulation quality



Global Indicators of Regulatory Governance, 2016

World Bank



out of 186 countries

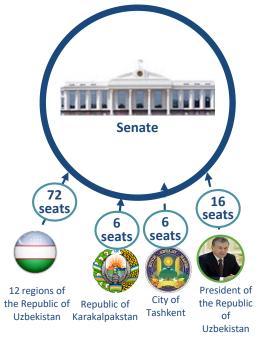
- The indicator reflects the quality of the legislative process, the quality and accessibility of the legislative framework for the population
- It is necessary to increase society's involvement in the legislative process, improve the quality of elaboration of the legislative acts, and optimize the legislative framework
- On August 8, 2018, the Republic of Uzbekistan approved the Concept for Improving Legislative Activity, which is in line with the best global practices and – subject to its implementation – will lay a foundation for improving the legislative activity and the legislative framework in the country

Current level of development

The legislative authority in the Republic of Uzbekistan is not fully independent, which compromises the quality of the legislative and controlling activity



- Liberal Democratic Party
- Democratic Party
- People's Democratic Party
- Social Democratic Party
- Ecological Movement of Uzbekistan



- The Legislative Chamber consists of **150** deputies:
 - 135 deputies are elected on the basis of a universal, equal, and direct electoral right in secret voting in territorial single-seat electoral districts on a multiparty basis
 - 15 deputies are elected from the Ecological Movement of Uzbekistan
- The principle of incomplete electiveness of the Legislative Chamber allows the appointment of 15 deputies and is in conflict with the practice of countries with developed democracy¹
- A prohibition on nominating independent candidates allows the Legislative Chamber to be formed from among the candidates of registered parties only²
- The process of registering parties is not transparent and hinders registration of new political parties³
- The President has the right to dismiss the Legislative Chamber⁴

The existing mechanism hinders independence of the Legislative Chamber and complicates performance of controlling and legislative functions

The Senate consists of **100** senators:

- 84 senators are elected through voting by deputies of the regional representative authorities
- Each region elects 6 senators
- 16 senators are appointed by the President of Uzbekistan
- The representative government bodies in the regions, districts, and cities (Kengashes [Councils] of People's Deputies) are headed by hokims, which is are conflict with the principle of separation of powers and leads to inefficient operation of the representative bodies
- Hokims (governors) of the regions are also senators, which greatly reduces the effectiveness of the senate in terms of exercising controlling power and making decisions on the activities of local executive authorities
- The principle of appointment of 16 senators reduces the independence of the Senate from the executive authority
- The President of the Republic of Uzbekistan is entitled to dismiss the Senate

The existing mechanisms hinder the independence of the Representative Body of the Republic of Uzbekistan (Oliy Majlis) and the Representative Bodies of local authorities, and complicate the exercise of controlling and law-making functions

Current level of development

Hierarchy of the regulatory acts of the Republic of Uzbekistan



- legislative level
- (II) legislative level
- (III) legislative level
- (IV) legislative level
- (V) legislative level



Resolutions of the Cabinet of Ministers, acts of the republican ministries and departments



Decrees of the President of the Republic of Uzbekistan



Constitution of the Republic of Uzbekistan



Decisions of local authorities



International contracts and treaties



Laws of the Republic of Uzbekistan



Laws and Orders of the Republic of Karakalpakstan



Codes of the Republic of Uzbekistan

There are a number of problem areas regarding observance of the hierarchy:



- Regulatory acts published by the executive authority often replace laws
- The bodies in charge of law enforcement are primarily guided by the Decrees of the President of the Republic of Uzbekistan and Decrees of the Cabinet of Ministers
- International agreements and treaties are not given priority

Current level of development

The existing system does not provide for the full-fledged application of international treaties, which complicates the international integration of the Republic of Uzbekistan



The Ministry of Foreign Affa

The Ministry of Foreign Affairs is the main governmental body that accumulates international treaties

Uzbekistan participates in more than **4,000** international treaties



?

The Ministry of Foreign Affairs does not maintain a public electronic database of international treaties available for other government bodies and the general public

The absence of a full-fledged electronic database of international treaties greatly complicates their application by the government bodies, parliamentarians, and courts



Provisions of international treaties are not fully reflected in the legislative base of Uzbekistan, which hinders their implementation

Current level of development

To solve the problems, on August 8, 2018, the President of the Republic of Uzbekistan approved the Concept of the Improvement of Legislative Activity that generally conforms to the best global practices

	Elements of improvement in legislative activity	Implementation deadline
regisiative framework	 Reduction of regulatory acts, revision of inactive acts, elimination of unreasonable limitations and unnecessary administrative procedures Implementation of effective mechanisms for adoption of "directly applicable" laws 	Details not provided December 1, 2018
	 Phased migration to the application of a "smart regulation" model 	January 1, 2019
Legislative activity	 Implementation of a system for compulsory assessment of the regulatory impact of draft regulatory acts, including cost-benefit analysis 	December 1, 2019
	 Further improvement and detailing of the procedures for adoption and consideration of civil initiatives regarding the establishment, alternation, or abolishment of legal rules by the government bodies 	October 1, 2018
	 Appointment of a single organization to coordinate the implementation and use of evidence-based policy instruments and "smart regulation" instruments 	August 1, 2019

Comments

- The concept contains the main elements for improving the legislative framework and legislative process, which are in line with the practice of developed countries. Implementation of this concept is expected to produce a positive effect on the legislative activity and the legislative framework
- Some elements of the concept are set out in a declarative manner and require a detailed description of particular steps, time frames, and responsible persons

Current level of development

As a result of poor elaboration of the rules in the laws, detailing is provided at the level of by-laws, which reduces the quality of the legislation and leads to discrepancies and corruption

Primary legislation

Secondary (delegated) legislation





Laws and Codes of the Republic of Uzbekistan



Decrees of the President



Resolutions of the Cabinet of Ministers, acts of the republican ministries and departments



Decisions of local authorities

5%

95%

Poor detailing

- The legislative framework is of moderate quality (ambiguous interpretation, excessive regulation, complicated application, etc.)
- There is a problem with discrepancies between the legislative acts
- Laws are often substituted with by-laws
- Poor detailing also creates conditions for the emergence of corruption

Restrictions on free speech and independent media in Uzbekistan hinder public control of the activity of legislative bodies and enforcement of laws

No database of legislative acts in English



The absence of legislative acts in English makes it difficult to attract foreign investors

No legal support



 The database lex.uz does not provide a full, interactive list of related documents, by-laws, or court resolutions so that users can fully understand issues of interest on their own

Not all legislative acts are included in the electronic database



 Incomplete digitalization of legislative acts complicates access thereto by the population, for example, many international treaties are not included in the electronic database of legislative acts Undeveloped IT infrastructure hinders the population's access to electronic databases of laws

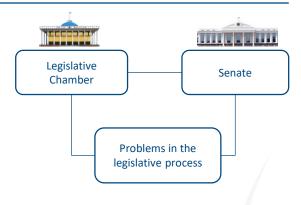


 Slow internet speed and its poor coverage hinder the improvement of legal literacy of the population and reduce the efficacy of laws In 2018, Uzbekistan ranked 114 out of 193 countries according to the UN ICT Infrastructure Development Index

Current level of development

Pressure points in the legislative process of the Republic of Uzbekistan

Legislative process in the Oliy Mailis

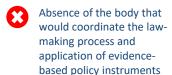


- There is no **special division** in the structure of the Oliv Majlis that conducts studies and consults parliamentarians
- Insufficient application of evidence-based policy instruments, including Regulatory **Impact Analysis (RIA)**
- Insufficient use of "smart regulation," for example, such principles as:
 - "One in one out"
 - "Regulatory guillotine"
 - "Sunset clause"
- Problems with interaction of chambers in the Oliy Majlis1

Areas of interaction



Interaction with the branchspecific bodies of executive authority







Discussions with the academic community











Absence of a complete digital database of international treaties does not allow their reflection in draft laws



Interaction

with the population

Current level of development

Parliamentary control in Uzbekistan is characterized by poor focus on filing queries and by its advisory nature

Elements of the parliamentary control system (international experience)

Both chambers of parliament, deputies (senate members), parties, factions

The structure and powers of the committees responsible for parliamentary control are established by area

Hearing mandatory government reports



Vote of no confidence

Ability to initiate legal proceedings, existence of administrative and criminal liability for refusal to provide information

Examples







Status in Uzbekistan¹

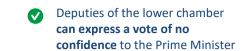


Only the Budget and Economic **Reforms Committee** is statutorily prescribed, and control instruments are not identified















The law provides for the advisory nature of control directives

Comments

Responsibility

- Over the last two years, the Oliy Majlis sent only six parliamentary requests, which characterizes a low level of parliamentary control. For comparison, in more developed countries like France and the UK this indicator in 2015 was about 25,000 and 30,000, respectively
- There are also no established control procedures, the focus is on "hearings" instead of on audits and queries, and the directives are of an advisory nature
- Additional problems highlighted in the area of parliamentary control are:
 - The absence of sufficient administrative resources for parliamentary control (deputies do not have their own staff to assist them in drawing up queries, etc.)
 - The absence of coordination between parliamentary control at the republican and regional levels

Strategic options for balancing the executive and legislative branches of authority

1

Separation of powers with concentration of authority in the legislative branch

The greatest scope of powers is held by the parliament. The parliament forms the government and controls its work. The head of state is often elected by the parliament. Developed political culture; observance of rights and freedoms of citizens; open elections; the government of the state elects legitimate representatives of the people; high level of government transparency; media freedom.





- Low risk of long-term concentration of authority in one government
- Protection of rights and freedoms of citizens
- Strong control of the activities of the executive authority



- Possible instability of the political policy
- Possible frequent change of the government
- Complicated coordination, especially during crises

Model for a high degree of development of political culture in the country

2

---- Target development option ---

Balanced system with an independent parliament

The head of state is elected by the people. The head of state forms and controls the activities of the government. The parliament exercises parliamentary control of the executive authority, including budget control, has veto and impeachment power Observance of rights and freedoms of citizens; open elections; the government of the state elects legitimate representatives of the people; high level of government transparency; media freedom







- High speed of decision making and stability
- Control over the activities of the executive authority
- Separation of powers
- Protection of rights and freedoms of citizens



- Risk of long-term concentration of power in one government
- Possible opposition of the executive and legislative branches
- System's high dependence on the head of state

High level of external control of the executive authority's activities by the legislative branch

3

Highly centralized system

Absence of political pluralism; poor development of democratic culture; media restrictions; limitation on the freedom of elections; failure to comply with the principle of separation of powers; the government is not controlled by and not accountable to the people





- Strong government capable of quick making and implementation of decisions
- Stability, order, and security



- Failure to observe rights and freedoms of citizens
- Lack of control over government activity
- High risk of authoritarianism
- · High risk of corruption

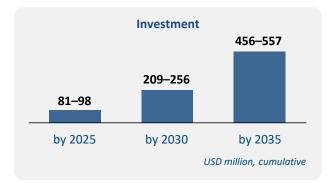
Absence of a check-and-balance system, absence of external control over the executive authority's activities

Target vision 2035

Increasing the independence of the legislative branch of the government, development of political culture in the Republic of Uzbekistan, optimization of the legislative framework, increasing the quality of the law-making process, further digitalization of the legislative framework, and facilitating access thereto by the population

- Development of the parliamentary control function through development of the practice of parliamentary queries and creation of publications by the parliament following monitoring and analysis
- Introduction of mandatory assessment of the regulatory impact of adopted acts
- Reduction in discrepancies between the legislative acts
- Digitalization of the law-making process
- Increased involvement of civil society in the lawmaking process (public hearings)





2025

Key strategic initiatives

- Increase the level of independence of the Representative Body of the Republic of Uzbekistan (Oliy Majlis) and the Representative Bodies of local authorities
- Improve political culture, including liberalization of registration of new parties, and increase transparency (enter Top 100 of Democracy Index)
- Introduce full electiveness (refusal to provide places in the parliament to the Ecological Movement of Uzbekistan) of the Legislative Chamber of the Oliy Majlis and the practice of election of independent candidates
- Increase nongovernmental control and involvement of society in the law-making process
- Improve the legislative framework, apply the principle of regulatory guillotine (exclusion of laws that are not used directly)
- Extend cooperation with international organizations to analyze the legislative framework, enhanced expert review of the parliamentarians and their research and resource support
- Increase the availability of laws through development of electronic legislative databases and telecommunications infrastructure
- Implement elements of an evidence-based policy and "smart regulation," improve the Republic of Uzbekistan's score in Global Indicators of Regulatory Governance to 3.8
- Create an electronic system of interaction between the government bodies in the legislative process
- Strengthen parliamentary control (initiation of parliamentary audits, creation of parliamentary reports), create an effective mechanism for reporting of the executive authorities to the parliament
- Create an effective mechanism for the application of international treaties by government bodies

Ensure nongovernmental control over the activities of the legislative authority and compliance with laws

2030

- (grants for nongovernment organizations)

 Comprehensive use of an evidence-
- based policy, including Regulatory
 Impact Analysis, and extend its
 application to all regulatory acts
- Comprehensive use of "smart regulation," including "One in one out" and "Sunset clause" principles, improve the Republic of Uzbekistan's score in Global Indicators of Regulatory Governance to 4.4
- Ensure continuous involvement of society and the academic community in the law-making process (holding public hearings, meetings, sending documents for discussion)
- Further improvement in political culture and independence of the legislative authority (enter Top 70 of Democracy Index)
- Ensure comprehensive independent parliamentary control

Ensure pluralism of opinions a opposition in the parliament

2035

- Establish the balance of powers between the legislative and executive branches (enter Top 50 of Democracy Index)
- Ensure full public control of the activity of the legislative authority
- Introduce fully transparent elections, including through blockchain technology
- Ensure stability of the legislation and a high level of elaboration of adopted laws, improve the Republic of Uzbekistan's score in Global Indicators of Regulatory Governance to 5.0

personnel



finance





legislation and state regulation

ir

infrastructure

Development of democratic institutions



Current level of development

Key challenges

- Lack of understanding of the fundamental importance of an independent judicial system
- Lack of public and investor confidence in the ability to ensure a fair process
- Lack of understanding of the inevitability of punishment; the presence of corruption
- Lack of traditions and knowledge of ways to ensure a fair trial as well as openness and transparency of court decisions
- Deep-rooted (Soviet) tradition of the presence of law enforcement agencies performing the functions of the court
- Lack of appropriate material and technical base and professional personnel in the judicial system
- Ineffectiveness of the Constitutional Court and the institution of People's Assessors.

Key findings

- Courts are not independent of law enforcement agencies. Pressure on judges is often exerted not from the outside but from the inside, through justices of the court or higher judicial authorities.
- Guarantee the independence of the Supreme Judicial Council, the system of selection and appointment of judges, as well as develop a system for training the professional judiciary and a unified examination of national justice.
- Judges may be disciplined for decisions that undermine the possibility of an independent decision.
- Courts issue acquittals very rarely, and statistics may include acquittals that were later reversed.
- Judges are overloaded and cannot consider cases in a quality manner in the time allotted for one case. Due to judges' excessive workload, there are gross legal errors and violations of human rights.
- In Uzbekistan, legal sciences are not developing at the proper level.
- Corruption and pressure on judges through corrupt methods are widespread.
- In practice, the judicial process is not available to the public, except for persons involved in the process, and there is no open database of court decisions on reviewed cases.
- The process is largely formal and does not ensure a fair trial and equality of parties.
- The principle of legal certainty is not applied in judicial practice, and different decisions can be made for similar cases.
- Reform the institution of people's assessors, systematize the work of the Presidium and Plenum of the Supreme Court of the Republic of Uzbekistan, the Supreme Judicial Council, the Qualification Board of Judges, and other structures, excluding duplication of their functions.

Chart/Diagram 1

86	Tanzania	0.47
87	Lebanon	0.47
88	Philippines	0.47
89	Russia	0.47
90	Dominican Republic	0.47
91	Uzbekistan	0.46
92	Mexico	0.45
93	Sierra Leone	0.45

- Uzbekistan's rating in the Rule of Law Index The World Justice Project: The Rule of Law Index 2017, 91st place. In 2018, the study covers 113 countries and jurisdictions. Kazakhstan is ranked 64th, and Kyrgyzstan, 82nd.
- The number of judges in Uzbekistan is 1 per 26,713 people (2017), while in France it is 1 per 11,000, in the USA, 1 per 9,000, and in Germany, 1 per 4,000.
- The number of acquittals increased from 7 for the period 2012–2016 (probability of acquittal was slightly above 0%) to 590 for 9 months of 2018.
- In Uzbekistan, court decisions are not made available. Since 2009, Kazakhstan has been publishing all types of court decisions on the internet. Such practice was established a long time ago in neighboring Russia and Kyrgyzstan.

Strategic options

1 Ensure the independence of the judicial authority

The independence of the judicial authority from any nonprocedural influence, both from the inside and outside, must be ensured. Judges must be free and independent in making their decisions and must be governed only by the law. Courts must be the body determining one's guilt. It is necessary to adopt a separate law on the status of judges with the unified rules, which would not be a part of the law governing the court system. A separate law must govern the selection of and requirements for candidates for the position of judge, bringing judges to liability; it must define a disciplinary offense, sanctions, and other issues in order to avoid the use of different interpretations as the instrument of pressure on judges.



- Citizens' trust and social stability
- Investment attractiveness
- Higher positions in various world rankings



- Significant review of the role of the court is required
- Long-term reform process is required
- Investors will not immediately see changes

Such measures will allow the courts to become a truly independent institution, which could be an example of successful judicial reform throughout the CIS

Selection system, lifelong judicial tenure, and irremovability ensure the high authority and independence of judges

The system of training and selecting judges through a transparent fair process will lead to appointment of judges who are competent lawyers with high morals and the ability to independently make decisions based on facts and the law. It is necessary to review the procedure for judges to hold life-long offices: life-long appointment must have only an initial probationary period. Irremovability is also an important criterion ensuring the independence of judges.

Examples of countries: Poland, USA, Germany, France



- The judicial system and judges enjoy high standing and trust in society
- Independence of the court is ensured
- The law in Uzbekistan is protected by the court



- Review of the training system is required
- Additional resources are required, including temporary ones
- Study of foreign experience is required

Guarantees for judges will make it possible to form a judicial authority capable of ensuring the rule of law, human rights, and high confidence of the population and investors in Uzbekistan's courts

Chart/Diagram 2

The graph presents data on the appointment and re-election of judges for 2014–2015. As well as data for 2017 on the activities of the Supreme Judicial Council, which evaluated the activities of 667 judges, 500 of which were recognized as "conforming to the position of judge," and 390 were appointed to the position.

Strategic options

3

Reduce the workload of judges and increase court costs proportionally

To further improve the work of the courts, it is obviously necessary to increase the number of judges as well. Today, that the population of Uzbekistan is approaching 33 million people, and the current number of judges are not able to consider the increasing number of cases. Therefore, an increased number of judges will alleviate the workload of courts. The limits of judges' workload must be elaborated.

In Uzbekistan, court costs are often meant to compensate for court expenses for the consideration of a case, not the expenses of the party in whose favor a decision is made. In such developed countries as Japan, the UK, and the USA (depending on the US state), the amount of court costs is rather high, which compels the parties to reconcile or settle disputes in an alternative way. When measuring the court costs, it is also necessary to take into the account actual expenses and the complexity of the case, establish the minimum cost of the lawsuit, etc.

In 2007, the Law on Arbitration Courts was adopted in our country, and in 2018, the Law on Mediation. An increase in the number of economic and civil cases considered by the arbitration courts will also alleviate the workload of the state courts. This practice is widely observed in Singapore and the UK. It is necessary to increase the categories of cases for which civil and economic procedural laws would stipulate compliance with the mandatory pre-trial procedure.

Examples of countries: Japan, USA, Singapore, UK, Germany



- An increased number of judges will alleviate the workload of the courts
- Human rights in Uzbekistan are firmly protected by the court
- Objective and comprehensive consideration of cases is
- The number of pretrial settlements of disputes between parties will increase
- Additional resources are required, including temporary ones
- Increased court costs fall on the shoulders of ordinary citizens

Uniform workload distribution on judges will ensure justice, comprehensive review of cases, and fair decisions based on the letter of the law and the duty and honor of a judge

4 Fair trial and fair decision: the norm in Uzbekistan's judicial system

Uzbekistan has a unique historical opportunity to ensure the creation of a judicial process that meets all international standards, both in terms of the organization and progress of the process and its results. Assigning the right for courts to issue an order for a search and wiretap of phone conversations of suspects, and humanizing criminal justice. Providing open access to the adopted judicial decisions and implementing an electronic service for the population: submitting electronic documents to courts, tracking the status of proceedings in cases, etc.

Examples of countries: Not only the countries based on the Anglo-Saxon legal system but also those based on the continental legal system, such as France, Germany, or Spain, regularly bring court decisions to the public's attention.



- Status and credibility of the court significantly improve
- Rights of citizens are fully protected
- Investment climate is significantly improved
- Public supervision over the courts is ensured
- Judges strive to be highly qualified



- Additional resources are required
- Critical analysis of various problems in the process is required

Uzbekistan will become the first country in the CIS that has managed to carry out effective judicial reform and has a fair judicial process

Target vision 2035

Uzbekistan has an independent judiciary that ensures the rule of law, protects human rights, and enjoys an impeccable reputation of citizens and investors

- Enter the Top 10 countries in various international ratings related to the rule of law (Rule of Law Index, etc.)
- Enter the Top 10 countries in anticorruption ratings, including in the justice system
- Receive positive feedback from various independent experts, including UN bodies
- Presence of lawsuits in Uzbekistan's courts between large corporations, which thereby confirm the credibility of Uzbekistan's judicial system as a fair arbitrator
- Use of the norms of international law, both public and private, by the courts of Uzbekistan
- Judges and other lawyers in Uzbekistan take an active part in international courts, tribunals, and UN bodies along with lawyers from other countries
- 1 judge per 5,000 people.

	Figures		
	2020	2030	2035
1 judge per number of people	20,000	12,000	5,000

Road map

Court formation

2025

Rule of law

- Acceptance and implementation of a road map for reform of the judiciary as an institution ensuring institutional independence
- Final acquittals reach the level of 20–30%
- Accession to all procedures that allow the submission of individual communications within the UN
- Reform of legal education to provide Uzbekistan with highly qualified, world-class lawyers dedicated to their profession

- Achievement of complete eradication of the gap between law and practice
- Adoption of a mechanism that would allow direct application and interpretation of the rules of international treaties by Uzbekistan's judges
- Achievement of the full functioning of the Constitutional Court in Uzbekistan, which is an active participant in the formation of Uzbekistan's legal landscape

International level

and the Netherlands

2030

- Uzbekistan's judicial system reaches the level of the best example in Eurasia at the level of Western countries, including the United Kingdom, Switzerland,
- Achievement of participation of Uzbekistan's judges and other lawyers in various international tribunals, courts, and arbitration courts based on competence, high ethical standards, and earned reputation
- International law is an integral part of Uzbekistan's legal system and is directly applicable to judges in resolving all types of cases





2. Economic development

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Economic development



Current level of development



Key challenges

- Change in climate conditions
- Problem of food security (1.9 million undernourished people in 2016)
- Lack of water resources against the backdrop of a growing population and wasteful use of water
- Lack of cultivated lands, pastures, fodder due to high salinity and soil erosion
- Low agricultural productivity (USD 2,247 per agricultural worker)
- Losses during storage and transportation of vegetables and fruits
- High regulatory barriers for the development of entrepreneurship in agriculture
- · Lack of credit resources

Uzbekistan

European

countries

Turkey*

Poor development of staff training centers

Key findings

- Uzbekistan ranks 78th in the Food Security Index 2017. The index calculates the accessibility and quality of food resources in terms of affordability and availability of healthy food in 113 countries
- Uzbekistan holds leading positions in the production of many crops: cotton, apricots, cherries, sultana grapes
- At the present time, cultivated lands are released from cotton in favor of fruits and vegetables
- The yield of croplands used to grow various fruits and vegetables lags behind the indicators of developed countries
- At the present time, all lands are 100% owned by the state, and farmers lease them
- Infrastructure problems also exist exhaustion of the working capacity of the irrigation system¹
- **Drying of the Aral Sea** contributes to further salinization of soils and loss of crops as a result of salt storms
- Presence of a large amount of eroded soil due to the use of toxic defoliants in the past

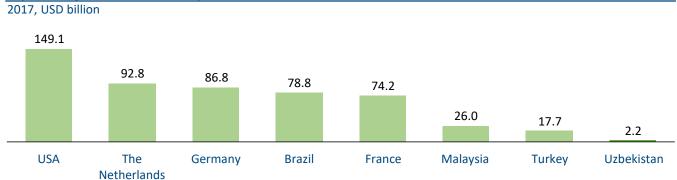
children in Turkey and adults in Russia

Food security Comments Prevalence of malnutrition % of population, 2016² The prevalence of malnutrition in 6.3% Uzbekistan is 2–3 times higher than in Western countries, Turkey, and Russia, and includes 1.9 million 2.5% 2.3% 1.8% people The deficiency of certain micronutrients is also greater than in Uzbekistan European Turkey Russia other countries countries **Deficiency in individual micronutrients** % of population, 2016² 53.1% Vitamin A deficiency, % of children 38.4% Vitamin A deficiency, % of adults 28.1% 26.8% 17.2% 14.1% * There is no data on vitamin A deficiency among

Russia*

Current level of agricultural development

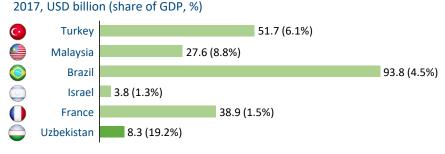




To conduct a comparative analysis of employment indicators, contribution to the economy and agricultural productivity, the leading countries in the production of agricultural products, export-oriented and possessing high-tech agriculture were selected

Uzbekistan exports fruits and vegetables, eggs, and lamb and goat meat. There is huge potential for agricultural crops, legumes, and seed crops (flax, sunflower, cotton)¹

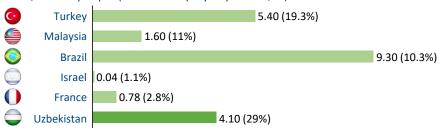
Contribution of the agriculture sector to the economy



 The share of agriculture in the Republic of Uzbekistan is currently higher than in other countries, which characterizes Uzbekistan's economy as emerging (1.3–1.5%)

Employment in agriculture

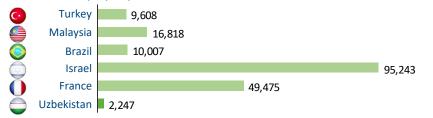




 The high level of employment in agriculture indicates a low level of integration of technological solutions in the agricultural sector

Agricultural productivity

2017, USD/employed person



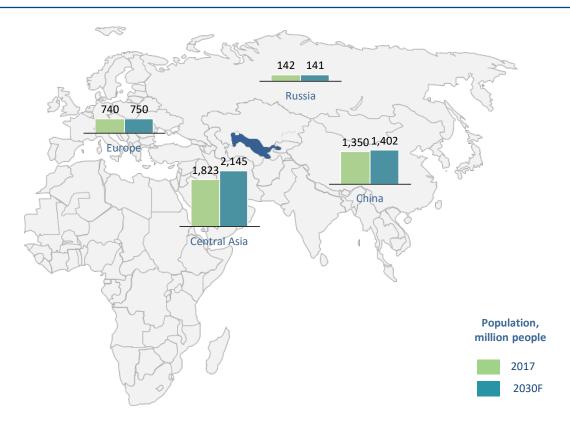
 Uzbekistan lags behind developed countries severalfold by the productivity of its agricultural industry

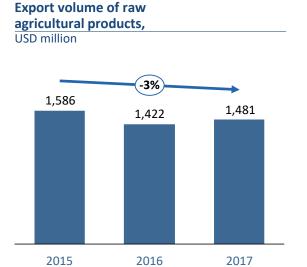
97

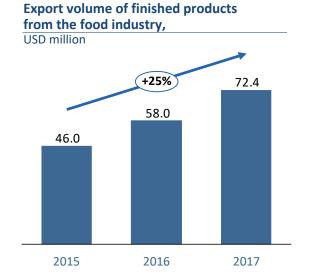
Current level of agricultural product export

If the current model of land and water resource management is maintained, food shortages will increase, land quality will deteriorate, and water reserves will decrease

Uzbekistan borders strategically attractive markets for trade in agricultural products

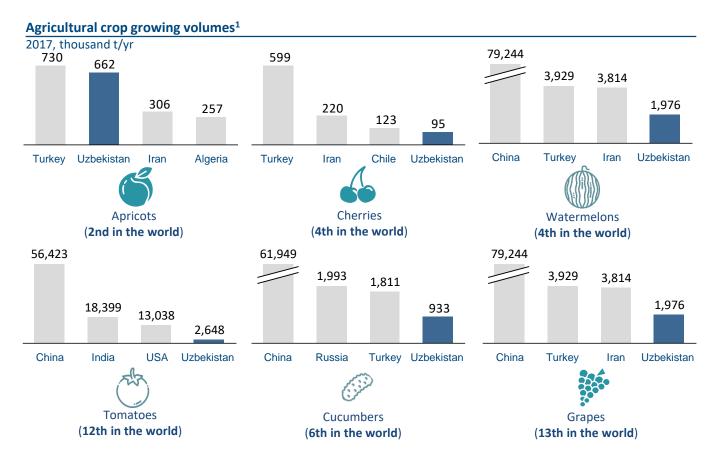




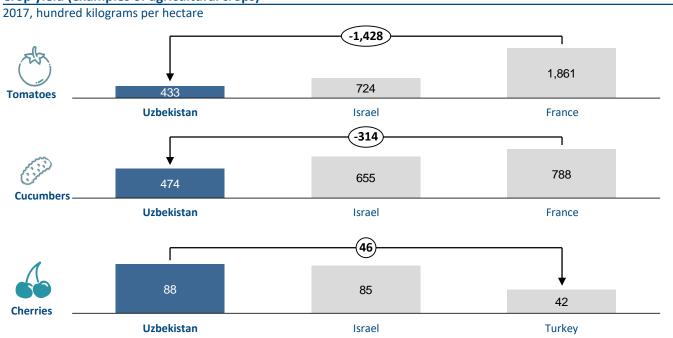


Source: Trade Map, 2017, analysis of the working group

Current level of Uzbekistan's export potential









Structural changes in the use of cultivated land

Structure of cultivated land use, 2018

Target structure of cultivated land use, 2035





Comments

- Elimination of cotton crops (60,000 ha) and grain crops (42,000 ha) on low-yield lands allows the average crop yield to increase considerably
- Increase in production of white meat will increase the profitability of the sector (production of 1 kg of white meat requires 5 times less feed)



15 ha of production areas will be allocated in the Republic of Karakalpakstan (Uzbekistan) for growing chili peppers. This order was given by President of Uzbekistan Shavkat Mirziyoyev during a trip to the Republic of Karakalpakstan

- Chili peppers are planned to be grown from varieties of **Indonesian hot peppers**, which were recently studied during the Uzbek delegation's trip to Indonesia.
- **68.3 million tons of chili peppers** are produced worldwide today. The ripening period of chili peppers is **60–80 days**, and the yield of industrial cultivation is **40 t/ha**



- Growing such nontraditional crops for Uzbekistan as pistachios on piedmont drylands is 50 times more profitable than wheat production on these lands; grazing during the period is only 4.5% of the benefits received from growing pistachios for the entire period
- Pistachios and chili peppers are not the only crops suitable to be grown in Uzbekistan, but are given only as examples
- It is also possible to extend production of traditional (local sorts of pomegranates, figs, apples, peaches, melons, pears, radishes, and others) and new crops, such as olives (olive plantations in Southern Europe are dying from a fungal infection that appeared due to the changing climate)

Area of irrigated lands exposed to salinization and erosion, km²

Area of saline soils¹
20,938 (48.6%)

22,162 (51.4%)

43,100

Area of soils exposed to erosion¹

6,284 (14.6%)

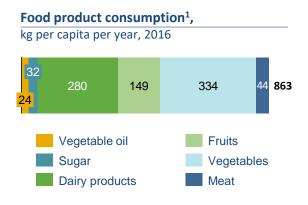
36,816 (85.4%)

43,100

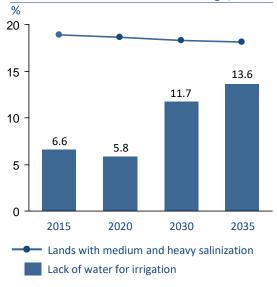
- In Karakalpakstan, the soil salinization ratio is 90%, in Khorezm region, 65%, in Bukhara region, 75–80%
- Desertification and man-made pollution pose a significant risk

Current model of land and water resource management

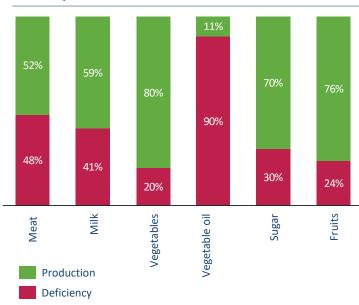
If the current model of land and water resource management is maintained, food shortages will increase, land quality will deteriorate, and water reserves will decrease



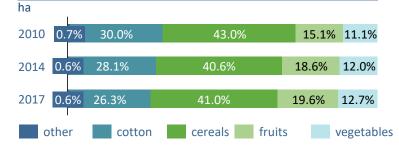
Soil salinization and water shortage,



Consumption in 2035



Distribution of croplands by product type,



Comments

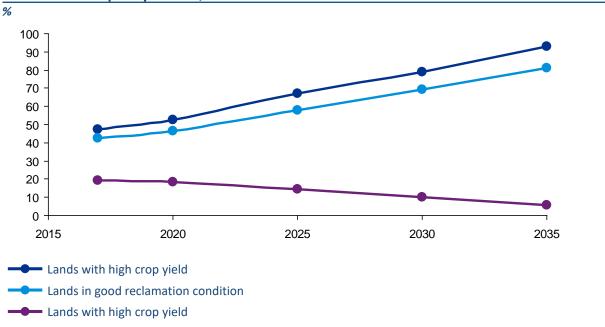
- Uzbekistan produces enough fruits, vegetables, and meat to satisfy the current domestic demand for these products
- However, there is already a need to import dairy products, sugar, and vegetable oil
- By 2035, a shortage is very likely to occur in **other types of food products** due to the following factors:
 - Population growth and change in the age structure in favor of an adult population
 - Increased income = increased demand
- An increased food shortage will be associated with:
 - scarcity of land and water resources
 - predicted climate change, as a result of which irrigation rates will increase by 5–10% by 2030



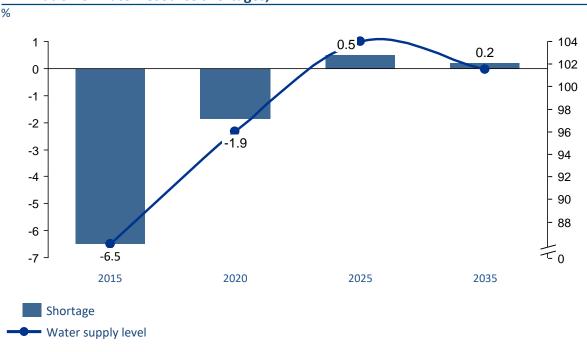
Support for the maintenance of irrigation and drainage infrastructure

Expansion of water-saving irrigation methods and support for maintenance of the irrigation and drainage infrastructure will increase the quality of lands and cover water shortages

Increase in the quality of land,



Elimination of water resource shortages,



Vision of the development of winemaking and viticulture



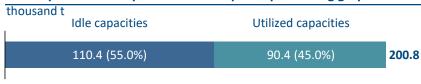
- On February 28, 2018, the Resolution of the President of the Republic of Uzbekistan Shavkat Mirziyoyev
 "On Measures to Fundamentally Improve the Wine Industry and the Sale of Alcoholic Beverages" was issued
- One of the most important points was the point about the abolition of licensing winemaking activities: "From January 1, 2019, licensing of activities for the production of natural grape wines developed from the raw materials of their own grape plantations, with the classification of such wines in the category of agricultural products, is canceled"
- Another item of the resolution introducing regulatory barriers to entry into the industry will also be important to potential investors: "From January 1, 2019, the activities for the production of natural wines, wine materials and brandy spirits, as well as the processing of grapes can be carried out by enterprises with plantations of at least 100 ha for the cultivation of fruit-bearing technical varieties (...)"

New and existing vineyards New vineyards

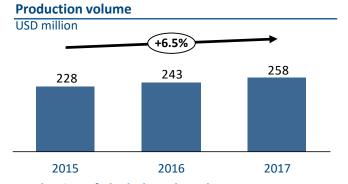
Comments

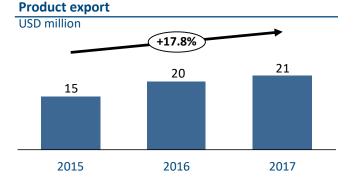


Use of production capacities of enterprises processing grapes



 At the present time, the available production capacities are not used in full, and production may be potentially doubled





Production of alcohol products by type



- **Over half of** all alcohol products produced in Uzbekistan are vodka, liqueurs, and spirits
- Wine production accounts for only 7.4% of the total production

Sources: Uzsharobsanoat JSC, analysis of the working group

Use of technology in agriculture

False flax (Camelina) is a traditional product of GAV

False flax is a dual-purpose product:

- For production of aviation biofuel and biodiesel
- For feeding cattle

Export potential: USD 90 million+ per year

Cultivation costs: 30%+ of cotton

Lactoferrin is a source of simple income from any dairy production

Lactoferrin is a **protein found in blood plasma**. Lactoferrin is produced in the mammary glands of humans and other mammals¹

Main market: China, Japan, South Korea

Export potential: USD 200 million+ per year

Price for 1 kg: USD 800 to USD 5,000 per kg

Market growth: 39% per year

Technology for membrane storage of products

Implementation of the **membrane method** for storing fresh plants in a modified gas medium will allow for long-term storage of **vegetables and fruits**

This technology is used in new types of containers inside which a **controlled gas medium** is created during sealing

Shelf life:



up to 330 days

up to 25 days



up to 50 days



Accelerated development of horticulture in the Republic of Uzbekistan through a cluster system



- On March 29, 2018, the Decree of the President of the Republic of Uzbekistan Shavkat Mirziyoyev "On Additional Measures for the Accelerated Development of Horticulture in the Republic of Uzbekistan" was issued
- One of the points of this decree concerns the creation of horticulture clusters: "To ensure in 2018 the creation in each region of 1–2 horticulture clusters and involvement from 2019 in a cluster form of organizing agricultural production of all regions specialized in the cultivation of fruits and vegetables; provide horticulture clusters with the right to independently decide on the placement of crops, determine the volume of cultivation of products, their species, and varieties, application of agrotechnological methods taking into account soil and climatic conditions, focus on demand in the domestic and foreign markets, as well as conclusion of contracts with farmers and dehkan farms for the harvesting of their agricultural products"
- According to the best international practices, the introduction of horticulture clusters will have a positive impact on the development of agriculture

The context and activity of the Cluster Association of the Midi-Pyrenees Region (France) illustrates the important role clusters play in stimulating innovations in the agroindustrial complex

Agrofood sector is the **foundation** of the economy in Aquitaine and Midi-Pyrenees

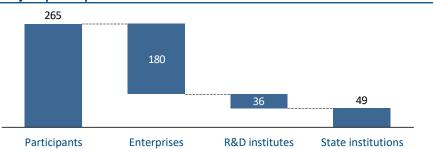


Employment in the cluster is over **210,000 people**

Financial turnover in the cluster is over EUR 12 billion

Access to 20 million consumers within a 300 km radius of Toulouse

Project participants in the cluster association



- Mobilize regional resources for investment in the cluster: attract financial and institutional support for the regional authority, optimize the use of financial instruments, and attract federal funding
- Support innovation clubs by individual areas:
 - Adaptation of crops to climate change
 - Development of agricultural machinery
 - Improvement in health safety and quality improvement
 - Innovative products
 - Improvement in production systems
 - Creation of new market proposals
 - Interaction with the environment
- Form alliances with cluster associations of other regions

- Goals:
- Increase the added value of the cluster's products
- Gain leadership among the regions due to competitive AIC
- Increase the region's attractiveness
- Create new jobs

EUR million for implementation of 238 projects

595
engaged enterprises
23
enjagets within the framework of

projects within the framework of target programs



International experience

Introduction of geographic indicators in Australia and Argentina increased added value and exports of agricultural and food industry products



The "Made in Australia" mark indicates Australia as an exporter of agricultural products



Australi

Goal:

To create a positive image of Australia as an agricultural product exporter:

- 1. All of the most important product ingredients were produced in Australia
- 2. The process of finished product manufacture also took place in Australia

Indicators:

- Over 10,000 products are labeled with the "Made in Australia" logo
- 98% of consumers recognize this logo
- Over 1,800 companies use the logo on their products



The "Brand of the Country" program played an important role in creating Argentina's positive image as an agricultural product exporter



Implementation mechanisms:

- "Brand of the Country" program
- "Argentina Food Products" trademark
- "Wines of Argentina" brand promotion

Activities:

Creation of Argentina Top Wines, an organization uniting more than ten wine cellars focused on exporting wine

Current results:

At the present time, the Wines of Argentina brand is represented in 36 countries and more than 70 cities worldwide

Target by 2020:

- USD 2 billion, revenue from the sale of Argentine wines
- 10%, global export of wines

International experience

The production volume in India's agricultural sector increased by teaching farmers the best international practices

BASF training program contributed to the development of agriculture in India

Before 2005, the average yield of soybean fields in India amounted to 0.9 t/ha, which accounted for only **37.5% of the average global indicators** (the average global indicator was 2.37 t/ha). The causes of **low crop yield** in India were:



India

- Wrong choice of fertilizers
- Underuse of plant protection agents
- Overall lack of knowledge in farming

The idea is to unite the efforts of BASF agronomists and farmers to achieve higher figures of return on business:

- Over 2,000 group lessons and 950 onsite seminars. Each of 280 engaged agronomists trained 150 to 225 farmers
- Teaching farmers how to farm was expected to increase the demand for fertilizers, one of BASF's key products in 2011². Distribution of fertilizers was provided via the existing system of suppliers that farmers were familiar with

Support and education of farmers allowed BASF to triple sales in India in 5 years

Indicators after introduction of the training program:



Soybean crop yield grew by **31%**



A call center was set up because of too high demand



Income grew by 24%

3

Sales by the company that organized training tripled

- Intensification in agriculture creates a demand for mineral fertilizers
- Development of agriculture with the highest result requires informed decisions based on farming knowledge
- Teaching farmers the best practices in the agricultural industry amid poor agriculture intensity is beneficial both for the farmers and for large companies producing fertilizers or agricultural machinery

Strategic options

1

Government associations

80–100% of land is owned by the state. Land plots are leased on a competitive basis

State monopoly associations have great influence; there are quotas for growing agricultural crops and for water





- Solving the problem of food security at the government level
- High level of development of staff training centers



- Absence of market conditions reduces competition between farmers
- Enterprises subsidized by the state cannot be competitive in global markets

The state plays the key role in development of agriculture

2

Medium-sized farms

40–60% of land is owned by the state. Land plots are leased on a competitive basis or are granted in ownership to farmers

Emphasis is placed on the development of medium farms through PPP, and regional agricultural clusters are created



Target development option -







- Ability to increase product output due to the effect of scale
- Full-cycle production inside the clusters gives a synergistic effect



- Focus on increasing quantity, not on improving quality of products
- Lack of flexibility in the choice of products, focus on marginal products

Large and medium farms operating in the cluster system become the driver of agriculture development

3

Small households

90–100% of land is privately owned. Land plots are granted in ownership to farmers.

Emphasis is placed on development of small farms, and agriculture has the following structure: farmers – traders

Examples of countries:





- brokers



- Competition between small households stimulates development of the sector
- Possibility of reorienting production due to the lack of quotas



Legal barriers need to be introduced to counter potential changes in the intended use of agricultural croplands by land owners

Small households produce natural agricultural products that will be then sold via a system of traders to the domestic market and for export

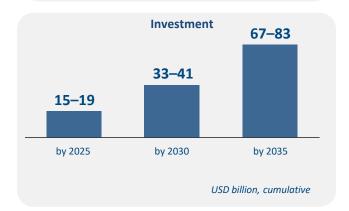


Target vision 2035

High-tech agriculture satisfying the growing demands of the population of Uzbekistan and focused on export products with a high level of processing and fresh fruits and vegetables

- 40–60% of land is owned by the state
- Focus on exporting finished products with high added value
- Emphasis on PPP in development of large-scale forms of farming in production and small-scale forms of farming in growing raw materials
- Creation of regional agricultural clusters
- Rational use of water resources for agricultural needs
- Creation of 15–20 centers for storing, sorting, and processing agricultural products
- Opening of new training centers in partnership with the leading US and European universities
- Automated management of agricultural complexes
- Construction of 2 factories for manufacturing agricultural machinery
- Adoption of international quality standards
- Promotion of healthy eating by the population by offering a wider choice of fruits and vegetables, and ensuring availability of various types of food for the population

Figures			
	2017	2035	CAGR
Agricultural production, USD billion	8.3	15.2	3.4%
Employment in agriculture, %	29	12.2	
Agricultural productivity, USD thousand per employed person	2.0	6.6	6.2%
Decline in the share of salinized lands, %	48.6	15	
Decline in the share of irrigated lands exposed to erosion, %	14.6	5	
Export of alcohol products	21	80	8.2%
Average crop yield of vineyards, t/ha	4	10	
Annual water intake for agricultural needs, % of total amount	90	70	
Prevalence of malnutrition, % of total population ¹	6.3	<1	



Agriculture

Key strategic initiatives

Removal of regulatory barriers to land privatization

2025

- Adoption of international quality standards
- Implementation of the membrane method of plant product storage
- Upgrading of existing and construction of new irrigation and drainage infrastructure
- Creation of large agroclusters, networks selling natural products, and industry banks
- Increasing the number of new training centers for training qualified staff
- Use of salinized irrigated lands to plant salt-tolerant plants: particularly salt-tolerant plants, such as beets (table beets, stock beets, and sugar beets), and medium-tolerant plants, such as tomatoes, cabbage, turnips, radishes, carrots, potatoes
- Subsidized loans for reconstruction, retrofitting, and restructuring of livestock farms
- Lease of breeding stock with high productivity indicators

- Creation of quality control laboratories
- Construction of factories for manufacturing agricultural machinery
- Breeding of special cows producing milk with higher lactoferrin content
- Production of protein products made of insects to feed animals
- Creation of programs to retrain agricultural workers
- Start of restructuring of the agroindustry
- Development of consumer cooperatives
- Subsidized loans for the development of private household plots and farms
- Development of biotechnologies, including genetic modification, molecular markers, molecular diagnostics, vaccines, cell cultures, microbiological solutions for the food industry
- Solving malnutrition and micronutrient deficiencies
- Use of false flax to restore the soil after cotton

Improvement in the informational support system in the agroindustry complex

2035

Formation of conditions for innovative development of agriculture

2030

- Widespread automation of management of agricultural complexes: implementation of IIOT technology, use of drones
- Final formation of a clear structure in the agroindustry (small and medium forms of farming for growing raw materials and large-scale forms for product manufacture)
- Creation of a unified public register of vineyards and database of lands fit for growing grapes

personnel finance

technologies

legislation and state regulation

infrastructure

Agriculture

Key strategic initiatives



Industry

Economic development



Economic development. Industry



Current level of development

(!)

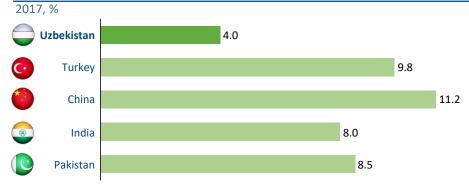
Key challenges

- Expanding production capacities for complete and deep processing of the entire volume of cotton fiber produced
- Solving the problem of slave labor in picking raw cotton
- The textile industry performs a social function by providing jobs to women
- Ensuring the output of products competitive in foreign markets
- Improving the qualified staff training system for the industry

Key findings

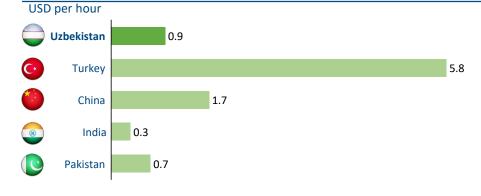
- At the present time, the system of textile clusters in Uzbekistan is poorly developed; a system of geographic indicators has not been introduced as is the case with countries holding leading positions in textile production
- Lack of modern weaving and dyeing-finishing capacities due to rather low profitability of weaving factories and long-term turnover of funds (more than 4 months)1
- A crisis of confidence toward cotton products from Uzbekistan from the global community occurred after several international organizations disclosed their reports on use of forced labor (including child labor) in picking cotton; it slowed the pace of development of the textile industry and attraction of foreign investors
- Lack of qualified management staff, low level of qualifications of managers and personnel, absence of labor motivation of employees, decline in prestige of blue-collar and technical jobs

Share of textile industry in GDP¹



 Having a big resource base, the Republic of Uzbekistan manufactures an insufficient volume of finished textile products, which explains its lag behind the leading countries in textile production by 2–2.5 times by contribution to GDP

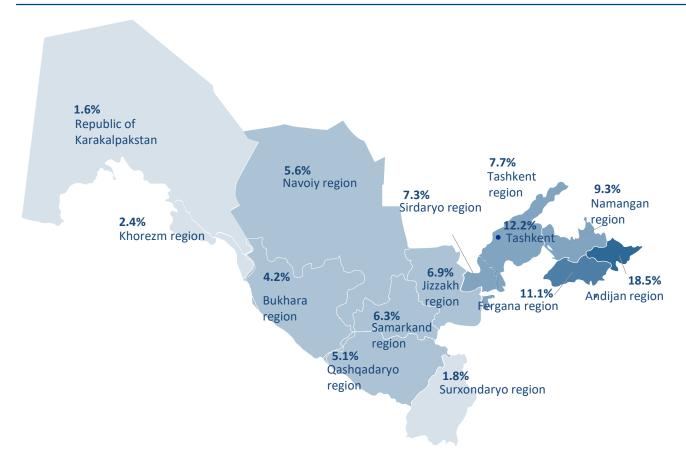
Labor cost¹, 2017



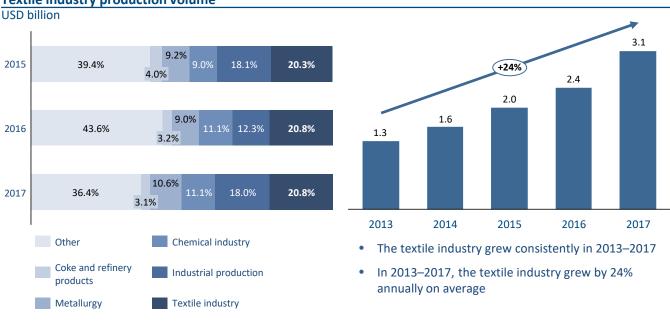
The Republic of Uzbekistan has a competitive advantage over China and Turkey thanks to a relatively cheap minimum cost of labor

Current level of development

Breakdown of textile product volume by region¹

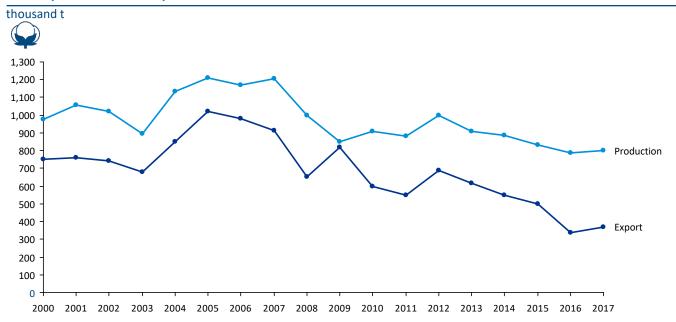


Textile industry production volume¹

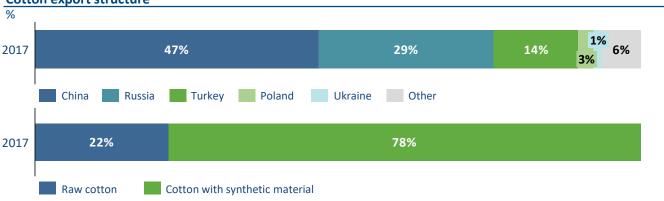


Current level of development

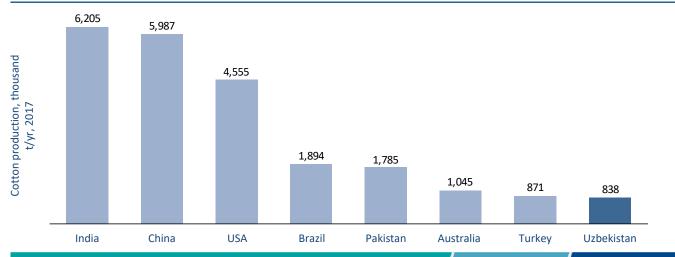
Cotton production and export trend¹



Cotton export structure¹



Cotton fiber manufacturers²



Strategic options

1

Cheap products (current situation)

Raw products and export are subsidized, preferential short-term loans for working capital are provided, and a duty-free scheme for the import of all auxiliary materials is established to attract western investors. Creation of large textile companies united in holdings (clusters) that provide for a closed production cycle – from fiber processing to manufacture of finished wearing apparel – allows prices to be maintained at a competitive level





- The textile industry starts developing quickly
- The country receives large amounts of foreign investment
- Finished products will be able to satisfy internal demands and will be exported in large volumes



- International investors who invest funds in production will focus on the cheap labor force.
 Therefore, the living conditions of people will not improve
- Cheap products are often manufactured using dangerous chemicals in order to reduce costs

High competition with countries manufacturing cheap textile products

2

Branded products

The sector is also developing with the help of clusters, but the chain of creating finished product value also includes expenses on partner programs with international design firms, on expansion of the assortment of clothes by creating exclusive models, and on ensuring production of leisure clothes made from natural fabrics. The garment industry also focuses on the tastes and demands of specific segments of the population, age of consumers, climatic conditions, etc.













- To obtain foreign investments in the long run, gaining a reputation as a manufacturer and exporter of high-quality textiles is important
- Enhancement of technological equipment
- Organization of production to create related parts: zippers, buttons, etc., which leads to the creation of new jobs



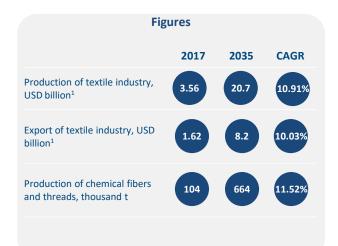
In the short-term, a sector regulated by the state must migrate to the market condition, invest in R&D, purchase new equipment, and ensure the creation of training centers for retraining employees

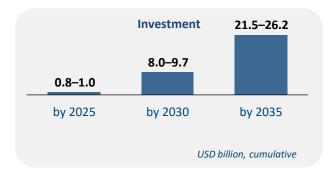
Big investments in production, technology, human capital, and image are required

Target vision 2035

High-tech textile industry with extensive processing of raw material that satisfies internal needs of the population based on the natural competitive advantages of the country and that is integrated with the global system of labor division

- Recognition by the global community of a resolution to the problem of forced labor in cotton picking
- Expansion of production capacities for processing cotton fiber (over 90 ginning plants)
- Launch of partner programs with TOP 10 international design firms to create branded products





Key strategic initiatives

Partner agreements with international fashion and design agencies

2025

- Update of production technology Adopt international quality standards, eliminate the slave labor problem
- Transition to a system of environmentally safe production of clothes
- Increase the production of fabrics with special kinds of finishing crease-resistant and shrink-resistant - with increased shape stability and lower material consumption
- Create a modern educational and research textile technopark based on the Tashkent Institute of Textile and Light Industry. Develop pilot projects for localization of chemical fiber production facilities
- Build a technological chain of synthetic materials (from production of polyester, viscose, and polyamide fibers to production of technical textile and other synthetic fabrics)
- Preserve and develop the existing associated segments of the industry, including building a technological chain of leather materials production (from raw hides to finished leather for clothing, footwear, furniture, and automotive industries)

Use next-generation sewing machines to automate the technological part of the production process

2030

- Implement "smart clothes" production technologies that will have anytime internet access, measure parameters of the state of health, etc.
- Produce new materials made of nontraditional raw materials and secondary resources
- Increase the performance of filtered nonwoven materials to solve environmental problems of large industrial enterprises
- Create conditions for partial localization of production of clothing and footwear products and support the development of domestic brands
- Minimize illegal production and circulation of textile industry goods in the consumer market
- Segment promising new commodity markets, expand and diversify product sales markets (Asian, African, American countries). Develop product marketing and advertising, image advertisement, and PR activities

Export high-quality products with a single label, "Uztextile"

2035

- Introduce nanotechnology in the textile industry
- Optimize staff size, their professional and expertise-based structure
- Solve the problem of employment of textile industry workers who were made redundant during automation and robotization (75% of workers are women)

personnel

finance

technologies



legislation and state regulation



infrastructure

Economic development. Industry



Current level of energy industry development

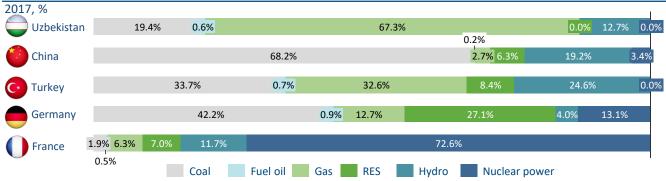
Key challenges

- At the present time, the model for using available energy resources is costintensive. If it does not change, the shortage of energy resources will grow to 65% by 2035
- Updating the existing obsolete energy industry infrastructure
- The need for major repairs of all main units at many existing power plants
- Restoring the Republic of Uzbekistan's independent position in the waterenergy balance of Central Asian countries depends on the development of the innovation potential of the fuel and energy complex
- Energy loss during distribution

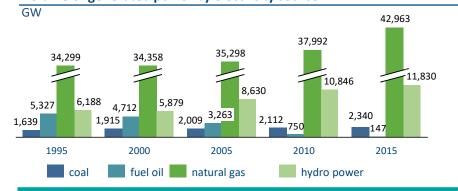
Key findings

- The main source of electricity and thermal energy in the Republic of Uzbekistan is thermal power plants (TPP) running on natural gas
- Restoration of the Republic of Uzbekistan's independent position in the water-energy balance of Central Asian countries requires power plant output to be increased through renovation and conversion of existing and installation of new units, including renewable energy units (biomass, etc.)
- To increase the level of expertise in the field of energy, it is necessary to open new and expand existing training centers, as well as develop programs to re-train employees
- Due to the increased importance of renewable energy sources, the coal industry will shrink. Therefore, it is necessary to provide jobs to people engaged in coal production
- Despite a low electricity price (USD 0.068 per 1 kW), the cost of connecting to the power supply system is 9 times higher than the average income per capita, and the time to connect is 6.5 times longer than in developed countries. A reduction in the cost and time for connection will elevate the country in the Doing Business Rating¹
- According to data provided by the Ministry of Economy for 2015, the energy content of the GDP of Uzbekistan has declined since 2000 from 0.98 tons of oil equivalent (t.o.e.) to 0.48 t.o.e. per USD 1,000 vs. the average global level of 0.2 t.o.e., and it has a certain potential for further decline²

Shares of electricity sources by type³



Volume of generated power by electricity source³



Comments

 At the present time, the Republic of Uzbekistan demonstrates the trend of abandoning use of fuel oil due to its poor efficiency in generating electricity

Sources: 1 = Doing Business Index 2018, World Bank; 2 = UzDaily; 3 = Uzbekenergo JSC, International Energy Agency, State Statistics Committee of the Republic of Uzbekistan, analysis of the working group

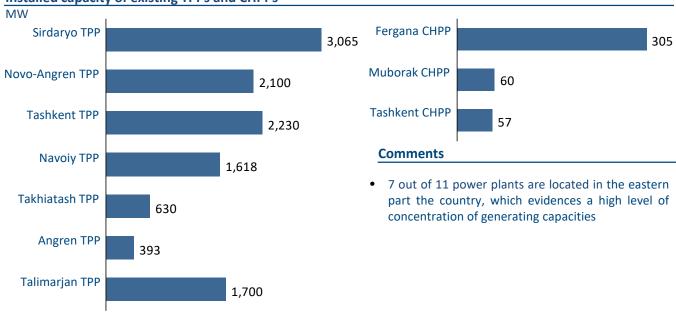
121

Current level of development

Electricity and thermal power generation by region



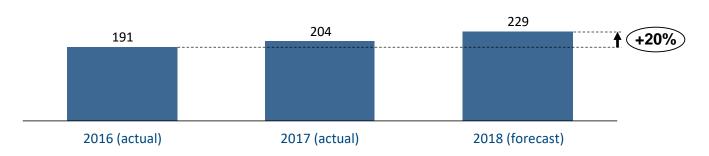




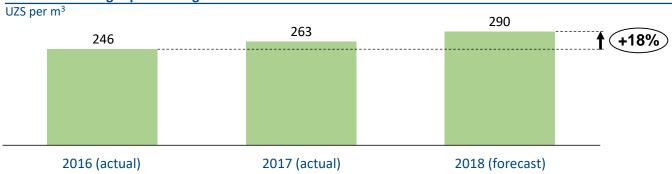
Changes in prices for electricity and energy carriers



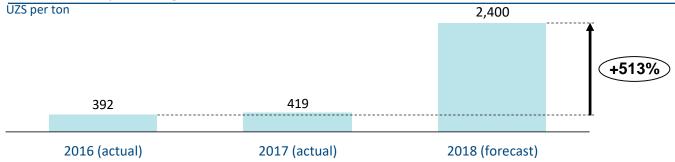
UZS per kW/h



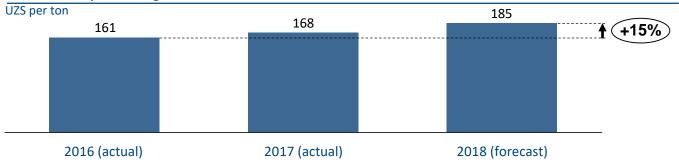
Trend in natural gas price change



Trend in fuel oil price change

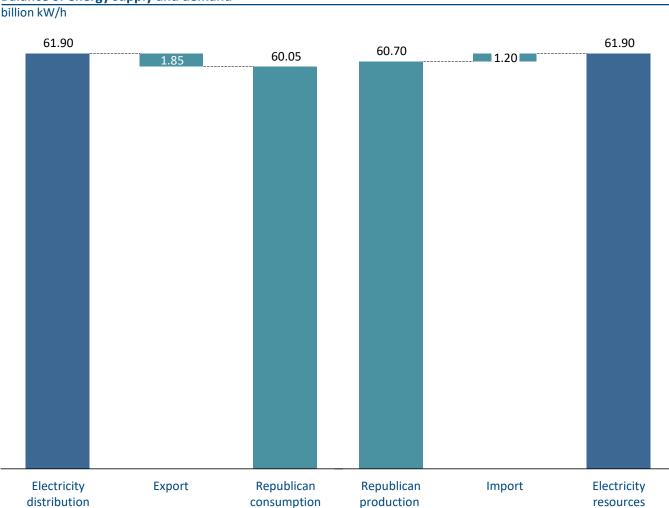


Trend in coal price change



Analysis of energy supply and demand



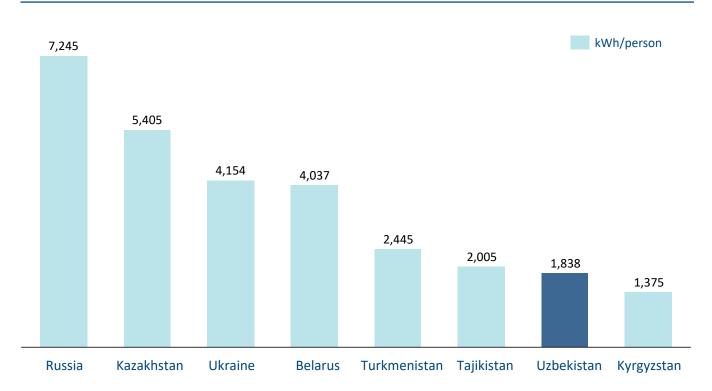


Comments

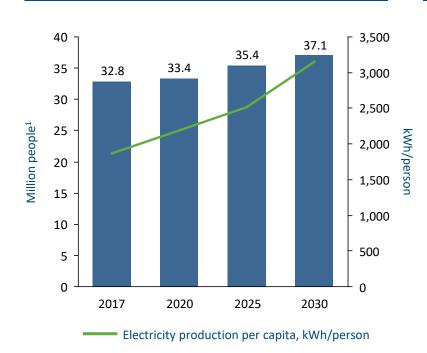
- Electricity generated by Uzbekenergo JSC, Uzbekgidroenergo JSC, and isolated generating plants AMMC and UKGC is enough to cover the republic's demand
- Since 2002, Uzbekistan has been supplying electricity to Afghanistan under annual direct contracts with due regard for demand from Afghanistan. Every year the supply volume has increased. In 2018, a contract for supply of about 1.85 billion kW/h of electricity was signed
- To cover the demand for electricity in the Fergana valley, Uzbekistan imports 1.2 billion kW/h from Kyrgyzstan
- Today, four Central Asian republics Uzbekistan, Tajikistan, Kazakhstan, and Kyrgyzstan plan to resume
 operation of the energy ring of Central Asia.
- This project will also include maintenance of the water and energy balance in the Central Asian region

Forecast of electricity production per capita

Electricity per capita



Forecast of increased demand for electricity in the Republic of Uzbekistan until 2030



Population, million people

Comments

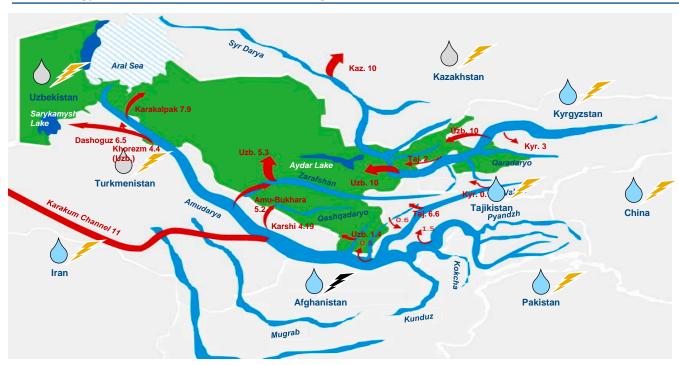
- Today, Uzbekistan generates less than
 2,000 kW/h per capital, which is the
 second lowest in Central Asia
- Uzbekenergo JSC plans to increase electricity production to 3,156 kW/h per capital taking into account the growing population
- This figure will be reached due to increased production of renewable energy sources in the structure of generating capacities from the current 12.7 to 19.7% by 2025² and upgrading of the existing plants

Sources: 1 = Institute of Forecasting and Macroeconomic Studies under the Cabinet of Ministers of the Republic of Uzbekistan, Uzbekenergo JSC; 2 = Sputnik Uzbekistan, analysis of the working group

125

Current level of energy industry development

Water-energy balance chart of the Central Asian region



Sufficient/insufficient electricity Sufficient/insufficient water resources **Diversion channels River waters**





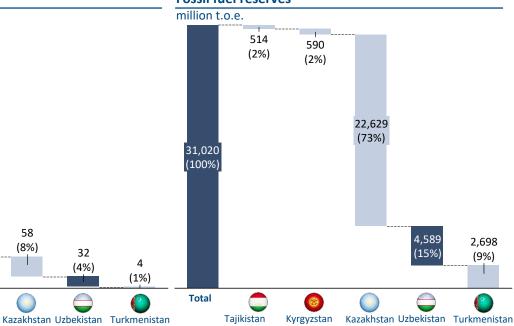
Water resource reserves

Tajikistan

Kyrgyzstan

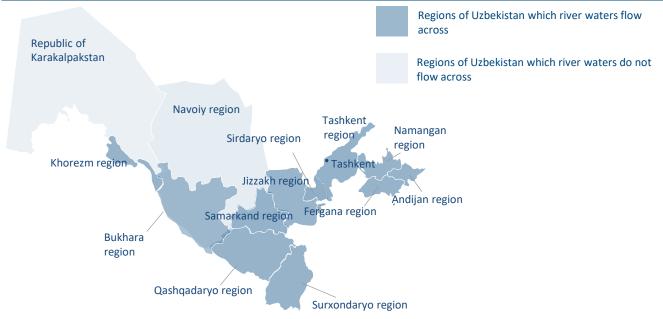
million t.o.e. 412 (53%)772 (100%) 266 (34%) 58 (8%) 32 (4%) (1%) Total

Fossil fuel reserves



Current level of energy industry development

Distribution of water resources in the Republic of Uzbekistan



Experience using small hydroelectric power plants (HPP)

- One of the most effective measures to increase energy efficiency will be standard construction of small **diversion power plants** at shallow channels **(7–8 meters deep) using capsular hydroelectric units** (similar to the experience of Russia, Ukraine, Kyrgyzstan, and Kazakhstan)
- Small HPPs do not have a negative impact on the environment, unlike large dam and run-of-river HPPs
- Shavkat Mirziyoyev, President of Uzbekistan, approved the Hydropower Development Program for 2017–2021. In particular, the program outlined 42 projects for the construction of new and upgrading of 32 existing hydropower plants in the system of the Ministry of Agriculture and Water Facilities of the Republic of Uzbekistan, Uzbekenergo JSC, at natural water flows and water utilization facilities of the country¹
- There are 1,350 small HPPs in Sweden, which generate 10% of the country's electricity demand. There are about 83,000 small HPPs in China.

Trend in the availability of water resources in Central Asia and Europe

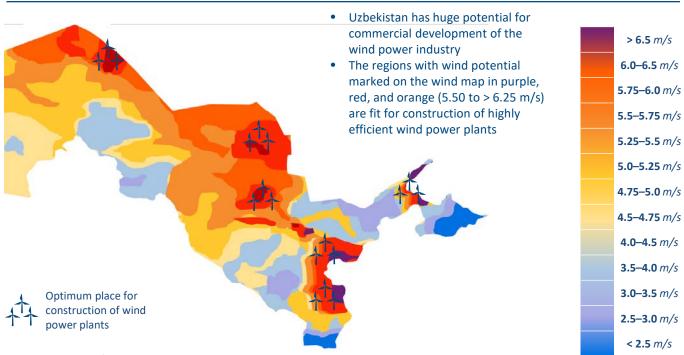
thousand m³ per capita annually 10 Categories of water resource availability: 8 $> 1,700 \text{ m}^3 = \text{significant}$ $1,000-1,700 \text{ m}^3 = \text{insignificant}$ 6 < 1,000 m³ = shortage 4 2 0 1960 2030 1970 1980 1990 2000 2010 2020 2040 Central Asia Europe

Comments

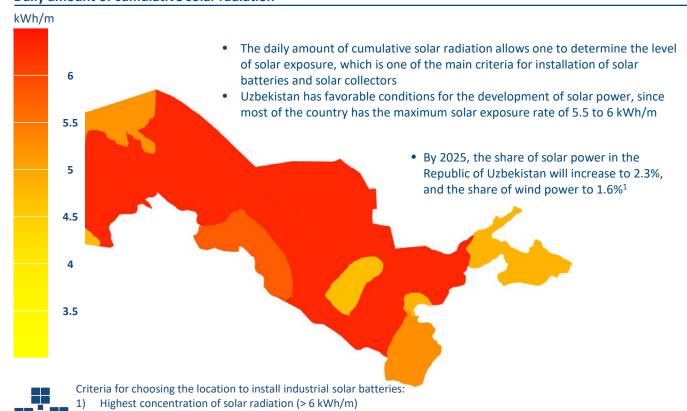
- Over the last 40 years, water supply volumes in Central Asia declined from 8,400 m³ to 2,500 m³ per capita annually
- By 2030, subject to the current population growth indicators in Central Asia, water supply volumes will reach the critical level of less than 1,700 m³ annually
- However, another 500–700 million m³ of water is required annually to support the minimum consumption level in Central Asia

Current level of energy industry development

Qualitative distribution of wind speed (average wind speed) at 80 m above the ground



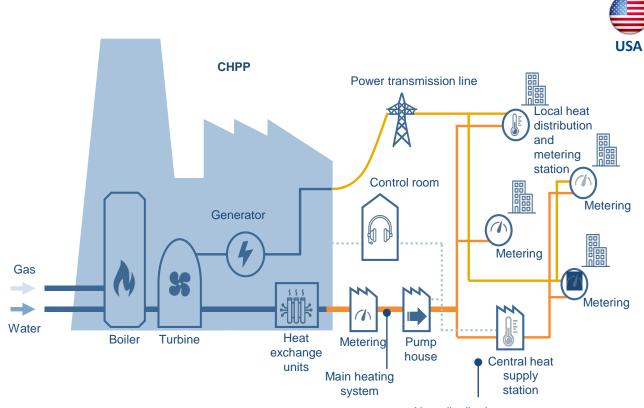
Daily amount of cumulative solar radiation



Settlements are located far from other power plants generating energy, so lack of power is observed

International experience

From CHPP to consumer: heat and electricity lines



Heat distribution system

Comments

General Electric may build a new combined-cycle power unit in Tashkent: the agreement was signed during President Shavkat Mirziyoyev's visit to the USA



- General Electric (GE) and Uzbekenergo JSC signed agreements to expand cooperation in the energy industry
- The parties agreed to consider possible implementation of a construction project for anew combinedcycle power unit at Tashkent TPP with a capacity over 660 MW on the basis of a GE H-class gas turbine
- H-class turbines are the most powerful in the GE line and are among the turbines with the highest performance in the world
- Combined-cycle power units based on the given settings can reach record-breaking power efficiency: in particular, at the combined-cycle power unit in Nagoya (Japan) in 2018 this indicator reached 63.08% and entered the Guinness Book of Records
- GE actively participates in solving the key infrastructure challenges of the country: the company was the
 main equipment provider for the 370 MW combined-cycle power unit at Tashkent TPP. At the present
 time, GE together with Hyundai Engineering & Construction is participating in the implementation of a
 construction project for two 230–280 MW CCPU blocks at Takhiatash TPP

Strategic options for the energy industry's level of regulation

Focus on traditional energy sources

Electricity will continue to be generated at the existing TPPs and CHPPs. Also, new electricity generation technologies will be implemented based on mobile gas turbine plants.









- Plants and infrastructure already exist, they only require renovation
- There are huge natural gas reserves that will satisfy domestic demand



Uzbekistan will continue to use traditional energy sources, and investments will be used to upgrade the infrastructure and equipment

Focus on renewable energy sources

Over 30% of all energy is generated with renewable energy sources (RES), big investments are made in construction of industrial solar batteries, wind generators, small HPPs, related infrastructure, as well as energy storage systems











- Geographic position and weather conditions
- Relatively inexpensive installation of power generation plants
- Reduction in prices for RES equipment



Lack of qualified personnel

----- Target development option ----

- At the moment, there are no operational and effective energy storage solutions
- Inadaptability of modern electrical network to connect with RES

Green energy will be the main energy in Uzbekistan's energy portfolio

Focus on nuclear power industry

Over 30% of all electricity is generated at nuclear power plants, large direct foreign investments are attracted, and foreign specialists are brought in for their construction and subsequent maintenance



Examples of countries:









- Direct investments
- Creation of a lot of jobs
- Potential uninterrupted power supply for a long
- Possibility to use energy carriers to receive products with gross added value (GAV)

Electricity from RES will be cheaper in 15–20 years

France

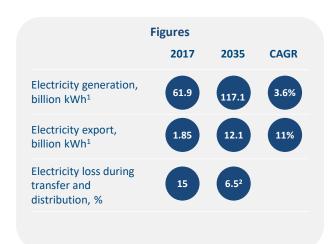
- Man-made risks
- · High demand for water
- Very high cost of investment

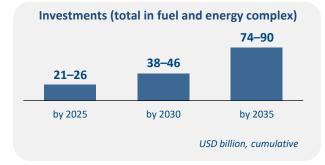
Major capital investments in nuclear power will have a long payback period, but power supply will be uninterrupted

Target vision 2035

Establish Uzbekistan's position in the energy balance of Central Asia, adopt a resource-efficient model for water consumption, and increase the economy's energy efficiency overall

- Construction of small diversion HPPs and related infrastructure
- Construction of plants generating thermal or electrical power from renewable energy sources, such as the sun, wind, or bio waste
- Work on creation of a water-power consortium in Central Asia
- Development of projects in the nuclear power industry (together with Russia, France, and China)
- Development of an industrial energy storage system
- Implementation of a decentralized electricity generation system (Smart Grid)





Main strategic initiatives in the energy industry

iam strategic initiatives in the energy industry

2025

2030

2035

- Operate combined-cycle power units during the implementation of economic measures, including introduction of a fee for carbon dioxide emissions, and direct ban on obsolete equipment that does not meet modern technological and environmental standards
- Gas turbine and upgraded combined-cycle CHPPs of different power, including modular stations running mostly on gas and partially on coal (where coal is a targeted fuel)
- Develop nuclear and renewable energy (in particular, solar and wind energy) aimed at diversifying the national fuel and energy balance
- Water-energy consortium as part of restoration of the unified energy system of Central Asia
- Upgrade 65 main substations of 220–500 kV, replacing the main power equipment with energy-efficient equipment with increased power (power and metering transformer units)
- Ensure stable energy supply and increase capacity of the demand for electricity and fuel
- Develop financial mechanisms to stimulate demand for electricity
- Upgrade distribution grids

- Develop nuclear power projects, complete construction of the first power units
- Implement a distributed electricity generation system
- Develop an industrial energy storage system
- Balanced development of networks depending on the specific utilization conditions of transformers and lines based on elaboration and implementation of the Networks Development Plan
- Energy industry based on renewable energy sources will develop, including in the form of small diversion HPPs, solar power plants, geothermal power plants and heat supply units, bioenergy and wind plants, waste burning and waste processing energy facilities in large cities. The share of RES in the energy balance will reach 25–30%
- Start retraining coal industry workers
- Integrate with the international projects of CASA-1000 type
- Implement an automatic control and information collection system (based on the example of SCADA)

- Implement industrial IoT digital technology
- Further work on strengthening interstate power transmission lines for a material increase in the share of Uzbekistan's electricity in the energy balance of neighboring countries in Central Asia
- Construct new transit lines of 500 kV through Uzbekistan Afghanistan Pakistan to increase the export potential of the Republic of Uzbekistan in the direction of Afghanistan and Pakistan, taking into account a roughly 5,000 MW deficit in Pakistan's energy system

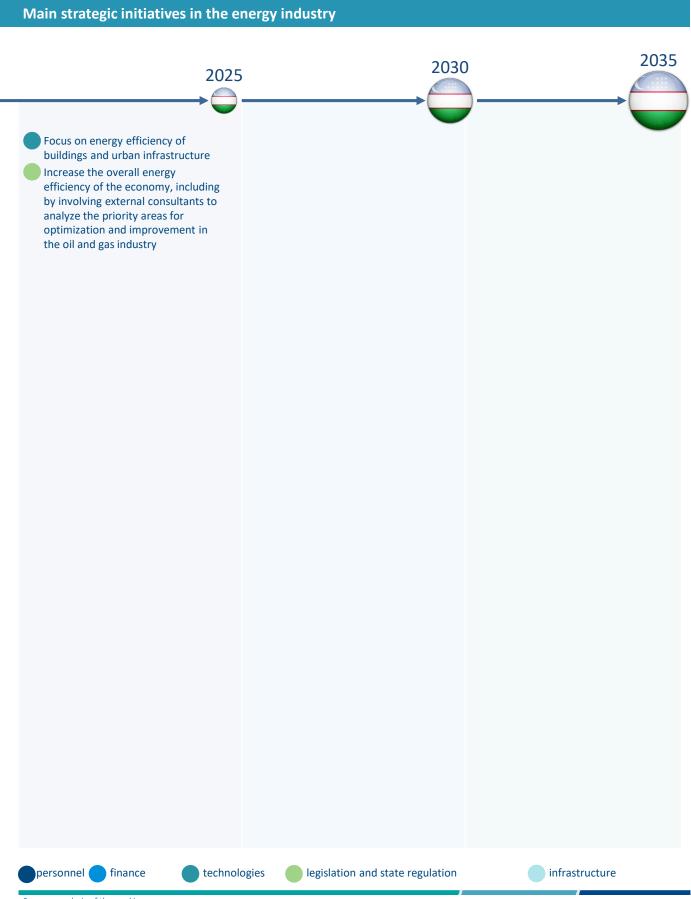
personnel

finance

technologies

legislation and state regulation

infrastructure



Current level of fuel industry development

Key challenges

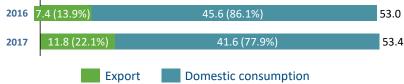
- To increase the refining depth to get products with high added value
- To increase drilling capacity
- To organize the Drilling Machinery and Equipment Maintenance and Repair Center
- To build new refineries and gas processing plants, to upgrade obsolete equipment at existing plants
- To implement systematic measures to train qualified staff in close integration of the educational process with science and production

Key findings

- At the present time, Uzbekistan's oil and gas industry is a regulated market, and migration to a developed oil and gas market will require structural adjustment of the value creation chain, as well as changes to the legislation and development of independent players
- During the first half of 2018, diesel fuel production grew by 17.7% (to 650,600 t); oil production declined by 9.9% (to 437,500 t) compared to the same period in 2017; production of natural gas grew by 6.6% (to over 34.33 billion m3); gas condensate production grew by 16.1% (to 1.23 million t) compared to the same period in 20171
- Petrol 92 in the Republic of Uzbekistan is more expensive than in other Central Asian countries. Diesel fuel is sold at approximately the same price as in other countries of the region
- The lack of qualified staff, low level of qualifications of managers and personnel, absence of labor motivation of employees, decline in prestige of blue-collar and technical jobs

Ratio of export and domestic consumption of gas²

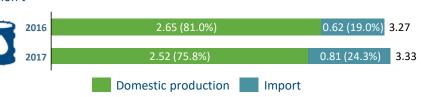




 At the present time, the share of natural gas exports grew (1.6 times compared to 2016), and gas production grew by 400 million m³

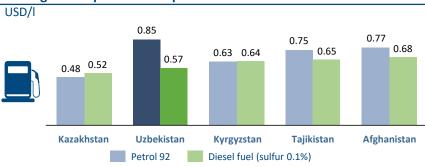
Oil consumption²





 Since 2016, oil consumption grew by 60,000 t, while domestic consumption declined by 130,000 t; oil import grew by 190,000 t

Average retail prices for oil products³

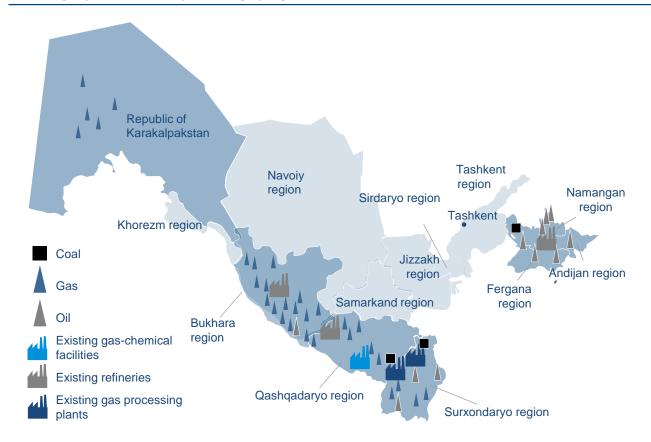


- The average retail price for **petrol 92** in the Republic of Uzbekistan is **higher** than in other Central Asian countries due to a shortage of motor fuel
- The price for diesel fuel (sulfur 0.1%) is at the same level as other countries of the region

134

Current level of fuel industry development

Oil and gas production and processing by region



Comments

- Proven reserves of fuel and energy resources in Uzbekistan: oil, about 177.2 million t; natural gas, 2.28 trillion m³; coal, 1.9 billion t, including: lignite, 1.853 billion t; black coal, 47 million t
- Uzbekistan is ranked:
 - 44th in the world by oil reserves
 - 21st in the world by natural gas reserves
- 125,000 people are employed in the oil and gas production sector
- 210 fields with free gas deposits
- 125 oil fields
- The gas industry is concentrated around **Gazli and Qarshi.** The main natural gas reserves are found at **Shurtan, Zevardy, Kokdumalak, Alan, and Adamtash** fields
- Oil is mostly produced in the Fergana valley and the Bukhara region
- Oil fields are explored in Karakalpakstan and in 6 regions: Qashqadaryo, Bukhara, Surxondaryo, Namangan, Andijan, and Fergana. About 75% of oil reserves are concentrated in the Qashqadaryo region, including 70% at Kokdumalak field
- At the present time, coal is mined at three fields: Angren lignite field, Shargun and Baisun black coal fields

Current level of fuel industry development



Natural gas

Production

Local companies:



Uzbekneftegaz



Uzgeoneftegazdobycha



Grag Uzburneftegaz

Foreign companies:



Lukoil



Gazprom



CNPC

Transportation

Local companies:



Uztransgaz

Distribution

Local companies:



Uztransgaz



Uzavtogaz

Comments

- The state company Uzbekneftegaz JSC is responsible for all extraction and distribution processes through its subsidiaries, while Uztransgaz JSC is responsible for gas transportation
- Large foreign companies from neighboring Russia and China are involved in natural gas extraction, and Lukoil is the main foreign company investing in the country



Upstream

Local companies:



Uzbekneftegaz

Foreign companies:



Midstream

Local companies:



Uzneftepererabotka

Downstream

Local companies:



Uzneftepererabotka

(Uzneftmar vulot Uznefteprodukt

Comments

- The state company Uzbekneftegaz JSC is responsible for the upstream sector and for marketing and sales via its subsidiaries. Uznefteprodukt JSC is also involved in marketing and sales
- The Russian company Lukoil also operates in the upstream sector

Strategic options for regulating the sector

Regulated market

There is a need to improve the efficiency and payback of state assets and import technologies of foreign companies. IPO of state assets and accession to the WTO and regional integrations (similar to EU). Price deregulation due to unstable development of the industry









- The price of electricity supply is regulated by the state and, therefore, remains low
- The state provides jobs to workers by subsidizing the industry



- There is no competitive environment
- There are regulatory barriers to entering the market
- Unsustainable infrastructure assets require investments of private capital

The state will continue to play a major role in oil and gas sector development

Emerging market

Start of privatization of state assets to increase foreign investors' interest (political reasons). Price deregulation in some areas of the sector. Gradual introduction of an antitrust law and law on countering unlawful price fixing







- Improved business climate due to reduced state participation
- Possibility of initial attraction of private investment



This type of market is a transition market between the regulated and emerging markets, which is why it is still exposed to the impact of uncertainty

The state continues to control the market, but private players start to appear

Developed market

Completion of the privatization of public assets, involvement of large international players in the upstream sector, and in the processing and transportation sector. Disaggregation of assets in the oil and gas industry and the energy industry







- Full deregulation, except natural monopolies, which leads to the formation of a competitive environment
- Reduced barriers for entering the energy sector due to a focus on increased market efficiency

It is likely that transitioning to a market system will reduce the number of jobs in order to increase operational efficiency

----- Target development option ----

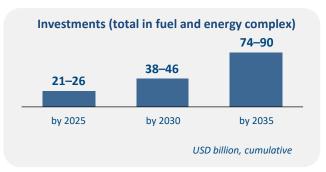
Fully market-based sector, private players are the driving force of industry development

Target vision 2035

High efficiency of the management of all kinds of energy carriers, including in terms of cost reduction and increased efficiency of labor, increased processing depth, increase in the overall energy efficiency of the economy of the Republic of Uzbekistan

- To increase the number of fueling stations and related infrastructure
- To reorganize the operation of existing gas processing and refinery plants by inviting contracted managers, to increase the number of fuel and lubricant production enterprises
- To lay oil pipelines made of thermoplastic composite
- To reduce the role of coal in the power generation structure
- To increase the crude oil processing depth at refineries and to improve the Nelson complexity index
- To use IIOT technology for analysis of the state of equipment and predictive repair and for monitoring the condition of employees
- To ensure transparent regulation of internal selling prices of fuel and lubricants





Main strategic initiatives of fuel industry

2025

2030

2035



- Increase the number and quality of staff training centers for oil and gas and geological sectors and train personnel in foreign countries
- Build the infrastructure for transportation of raw materials

 Increase the number of fueling stations and related infrastructure
- Reorganize the operation of Uzbekneftegaz JSC by inviting contracted managers, increase the number of fuel and lubricant production enterprises
- Process associated petroleum gas at gas processing plants with division of gas into ethane, propane, and butane, if technologically necessary, also into butane isomers
- Retrofit and upgrade refinery plants to develop technological facilities for deeper oil refining, decrease specific oil consumption per unit of target products, and implement modern technology for catalytic reforming of gasoline, isomerization, etc.
- Retrofit gas transport facilities, provide systematic organization of the operation process modes of the main gas pipelines, and reduce gas loss
- Bring the system of technical and environmental standards for petrochemical products in line with European Union standardization systems
- Provide for structural division and market liberalization of production and retail sale of gas, fuel and lubricants, and electricity

- Increase the crude oil processing depth at refineries and improve the Nelson complexity index
- Use IIOT technology for analysis of the state of equipment and predictive repair, for monitoring the condition of employees and use digital twins (virtual modeling of assets)
- Lay oil pipelines made of thermoplastic composite
- Implement automated control and telemetry systems, improve the technical condition of gas pumping units, implement highly efficient gas turbine drives for highly efficient gas pumping units, and extend the use of gas pumping units with a controlled electrical drive
- Introduce a compulsory procedure to form a liquidation fund for coal mining enterprises
- Implement technologies for enhanced efficiency of hydrocarbon production at existing fields
- Apply tax and customs incentives to upgrade existing refinery and petrochemical facilities for improved energy efficiency, resource efficiency, and increased product output

- Reduce the role of coal in the energy generation structure and finish work on closing unprofitable and unpromising coal enterprises
- Solve the problem of single-industry towns whose population is involved in coal mining, retrain workers for employment in other industries
- Automate drilling processes, implement robotization
 - Create favorable conditions for development of an ecosystem of suppliers based on SME to provide engineering and other service functions to enterprises of the industry
- Further development of the gas processing and gas-chemical industry for efficient use of valuable fractions of crude hydrocarbons and associated petroleum gas

personnel



technologies



legislation and state regulation



infrastructure

Economic development. Industry



Current level of development



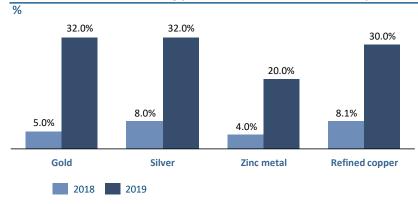
Key challenges

- To modernize and upgrade the fleet of core process equipment in the geological industry
- To increase the refining depth to get products with high added value
- To increase drilling capacity
- To organize the Drilling Machinery and Equipment Maintenance and Repair Center
- To implement systematic measures to train qualified staff in close integration of the educational process with science and production

Key findings

- Azam Kadirkhodzhayev, First Deputy Chairman of the State Committee of the Republic of Uzbekistan for Geology and Mineral Resources, estimates the potential value of mineral resources in Uzbekistan at USD 5.7 trillion1
- Proven gold reserves at the existing production pace will last for over 50 years; uranium, for over 20 years; copper, for over 100 years1
- About 45% of total appropriations for geological exploration work is allocated for search, assessment, and exploration of gold; about 17%, for uranium; 10%, for other metallic minerals; 4%, for ground water; 3%, for nonmetallic minerals; 7%, for regional surveys; 5%, for R&D, etc.1
- On July 23, 2018, President of Uzbekistan Shavkat Mirziyoyev signed a decree to increase subsurface tax rates during production of nonferrous and precious metals (5 times on average)2. Respective amendments were introduced to Annex No. 14 to Presidential Decree No. PP-3454 dated December 29, 2017

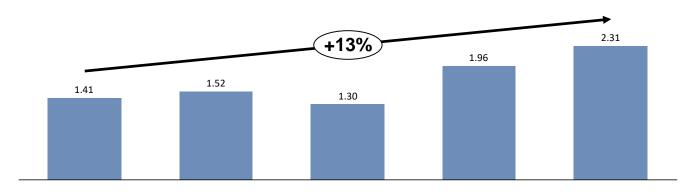
Subsurface tax rates during production of nonferrous and precious metals¹



- Tax rates for gold mining will increase from 5% to 32% of the taxable base; for silver, 8% to 32%; for copper, 8.1% to 30%; for zinc, 4% to 20%
- This measure will increase tax revenue to the budget

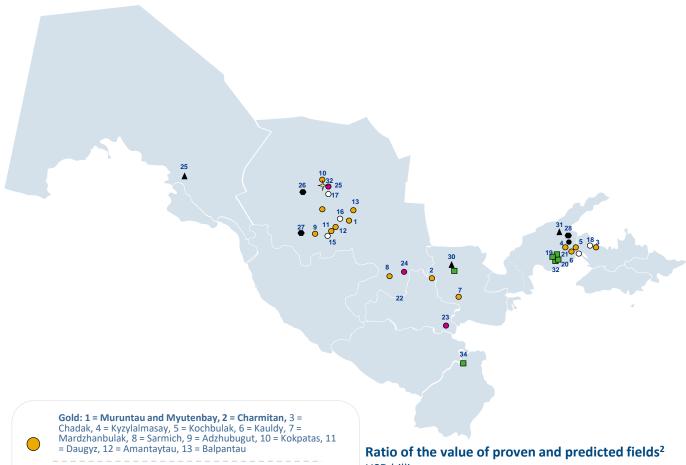
Dynamics of subsurface tax revenue²

UZS trillion



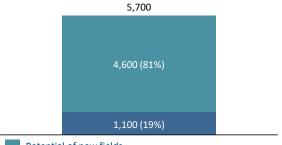
Current level of development

Metallogenic zoning map of Uzbekistan¹



- Silver: 14 = Lashkerek, 15 = Vysokovoltnoye, 16 = Kosmanachi, 17 = Okzhetpes, 18 = Aktepe
- Nonferrous metals (copper, lead, zinc): 19 = Kalmakyr + Dalneye, 20 = Sarycheku, 21 = Kyzata, 32 = Kurgashinkan, 33 = Uch-Kulak, 34 = Khandiza
- Nonferrous metals (copper, lead, zinc): 19 = Kalmakyr + Dalneye, 20 = Sarycheku, 21 = Kyzata, 32 = Kurgashinkan, 33 = Uch-Kulak,
- Radioactive metals (uranium): 26 = Uchquduqtau, 27 = Dzhantuar,
- 28 = Alatanga
- Ferrous metals (iron): 29 = Tebinbulak, 30 = Temirkan, 31 = Syurenata
- Diamonds: 32 = Karashokho

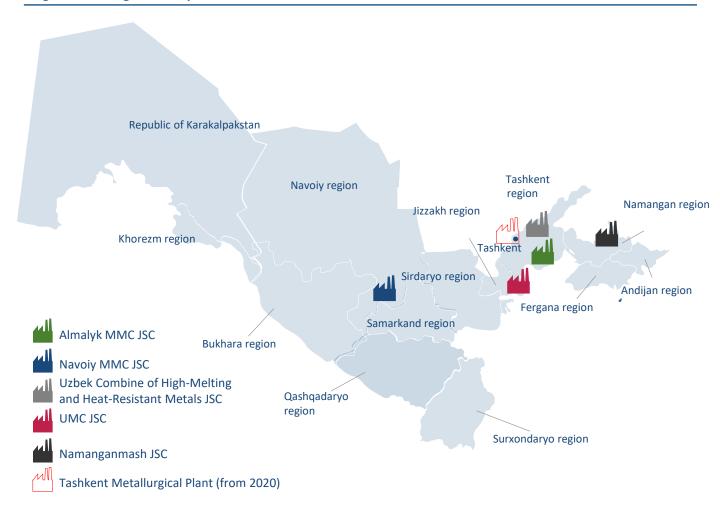
USD billion



- Potential of new fields Proven reserves and prepared fields
- As estimated by the State Committee of the Republic of Uzbekistan for Geology and Mineral Resources, the value of crude mineral potential is USD 5.7 trillion

Current level of development

Largest metallurgical enterprises



Current legislation governing the mining and metallurgical industry

- Activities of mining and metallurgical companies in the Republic of Kazakhstan are governed by the following legislative acts:
 - Key law: Law of the Republic of Uzbekistan "On Subsoil" adopted in 2002
- In recent years, a number of regulatory acts were adopted in Uzbekistan to expand investment cooperation in the mining and geological sector¹:
 - Resolution of the Cabinet of Ministers No. 328 that approved the lists of prospective areas of strategically important solid minerals
 - Resolution of the President No. PP-3479 "On Measures for Stable Supply of In-Demand Types of Products and Raw Materials to Sectors of the National Economy"
 - Resolution of the President No. PP-3578 "On Measures to Improve the Activities of the State Committee of the Republic of Uzbekistan for Geology and Mineral Resources"

Current level of development

Nonferrous metallurgy



Navoiy MMC JSC1

НГМК

- Navoiy MMC is one of the largest gold producers in Central Asia
- The combine is **fully** owned by the state
- The main gold mining base of the enterprise is the Muruntau field (Central Kyzylkum), which has been mined since 1967
- Gold production at NMMC has reached about 80 t in recent years compared to 100 t of the country's total production of this metal
- The NMMC production complex currently unites four metallurgical plants in: Navoiy (MMC-1), Zarafshan (MMC-2), Uchquduq (MMC-3), and Zarmitan (MMC-4)



Almalyk MMC JSC²

AFMK

- Almalyk MMC is the **only copper producer** in Uzbekistan
- The state's share in the combine is 97.53%, which is controlled by SFI Management Group
- The enterprise produces refined copper, zinc metal, lead and molybdenum concentrates, and other products
- AMMC accounts for about 90% of silver production and 20% of gold production in the country
- Since 2015, assets of Uzbek Combine of High-Melting and Heat-Resistant Metals JSC (UzCHHM, Chirchiq, Tashkent region) have been fully transferred to AMMC. Therefore, this enterprise has also become a monopolist in the production of tungsten

Ferrous metallurgy



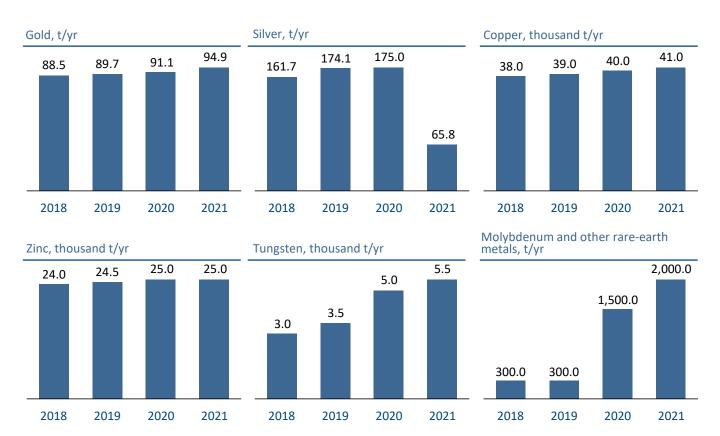
Uzmetcombine JSC³

АО "УЗМЕТКОМБИНАТ"

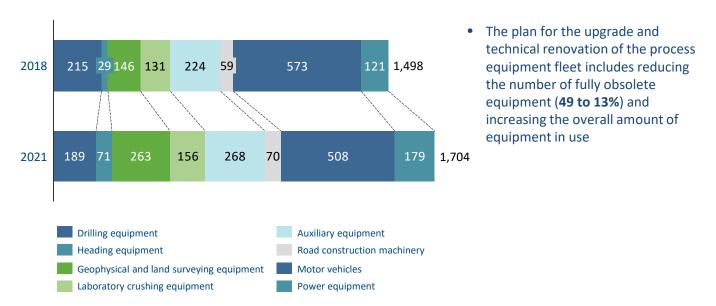
- Uzmetcombine is the leading ferrous metallurgical enterprise in Uzbekistan
- The state's share in the combine is 74.1%, which is controlled by SFI Management Group
- As estimated by experts, only 36.1% of Uzbekistan's current total demand for rolled ferrous metals is satisfied by processing junk and waste ferrous metals at Uzmetcombine JSC in Bekabad. The remaining portion (63.9%) is imported from CIS countries, mostly from Russia, Kazakhstan, and Ukraine⁴

Current level of development

Predicted growth in reserves of the main types of mineral resources until 2021¹



Plan for upgrade and technical renovation of the main process equipment fleet in the geological sector¹, pcs.



Further development of mining and metallurgical enterprises

Taking mining and metallurgical enterprises to IPO

- In order to allow the mining and metallurgical complex to contribute to further active growth of the
 economy of Uzbekistan, it is necessary to perform financial rehabilitation of the largest mining and
 metallurgical enterprises and to make them reach IPO after prior transfer to private management
- This method has been used in several countries:





Botswana and Chile implemented similar strategies with their main mining companies

Taking mining and metallurgical enterprises to IPO



Tax system of the mining and metallurgical industry of Uzbekistan

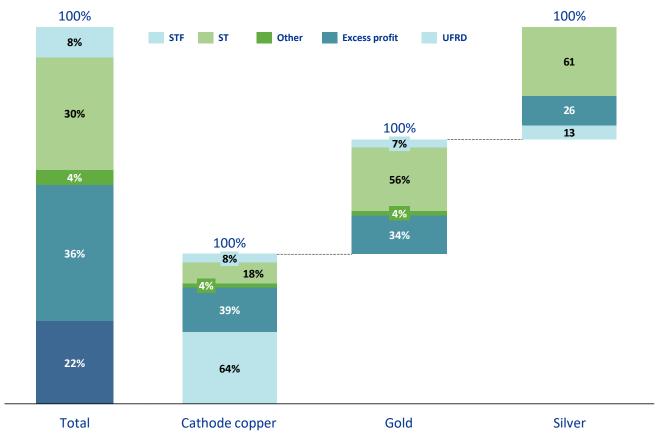
Under the current tax system for mining and metallurgical enterprises, the effective rate is 113 to 416%

At the present time, mining and metallurgical companies are subject to following taxes and charges:

- State Target Fund
- 3.5% (STF)
- Extraction tax 4.0–10.4% (royalty, for metals)
- Profit tax 14%
- Excess profit tax 50%
- Payments to UFRD (if copper price is > USD 5,600/t)
- Other taxes and charges

Tax liabilities of a large mining and metallurgical enterprise in 2017 by metal

%

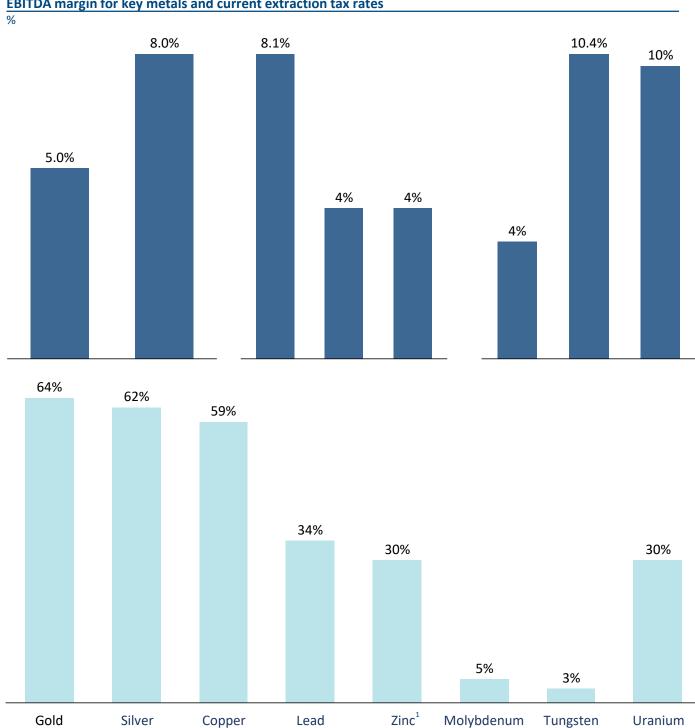


Tax system of the mining and metallurgical industry of Uzbekistan

- State companies significantly understate their profits in reports for the purpose of payments to the UFRD and the excess profit tax.
- In global practice, the state-owner withdraws funds through dividends, which is not reflected in P&L and, thus, allows the company to show profits and raise external debt financing

Comparison of the extraction tax rate with the margin of metals

EBITDA margin for key metals and current extraction tax rates



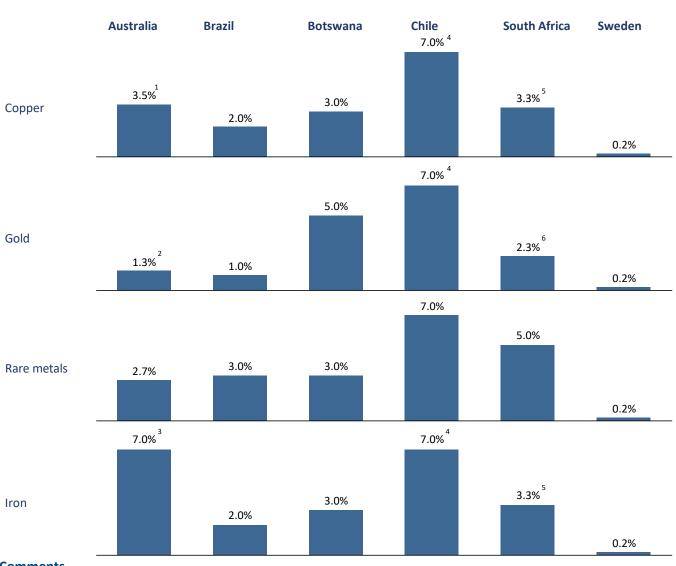
Production of all metals is currently concentrated in state enterprises

Note: 1. Average margin in 2017 according to Glencore, Vedanta Resources, Teck Resources, KazMinerals

Practice of diversification of royalty rates within the metals category

Royalty rate on metals

% of net revenue



Comments

- In countries with a developed mining and metallurgical industry, the government sets
- various royalty rates on the production of metals.
- Royalty rates usually depend on the margin of metals and on the willingness of the country to stimulate investments in a certain industry.
- The tax scheme in different countries also differs in additional benefits.
- The main difference is a different set of benefits and mechanisms stimulating investing activities:
 - Accelerated depreciation
 - Writing off capital expenditures in OPEX
 - No limitations on the carry-forward of loss, etc.

Note: 1. the average rate is specified, the range is established by law; 2.7–3.5% 2. the average rate is specified, the range is established by law; 0.0–2.5% 3. the average rate is specified, the range is established by law; 0.0–14.0% 5. the average rate is specified, the range is established by law; 0.5–7.0% 6. the average rate is specified, the range is established by law; 0.5–5.0%

Examples of the most successful tax schemes by metal

Country

Royalty rate

Specific conditions for CODELCO

Copper	Gold	Rare metals	Iron
Chile	Australia	Australia 🗐	Brazil 🔵
0–14%	0–2.5%	2.7%	2.0%
 10% royalty on export revenue from the sale of copper Targeted use of funds received from the royalty 	 Accelerated depreciation No limitations on the carry-forward of loss 	 Accelerated depreciation No limitations on the carryforward of loss 	License fee No tax on dividends

Chile

Description

Copper is the key source of receipts to Chile's budget. Chile is also home to CODELCO, the world's largest producer of copper.



Australia's gold mining industry is the key industry in the country due to its direct impact on the economy (export: USD 15–20 billion annually).

Australia

Gold is produced at 75 open and underground mines. There are also about 20 mining enterprises where gold is recovered as an associated product.

Rare metals hold a special niche in the economy of any country.

Unlike gold or other metals, rare metals are produced by small companies.

One of the key examples in taxation is Australia, where one-third of global rare metals production is concentrated.

As a rule, rare metals are produced/mined by small companies, junior miners.

Brazil ranks third in the world for iron ore production.

About 90% of commercial iron ore in Brazil is produced by Vale, the largest mining company

The company ranks first in the world by volume of iron ore reserves and second by production volumes



Australia



Brazil

Summary of suggested changes to the tax system for mining and metallurgical companies

There are currently no private mining companies in the Republic of Uzbekistan, except for single companies engaged in waste processing. Because of this, the state loses significant potential tax proceeds from private individuals. In addition, it limits the opportunity to create new jobs in the private sector.

1. Changes in the current tax and royalty system:

- Abolishment of the excess profit tax and introduction of 25% tax on the revenue for state companies
- Reformation of the extraction tax system (royalty).
- Abolishment of the PSA (Production Share Agreement) system for mining companies

2. Creation of a system of benefits for new enterprises/projects in the industry:

- Accelerated depreciation. For example, investments in infrastructure, transportation, and construction of facilities and equipment for mining activities (including gas pipelines, power lines, roads) are subject to accelerated depreciation, 33% annually
- Carry-forward of tax losses. Taxpayers of mining operations have the right to carry forward their tax loss with no restriction on time.
- Write off of capital expenditures. Mining companies are entitled to deduct from their taxable income up to 100% of their capital expenditures associated with project exploration and development, including expenses on obtaining a license for field exploration and development, etc.
- 30 years of tax stability.
- Exemption from import duties on capital investments.
- Early VAT refund.

Strategic options

1

Regulated market

There is a need to improve the efficiency and payback of state assets and import technologies of foreign companies. IPO of state assets and accession to the WTO and regional integrations (similar to EU). Price deregulation due to unstable development of the industry







 The state provides jobs to workers by subsidizing the industry



- There is no competitive environment
- There are regulatory barriers to entering the market
- Unsustainable infrastructure assets require investments of private capital

The state will continue to play a major role in mining and metallurgical industry development

2

Emerging market

Start of privatization of state assets to increase foreign investors' interest. Price deregulation in some areas of the sector. Gradual introduction of an antitrust law and law on countering unlawful price fixing







- Improved business climate due to reduced state participation
- Possibility of initial attraction of private investment



This type of market is a transition market between the regulated and emerging markets, which is why it is still exposed to the impact of uncertainty

The state continues to control the market, but private players start to appear

3

Developed market

Privatization of state assets is fully complete, attraction of large international players in the sector of production, processing, and enrichment of crude minerals



----- Target development option --

Examples of countries:



- Full deregulation leading to the formation of a competitive environment
- Reduced barriers for entering the mining sector due to a focus on increased market efficiency

Unstable effective demand of associated sectors of the national economy

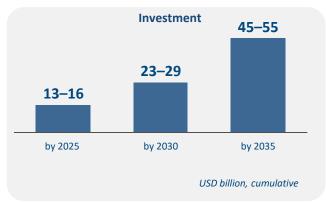
Fully market-based sector, private players are the driving force of industry development

Target vision 2035

High efficiency of MMC management, including in terms of cost reduction and improvement in labor efficiency, and increase in crude materials refining depth

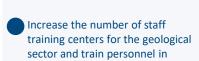
- Increase the number of staff training centers for the geological sector and train personnel in foreign countries
- Increase rock recoverability
- Reorganize the operation of existing mining and metallurgical enterprises by inviting contracted managers
- Reduce the occupational injury and mortality rate
- Create a tungsten industry cluster in the Republic of Uzbekistan
- Use design and information support technology for mining operations (mathematical simulation of subsoil, calculations of the optimal forms of open pits, and the schedule of mining operations development, ore separation)
- Turn public enterprises engaged in mineral production into "world champions" by first transferring them to private management and then through an initial public offering of shares of these companies (IPO)
- Stop the program of state subsidies for state enterprises





2025

Key strategic initiatives



Build the infrastructure for transportation of raw materials

foreign countries

- Ensure the investment attractiveness of projects on manufacturing highly processed metallurgical products, special steels, and alloys by eliminating regulatory and infrastructure restrictions
- Create industrial clusters uniting manufacturers of primary metals and products of subsequent process stages
- Implement the "use it or lose it" principle in subsoil use that would allow cancellation of licenses under which no production is performed
- Implement procedures to facilitate awarding of geological exploration contracts
- Upgrade the system of evaluation and accounting of ore reserves with a more precise assessment of recoverability
- Create the regulatory framework for selling emission quotas under the Kyoto Protocol in case of increased eco-friendliness of the production process
- Implement professional operating standards aimed at reducing the accident rate, increasing safety, and improving labor conditions at the enterprises of the industry
- Develop a leasing system for production equipment, including mining and smelting equipment

Use design and information support technology for mining operations (mathematical simulation of subsoil, calculations of the optimal forms of open pits, and the schedule of mining operations development, ore separation)

- Use IIOT (Industrial Internet of Things) technology for analysis of the state of equipment and predictive repair
- Develop and implement measures within the framework of the state policy on improved environmental efficiency, energy efficiency, and carbon regulation in accordance with the interests of enterprises of the industry
- Develop and implement measures aimed at increasing provision of junk to the enterprises, including by intensifying imports
- Implement technology aimed at processing solid man-made waste of the industry, including for repeated recovery of ore material
- Reduce the occupational injury and mortality rate
- Organize compulsory long-term production practice for students of higher and vocational educational institutions based on the example of France and Germany
- Subsidize advanced training programs for staff, including with a focus on safety aspects
- Activities to motivate SME within the framework of developing an ecosystem of suppliers

Apply remote control of machines

Total robotization of the
technological equipment in

2035

technological equipment in production, processing, and enrichment sectors

2030

Encourage development of new materials to mitigate the risks of sales reduction as a result of replacement of metallurgical products with substitute goods in the long-term

- Increase ferrous metallurgical products produced by expanding domestic demand from the construction industry, which will be provided due to the following factors: replacement of obsolete housing stock; increase in the residential area indicator per capita; replacement of housing and utility infrastructure; encouragement of the use of metal in construction
- Government support of projects to reduce excess facilities, shut down ineffective production facilities, or change their profile in single-industry towns
- Increase the output of existing MMPs involving cut-off grade ores and mineralized bulk in processing

personnel



finance



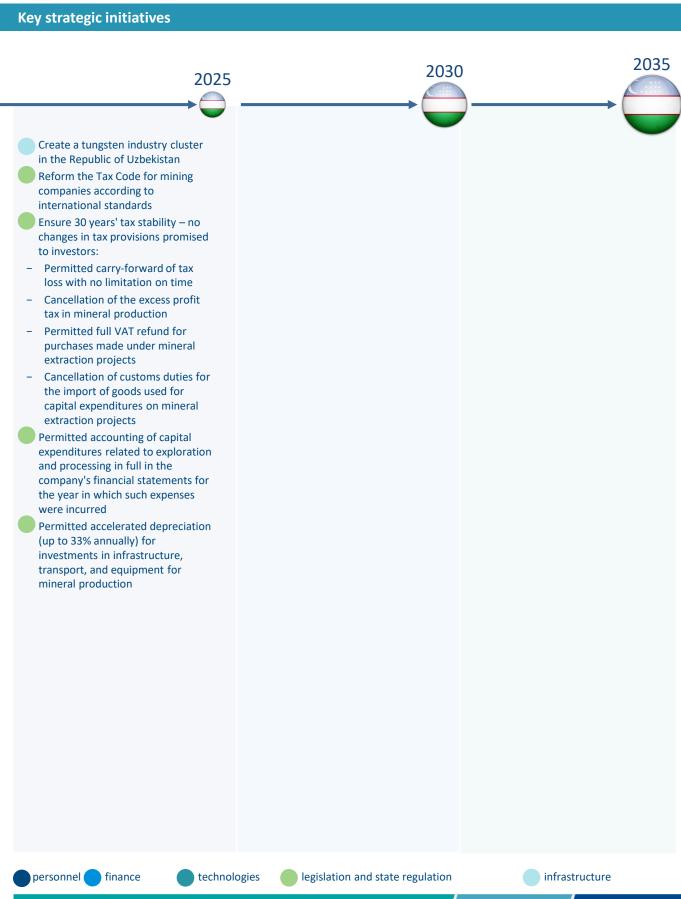
technologies



legislation and state regulation



infrastructure



Economic development. Industry



Current level of development



Key challenges

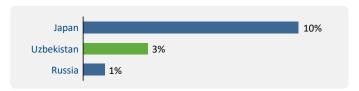
- High customs duties (about 30%) and excise taxes on imported vehicles
- Poor availability of cars 65 cars per 1,000 people1
- Ineffective price policy and low level of product line diversification
- Vehicles of Uzbek origin have export geography within CIS countries
- Low purchasing power
- No competition in the production sector in the domestic market

Key findings

- Significant share of the automotive industry in GDP about 3%
- Forecasted increase in jobs in the industry from 26,000 in 2017 to 40,000 in 20352
- Uzbekistan's automotive market in 2017 shows a positive trend: the market capacity was 61,000 cars in 2017 and grew by 9% against the previous year
- Existing production facilities of the automotive industry are potentially enough to manufacture 300,000 cars annually, but they are utilized at half of their full capacity
- A closed market and lack of competition lead to the overvalue of vehicles in the domestic market compared to the export market
- High import duty amid poor solvency of the population limits the market's development.

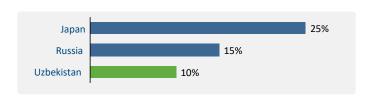
Automotive industry share in GDP, 2017

USD million



• The automotive industry's share in GDP varies from 1% in Russia to 10% in Japan

Automotive industry share in the total volume of the industry, 2017



• Uzavtosanoat JSC is the Uzbek holding company controlling vehicle production plants. At the present time, it is the only automotive industry enterprise in Uzbekistan

Buses and trucks Light vehicles

Production volume of the main types of products

thousand units



• The decline in vehicle manufacturing in Uzbekistan in 2015–2016 was caused by the crisis in the Russian automotive market, which is the leading export market for Uzbek automobile manufacturers with over 50% share³

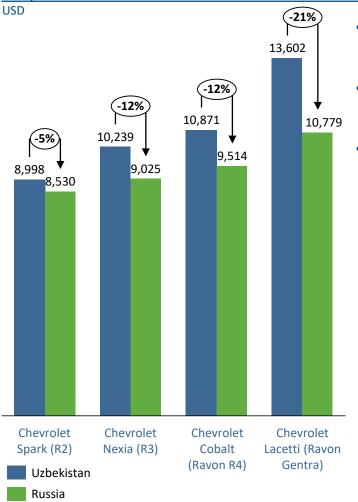
Sources: 1 = United Nations Economic Commission for Europe

^{2 =} Uzavtosanoat JSC, AUTOSTAT analytical agency, BMI, analysis of the working group

^{3 =} ITC Trade Map

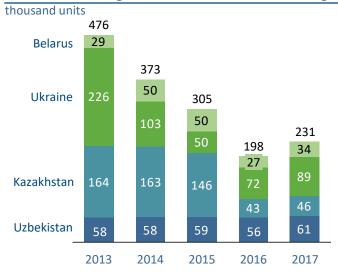
Current level of development

Comparison of the cost of vehicles in Uzbekistan and Russia



- Russia is Uzbekistan's main commercial partner and the main importer of cars manufactured in Uzbekistan
- Cars sold in the domestic market are more expensive than their export analogs in spite of their simplified configuration
- For example, differences in the configuration of Ravon R2 Elegant AT in Russia and Uzbekistan:
 - Passive alarm system and central lock
 - 4 airbags
 - 6 audio system speakers
 - Rear parking sensor
 - Multimedia steering wheel control
 - Heated windshield and front seats
 - ERA-GLONASS system

Sales of cars and light commercial vehicles in the largest CIS states apart from Russia



- In 2017, CIS markets demonstrated signs of revival due to stabilization of the economy and exchange rates
- Uzbekistan's automotive market also shows positive trends
- The market capacity was 61,000 cars in 2017 and grew by 9% against the previous year
- Considering the existing production capacities, Uzbekistan has the potential to manufacture and sell up to 300,000 vehicles annually

Strategic options

1

Leadership in costs

Follow the current development model of the automotive industry of Uzbekistan: manufacture budget cars with increased quality and reliability. In the future, exports will be focused on the growing consumption markets



Examples of countries:







- There are ready production capacities designed to double the current manufacturing level
- Today, there is demand for cheap cars in countries with growing populations



- Need to update existing capacities due to a high level of obsolescence
- Lack of qualified personnel
- Lack of incentives for automotive industry development
- By 2035, the demand for cheap cars will decline due to global trends in innovative products

Orientation on the manufacture of budget vehicles with improvement in their quality

2

Target development option

Innovations in production

Opening of new innovative vehicle production facilities using high-tech materials. It is necessary to improve the investment climate, create special economic areas, and open staff training centers. In the future, exports will be focused on developed markets



Examples of countries:







- Impetus for automotive industry development, including localization of the manufacture of parts and components
- Increase in jobs
- Potential to occupy its share in the high-tech vehicle market
- Growing demand for electric vehicles



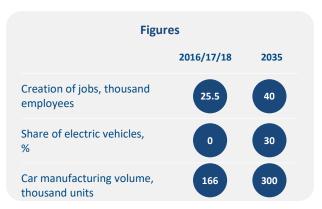
- Lack of qualified personnel
- It is necessary to significantly upgrade production capacities and infrastructure
- The investment climate must be improved
- Lack of modern enterprises making tools

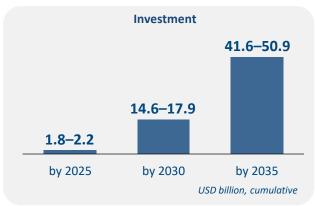
Focus on innovations

Target vision 2035

An automotive industry focused on export using new technology and attracting international auto groups with subsequent localization of production

- Localization of production of international companies
- Improvement in the customs and tariff regulation system and optimization of customs payments in foreign trade activity as a step towards accession to the WTO
- Expansion of the export geography of manufactured automotive products (including India, Turkey, China, and Pakistan)
- Implementation of full-cycle manufacture of electric vehicles





Key strategic initiatives



- Introduce mobile solution technology in vehicles
- Update the model line, launch innovative product manufacturers into the market by creating favorable conditions for manufacturers
- Provide priority access to government support programs depending on current technological operations (e.g., supporting gaspowered car manufacturing)
- Integrate the Uzbek component sector into the supply chains of global automotive manufacturers and component suppliers
- Implement component export development programs in countries with a rapidly growing economy
- Reduce the net cost by increasing efficiency, optimizing procurement activity, developing suppliers, etc.; implement comprehensive net cost reduction programs (including design-to-cost and lean production)
- Prepare the legislative framework for the manufacture and implementation of electric vehicles and for construction of the necessary infrastructure

- carbon fiber and resin, etc.
- Export cars to promising markets: India, China, Pakistan
- Manufacture electric vehicles
- Develop engineering staff and competencies on the basis of 1–2 modern local platforms (models)
- Support and specialization of "niche" R&D
- Form an Uzbek base of automotive components, which is the necessary for further development of local manufacture of motors, gear boxes, axes, and chassis

- including launch of self-driving vehicle manufacturing
- Expand the export geography: Uzbekistan is one of the main automobile exporters to Middle Asia
- Form a compulsory technical regulation that would set out specifications and standards for cyber security to be observed in software and hardware used in intelligent transport systems and vehicles
- Shut down production of old local models gradually and replace them with deeply localized global platforms





finance





legislation and state regulation



infrastructure

Development of AIC, industry, fuel and energy, and infrastructure



Current level of development



Key challenges

- Poor quality of infrastructure
- Unavailability of financial resources
- Lack of the fundamental research base and modern design engineering developments in the chemical industry
- Lack of qualified personnel
- Focus on manufacture of low-margin products
- Ineffective industrial cooperation between the chemical industry and other industry sectors

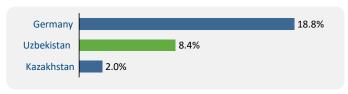
Key findings

- Uzkimyosanoat JSC is the Uzbek holding company uniting chemical enterprises of the Republic of Uzbekistan
- Small share of the chemical industry in GDP (0.6%) with a focus on production of nitrogen, phosphate, and potash fertilizers
- Apart from chemical fertilizers, Uzbekistan's chemical industry is represented by the segments of chemical products for mining and metallurgical facilities and the oil and gas industry, inorganic, organic and household chemical products
- Chemical industry enterprises are present in almost every region of the country: Navoiy, Tashkent, Samarkand, Qashqadaryo, Fergana, Jizzakh regions and the Republic of Karakalpakstan
- To overcome the main barriers of industry development, it is necessary to develop internal demand, primarily from the agroindustrial complex

Chemical industry share in GDP, 2017



Chemical industry share in the total industry volume, 2017

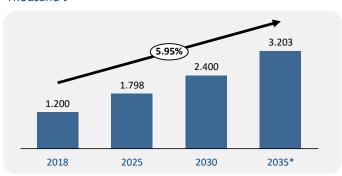


Comments

- Chemical industry comprises 0.6% of GDP in the Republic of Uzbekistan
- Germany's example shows the existing potential for increasing the chemical industry's role along with overall increased growth of industry

Forecast for the chemical fertilizers production dynamics

Thousand t



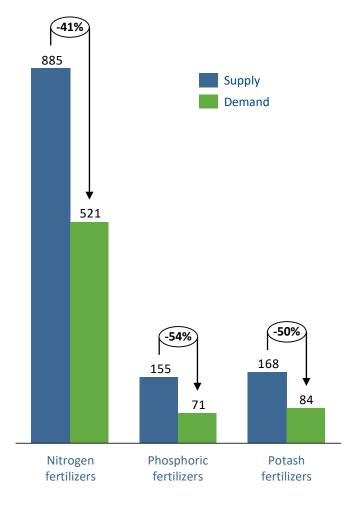
Note: * calculation by the working group

- According to forecasts in the Chemical Industry Development Program for 2018–2030 prepared by Uzkimyosanoat JSC, production of chemical fertilizers will double by 2030
- This growth will be possible thanks to the creation of new and upgrading of existing production facilities

Sources: World Bank, Uzkimyosanoat JSC, analysis of the working group

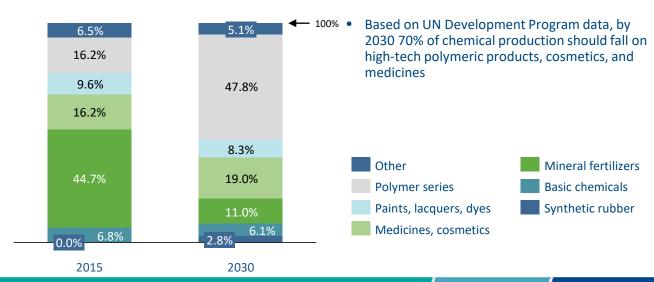
Current level of development

Comparison of internal demand and supply of mineral fertilizers, 2017, thousand tons



- Production of mineral fertilizers greatly exceeds internal demand for them, by 40–50% on average
- Therefore, most mineral fertilizers are exported
- The Chemical Industry Development Program for 2018–2030 prepared by Uzkimyosanoat JSC predicts export growth from USD 185.6 million in 2018 to USD 742.4 million in 2030
- The main importers of Uzbekistan's chemical products are China, Russia, Kazakhstan, and Turkey¹

Chemical industry production by product type, USD million



Current level of development

The chemical industry is represented by the mineral and household chemical segments

A simplified chain of creating the chemical industry production volume amid fully integrated enterprises in the consumer sectors

Concentration, **Production of Production** getting pre-concentrate **Exploration** Production secondary of primary products products Ammonium Carbamide Pure hydrogen Natural gas nitrate, calcium-Nitric Pure nitrogen ammonium-Hydrocarbon fields Nitrogen-phosphorus acid nitrate, fertilizers (N-P) carbamide-Oil Sulfuric acid Sulfur, sulfur oxide ammonia mix Nitrogen-phosphoruspotash fertilizers (N-P-Ground Common phosphate fertilizers, phosphate rock Monoammonium Phosphate rock double (triple) Phosphate rock Pre-concentrate superphosphat phosphate (MAP) deposits Mineral chemicals Extraction phosphoric feed Diammonium acid phosphates phosphate (DAP) Potassium chloride Potash salt Sylvinite, Potash salt deposits carnallite Potassium sulfate Potassium nitrate Halite, rock salt, Table salt salt lakes, sea Table salt Chlorine **Pesticides** deposits salt Higher fatty Natural gas and oil Oil, natural gas Surface active agents Household chemicals fields alcohols Bleaches, laundry powders, water chlorination agents, Caustic soda soap, detergents Table salt Halite, rock salt, Table salt Sodium hypochlorite deposits salt lakes Sodium sulfate, sodium silicate

Strategic options

Leadership in costs

Follow the current development model of the chemical industry of Uzbekistan: production of mineral fertilizers with a focus on meeting domestic demand and export of fertilizers to the growing consumption markets



Examples of countries:









- There are ready production capacities designed to double the current manufacturing level
- Today, there is demand for mineral fertilizers in countries with growing populations



- Lack of qualified personnel
- Lack of incentives for chemical industry development
- By 2035, demand will shift from lowtechnology chemicals (fertilizers) to hightechnology products (polymeric products, cosmetics, and medicines)

Focus on smooth production of mineral fertilizers

Innovations in production

Opening of new innovative productions of polymeric products, cosmetics, and medicines. It is necessary to improve the investment climate, create special economic areas, and open staff training centers. In the future, exports will be focused on the developed markets (Arabian Peninsula countries, Turkey)



Target development option

Examples of countries:









- Impetus for developing the chemical industry as an export-oriented sector
- Increase in jobs
- Potential for occupying its share in the global market of high-tech products



- Lack of qualified personnel
- It is necessary to upgrade production capacities and infrastructure
- It is necessary to improve the investment climate for localization of production facilities of international companies

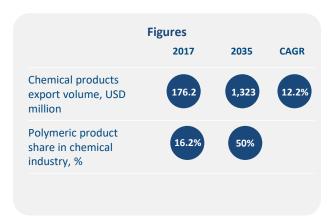
Focus on innovations

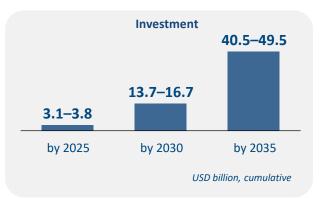
Target vision 2035

Chemical industry focused on production and export of high-tech

polymeric products, cosmetics, and medicines using new technologies and attracting international companies

- Localization of production of international companies
- Active stimulation of industrial cooperation requires a focus on high-technology "outrunning" chemical productions: polymer series, synthetic rubbers, medicines¹
- Separate production of chemical products: creation of separate companies for production of mineral fertilizers and high-tech chemical products
- Establishment of effective industrial cooperation between the chemical industry and other industry sectors
- Active development of science and industry-specific research
- Integration into the production process of advanced research developments aimed at deep processing of crude hydrocarbons and mineral resources
- Improvement of the quality of design engineering works and diagnostic studies
- Organization of an effective system of staff training and advanced training in all areas of chemistry and chemical technology





Key strategic initiatives

2025

Expand production of industrial

rubber goods (conveyor belts, car

2030

Increase production of polymeric products, cosmetics, and medicines

tires, etc.)

- Draw up a binding technical regulation that would set out the specifications and standards for safe use of chemical products
- Develop staff training centers to supply enterprises of the industry and the central office of Uzkimyosanoat JSC with highly qualified specialists
- Establish close cooperation with the institutes, scientists, and announce grants for financing labor-saving ideas and inventions and projects for creating new chemical product types
- Organize a diagnostic center for inspection of process equipment
- Create a research and development and design institute together with international partners

Expand the export geography: Uzbekistan is one of the main manufacturers of chemical products in Middle Asia

2035

Activate work on sharing experiences in the field of process management and implementation of modern methods of corporate governance, organization of technical and technological retrofitting of enterprises

international companies Build new chemical industry

Localization of production of

- production facilities
- Upgrade the existing production facilities through technical retrofitting by purchasing process lines to expand the assortment and range of manufactured products
- Organize production of complex fertilizers containing nitrogen, phosphorus, and potassium (NPK fertilizers)
- Provide priority access to government support programs depending on the current technological operations
- Develop staff potential starting from school
- Conduct market studies to identify and expand the sales market for chemical products



finance

technologies



legislation and state regulation



infrastructure

Transport

Development of AIC, industry, fuel and energy, and infrastructure



Transport

Current development level of the transport and logistics industry



Key challenges

- Obsolescence of infrastructure
- Lack of available air service for the population
- Poor efficiency of railway transportation
- Lack of public transportation
- Increase in railway electrification
- Growth of competition from alternative routes, enhanced intermodality
- Poor quality of transport and logistics services
- Problems with the customs clearance of cargo

Key findings

- The transport infrastructure covers Uzbekistan's main regions and cities, and expansion and upgrading of facilities are being performed. The amount of attracted investments in 2017 was USD 651 million
- In 2013–2017, passenger flow stagnation was observed in all types of transport (railway, air, motor)
- Over the last 5 years, cargo transport by air and road slightly increased (+5%)
- Uzbekistan is behind developed countries in terms of logistics efficiency and ranks 99th in the Logistics Performance Index (LPI)

Functions and role of the transport and logistics system

Transport connection of the country

- Transport accessibility and connection of the key economic centers of the country
- Transport connection of work places and places of residence of the population
- Transport connection of places of goods production and consumption (including B2B "raw materials – goods production")
- Transportation is possible from any point to any other point

Transportation efficiency

- High speed of transportation
- Predictability of and compliance with transportation deadlines
- Possibility of just-in-time delivery

Integration in the global community

- Transport accessibility of the global markets for national manufacturers (sale of products)
- Transport accessibility of global sourcing for national companies (purchase of resources)
- Accessibility of the country's transport and logistics system for foreign users (transit)

Coverage and service quality

- Providing transportation of any type of cargo and any category of passengers
- Offering a whole range of transport and logistic services in a user-friendly format
- Ensuring transportation safety



Contribution of an efficient transport and logistics system to the country's development



- Development of the basic economic sectors and growth in international trade due to more efficient transport links and cheaper transportation
- Attraction of new companies to the country (transport quality is the 3rd most important factor for companies when choosing the place for localization)
- Creation of new jobs through improved mobility of the population

Increase in labor output and competitiveness

- Reduction in production costs (a more efficient transport system reduces transport costs)
- Enhanced performance efficiency (just-in-time delivery and offering comprehensive logistic services allows consignors to cut their production costs and free resources by eliminating maintenance of their own transport divisions, etc.)

Supporting structural changes in the economy



 Population's ability to change places of work in case of changes in the economic structure (a developed transport system facilitates movement of the workforce)

Improvement in the quality of life

- Reduced travel time frees up the social time of the population
- A developed transport system expands the list of available goods and services

Contribution of the transport and logistics system to the economy of Uzbekistan

Transport service share in GDP

2017, USD million

14% 86% 48,717

Transport services

Transport service share in total services

2017, USD million

70% 14,974

Transport services

Share of people employed in the transport industry in the total number of employed people

2017, thousand people

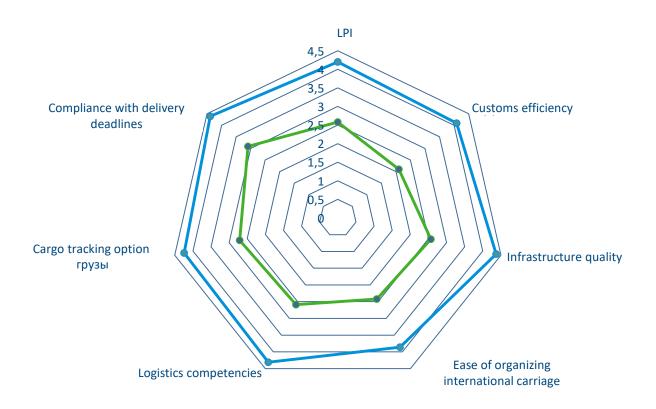
5% 95% 13,520

Transport services



Position of the Republic of Uzbekistan in the Logistics Performance Index

Uzbekistan is ranked 99th in the international Logistics Performance Index (LPI)1





Country	No. in the rating	LPI score
Germany	1	4.20
Netherlands	2	4.07
Sweden	3	4.07
Singapore	4	4.05
Uzbekistan	99	2.58

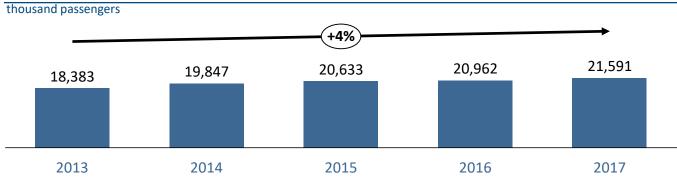
- The indicator demonstrates the relative efficiency of logistics among countries and regions
- In 2018, Germany became the leader in the LPI rating
- Uzbekistan is ranked 99th out of 160 countries
- Uzbekistan has rather low figures for all 6 criteria, which proves poor development of the transport and logistics complex that requires comprehensive improvements

Transport

Passenger traffic volume

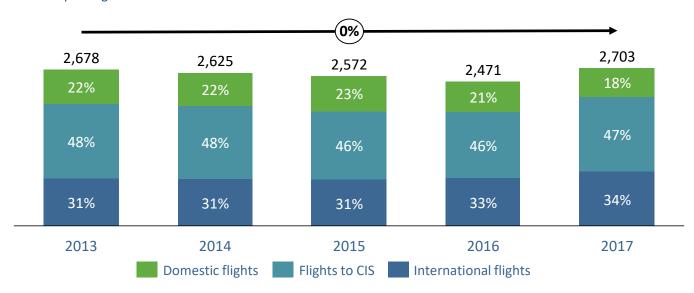
Over the last 5 years, stagnation of passenger traffic was observed in all types of transport

Passengers carried by railway transport



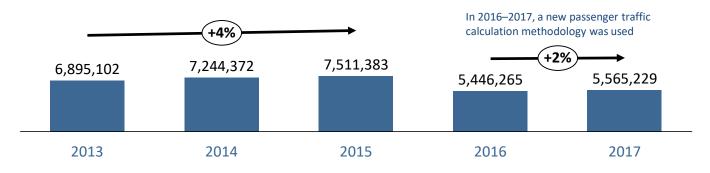
Passengers carried by air transport

thousand passengers



Passengers carried by motor transport

thousand passengers

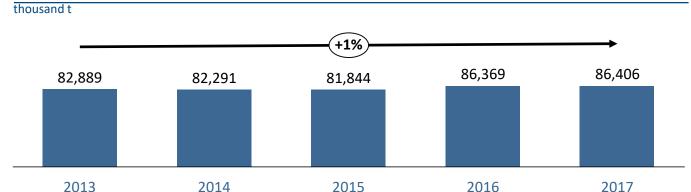


Transport

Passenger traffic volume

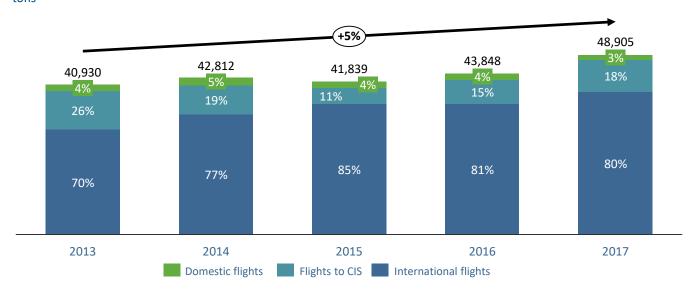
Over the last 5 years, cargo carriage by air and motor transport slightly increased

Cargo carried by railway transport



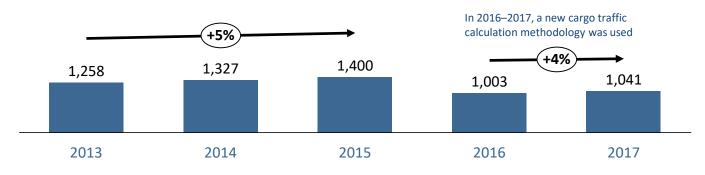
Cargo carried by air transport

tons



Cargo carried by motor transport

million t





Current development level of transport corridors and airports

Main transport corridors and airports in the Republic of Uzbekistan



Comments

International motor and railway transport corridors

- ····· CAREC Corridor 2a
- ····· CAREC Corridor 3a

Cities

- () Population > 2 million people
- Population > 500,000 people
- Population < 500,000 people

Airports



- Islam Karimov Tashkent International Airport
- Samarkand International Airport
- Bukhara International Airport
- Urgench International Airport
- Navoiy International Airport
- Namangan International Airport
- Andijan International Airport
- Termez International Airport
- Samarkand International Airport
- Qarshi International Airport
- Nukus International Airport



Current development level of logistics centers

Today, the number of logistics centers in the country is increasing. However, the transport industry should accept the challenges of a growing economy and continue to expand its storage and logistics capacities

Logistics center name	Location
Sergeli-AgroFresh	Tashkent
Modus Best LLC	Kungrad (Republic of Karakalpakstan)
United Cargo Center	Tashkent
JIZZAXULGURJISAVDO LLC	Jizzakh
Forward Trans Terminals LLC	Tashkent
TUCella	Tashkent
UNIVERSAL LOGISTICS SERVICES LLC JV	Tashkent
Bayer Group LLC	Tashkent
REELLOG TASHKENT LLC	Tashkent
Transatlantic	Tashkent
NOVASPIN LTD	Tashkent
Fargonaulgurzhisavdo LLC	Fergana
Agricultural Logistics Enterprise LLC	Fergana
Pakhtakor-tola bazasi, Subsidiary Enterprise	Jizzakh
Wholesale regional depot "Surxondaryo ozik-ovkat mollari"	Termez
Andijon moilash materiallari LLC	Andijan
ZVSB LLC	Samarkand
BEK Broker LLC	Kungrad (Republic of Karakalpakstan)
Xo'jalik va qurilish mollari	Tashkent
TSB, Subsidiary Company	Keles (Tashkent region)

Today, Sergeli-Agrofresh is the largest logistics center in the country

- The refrigeration and warehousing logistic complex Sergeli-Agrofresh, just like most logistics centers in the country, is located in Tashkent
- The area of the center's production premises is 14,000 m² and can hold 10,000 to 16,000 tons of cargo
- The complex is furnished with modern, high-quality, imported refrigeration equipment. Maintenance of the temperature and humidity inside the premises is fully automated
- This center provides all cargo handling services, from ordinary unloading to sorting, marking, and labeling



Transport

Main transit corridors

- Trans-Afghan international transport corridor. Termez (Uzbekistan) Mazari-i-Sharif Herat (Afghanistan) Bandar Abbas (port) and Chabahar (port) (Iran)
- Transport corridor Andijan Osh Sary Tash Irkeshtam Kashgar (Uzbekistan Kyrgyzstan Uzbekistan)
- International transport corridor Uzbekistan Turkmenistan Iran Oman Qatar.
- Existing transport corridors (motor transportation) to sea ports
 - 1.1. Tashkent Kyzylorda Aralsk Aktyubinsk Baltic ports
 - 1.2. Tashkent Shymkent Balkhash Astana Petukhovo Chelyabinsk Moscow
 - 1.3. Tashkent Chardzhou Nukus Guryev Astrakhan Black Sea ports
 - 1.4. Tashkent Shymkent Almaty Semipalatinsk Far Eastern ports
- Developing transport corridors (motor transportation)
 - 2.1. Tashkent Almaty Druzhba Urumqi Lyaongan port (China) Busan port (South Korea)
 - 2.2. Tashkent Bukhara Chardzhou Bandar Abbas (Iran)
 - 2.3. Tashkent Turkmenbashi port Baku Port of Poti (Georgia)
 - 2.4. Tashkent Chardzhou Tehran Port of Mersin (Turkey)
 - 2.5. Tashkent Kungrad Beyneu- Astrakhan Russia (Ukraine) Europe
- Future transport corridors (motor transportation)
 - 3.1. Tashkent Port of Aktau Baku Port of Poti (Georgia)
 - 3.2. Tashkent Port of Aktau Volga Volga-Don Channel Black Sea
 - 3.3. Tashkent Port of Turkmenbashi Astrakhan Russia Europe
 - 3.4. Tashkent Kungrad Astrakhan Port of Novorossiysk
 - 3.5. Tashkent Andijan Osh Sary-Tash Irkeshtam Kashgar (China)
 - 3.6. Tashkent Termez Mazari-i-Sharif Sheberghan Herat Dogarun Port of Bandar Abbas (or Tehran Ankara)
 - 3.7. Tashkent Termez Mazari-i-Sharif Shebergan Herat Dilorom Milak Port of Chabahar
- CAREC corridors (Central Asian Regional Economic Cooperation) going across Uzbekistan:
 - 1. CAREC corridor 2a. Direction: Astrakhan Beyneu Bukhara Tashkent Andijan Osh Irkeshtam
 - 2. CAREC corridor 2b. Direction: Baku Turkmenbashi Bukhara Tashkent Andijan Osh Irkeshtam
 - 3. CAREC corridor 3a. Direction: Rubtsovsk Almaty Shymkent Tashkent Bukhara Serakhs Bandar Abbas
 - CAREC corridor 3b. Direction: Rubtsovsk Almaty Bishkek Osh Karamyk Dzhirgatal Darband –
 Dushanbe Saryasiya Termez
 - 5. CAREC corridor 6a. Direction: Astrakhan (Russia) Beyneu (Uzbekistan) Bukhara Guzar Hairatan customs border post (Termez, Uzbekistan) Mazar-i-Sharif (Afghanistan)
 - 6. CAREC corridor 6b. Direction: Orenburg (Russia) Kyzylorda Shymkent (Kazakhstan) Tashkent Samarkand Termez (Uzbekistan)
 - 7. CAREC corridor 6c. Direction: Orenburg (Russia) Kyzylorda Shymkent (Kazakhstan) Tashkent Khavast (Uzbekistan) Ura-Tube Aini Dushanbe Kurgan-Tube Nizhny Pyandzh (Tajikistan) Shirhan Bandar Kunduz Kabul (Afghanistan)
- The transport corridor Europe Caucasus Asia (TRASECA) comprises the network of ground and sea routes from Europe across the Black Sea, Caucasus and Caspian Sea to the Central Asian republics
 - One of the possible areas of transit development is the China EU corridor, the estimated trade volume of which will be about USD 800 billion by 2020
 - Active work is underway to extend transport connection with Iran, Afghanistan, Turkey, and other countries

Investment projects in the transport and logistics infrastructure





- 13 investment projects for the development and electrification of railroads are being implemented in Uzbekistan.
 - New electrified double-track section "Jizzakh-Yangiyer," rehabilitation of railways, renovation of passenger and freight cars, renovation and upgrading of trains
 - Modernization of Chukursay station that will be turned into a powerful logistics station



- In 2016, the national airline Uzbekistan Airways began implementing the investment project "Construction of a new international passenger terminal in Tashkent Airport (Tashkent-4)"
 - Tashkent-4 will be about 87,000 m2 in area, and its throughput capacity will be 1,500 passengers per hour, or 5.7 million passengers annually

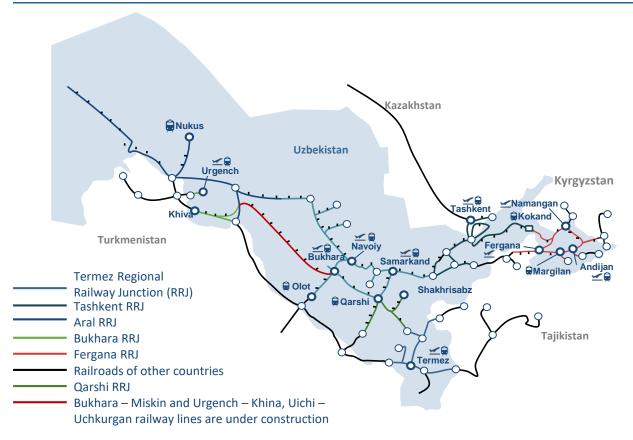


- In 2017, 11 investment projects were scheduled for implementation
- The World Bank supports a project on development of local roads in Uzbekistan
- The total cost of phase 1 of the project amounts to USD 200 million, and it is implemented by the World Bank in collaboration with the Republican Road Fund

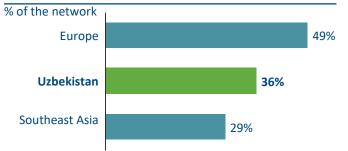


Current development level of railway transportation

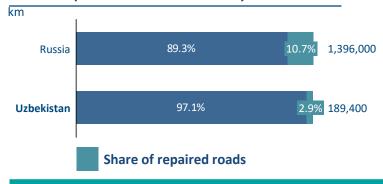
Railroad coverage in the Republic of Uzbekistan



Share of electrified tracks



Share of repaired motor roads for the year



Comments

- Compared to diesel traction, the cost of freight carriage by electrified tracks is 25–30% lower
- Electrified rails are a more efficient and environmentally clean type of transportation

Comments

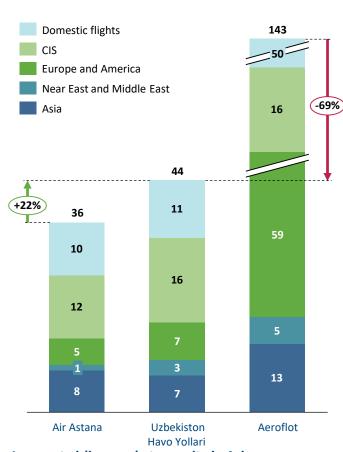
- In 2017, **3% of motor roads** were repaired in the Republic of Uzbekistan
- To improve the quality of roads, it is necessary to attract investments in R&D and use the existing developments of developed countries (PlasticRoad in the Netherlands)



Current development level of air transportation

Number of destinations by region

Companies offering flights to the Republic of Uzbekistan



Airline	Country
Air Astana	Kazakhstan
Air Kyrgyzstan	Kyrgyzstan
Asiana Airlines	South Korea
Korean Air	South Korea
China Southern Airlines	China
S7 Airlines	Russia
Aeroflot	Russia
Utair	Russia
Ural Airlines	Russia
Yakutia Airlines	Russia
Turkish Airlines	Turkey
Azerbaijan Airlines	Azerbaijan

- Uzbekistan Airways has poor geographic coverage of flights: the company offers carriage to only 7 cities in European and American countries
- The population is forced to construct their travel route with transfers
- The air carrier market is also rather small: 12 carriers from 7 countries
- Plans are to open 2 new destinations and increase the frequency of some currently operating airlines

Low cost airline market capacity in Asia

number of passenger seats, million people, annual market growth, %



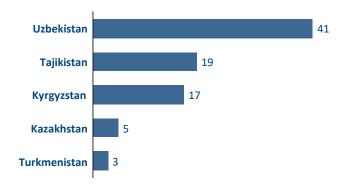
- The share of low cost airlines in Uzbekistan in 0.1%
- During 2008–2018, Asia managed to outpace Europe according to penetration of low cost airlines the average growth rate is 19% in Asia vs. 9.4% in Europe
- During this period, the share of low cost airlines in the market grew from 10 to 28%
- If this growth pace is maintained, low cost airlines are predicted to occupy 50% of the entire Asian air market by 2030



Current development level of motor transportation

Density of motor road networks

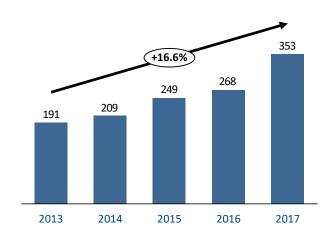
km per 100 km²



Comments

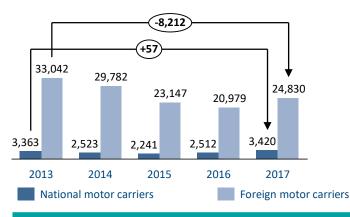
 The Republic of Uzbekistan has the highest density of motor road networks in the Central Asian region

Number of permits issued for carriage of oversized and heavy freight along motor roads



 Over 5 years, the number of permits issued to carry oversized freight nearly doubled

Number of permits issued for carriage of oversized and heavy freight along motor roads

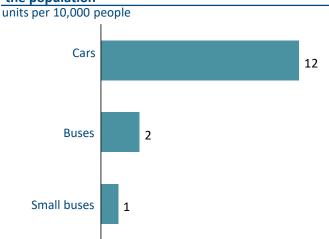


 Over 5 years, the volume of freight carried by national motor carriers across the Republic of Uzbekistan grew, and the share of foreign motor carriers declined, though it still comprises a major part of the market

Transport

Current development level of motor transportation

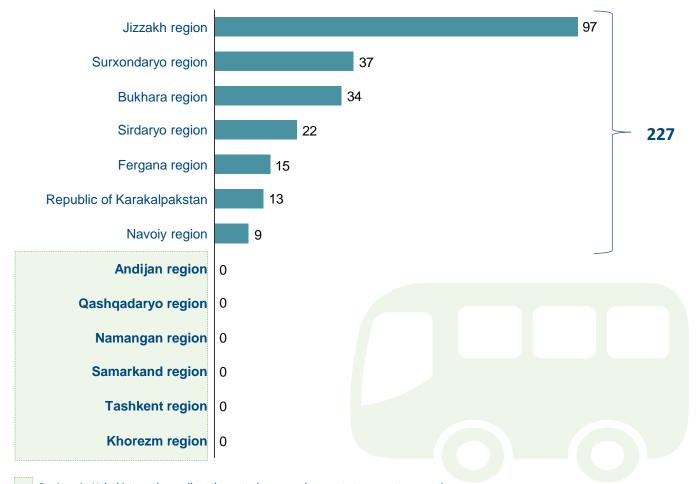
Availability of passenger motor transport to the population



Comments

- Over half of settlements in Uzbekistan have no regular motor transport connection (227 out of 452)
- At the present time, some motor transport routes have been closed due to the lack of buses
- There are only 15 means of public transport per 10,000 people of the population

Settlements without regular motor transport connection



Regions in Uzbekistan where all settlements have regular motor transport connection

Strategic options

Investment mechanisms at the government level

 At the government level, investment mechanisms determine the general policy for different government institutions seeking funding



 The government receives recommendations from the consultative body with respect to project priority



Examples of countries:



The government makes general decisions, for example, determining the scope of funding for the whole transport industry

The model outlines the common policy for all government administration bodies

Investment mechanisms at the ministry level

 The projects to be funded are determined at the ministry level, proceeding from the overall government priorities for investment activity



 Focus on various criteria, such as government policy, performance indicators, and needs of different groups of people



----- Target development option ----

Examples of countries:





It is difficult to make a quantitative estimation of the advantages and benefits attained

The model establishes the priority of financing projects according to a number of criteria

Investment mechanisms at the project level

 Individual projects compete for funding for transport development based on specific needs, such as the need to solve the problem of the road transport network capacity



- Reduction in road occupancy
- Increase in traffic safety
- Reduction in carbon dioxide emissions
- Increase in mobility







- Lost time during maintenance
- Capital investments
- · Load on other services

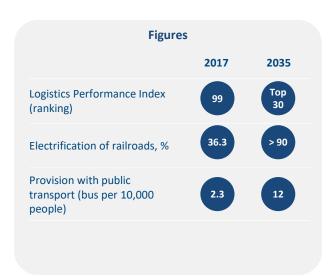
The model provides for analysis of individual demands through an assessment

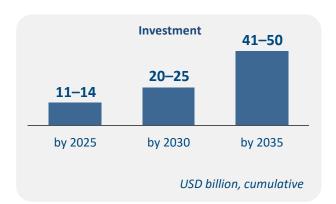


Target vision 2035

Transport industry focused on the arrival of private players, privatization of noncore assets, and reduction in the cost of logistics

- Creation of 2 dry ports, development of a multimodal carriage segment, reduction in customs regulations
- Construction and electrification of new motor and rail roads and upgrading of stations and airports
- Increase in the number of low cost airlines, introduction of the open skies scheme
- Implementation of mobile solution technology in urban transportation
- Use of passenger drones
- Transfer of ticket sales functions to IT companies through implementation of IIOC, IIOT, and IIOM





Strategic development goals of the transport and logistics system



Realization of transit potential



Realization of export potential



Satisfaction of internal demands of the national economy



Increase in mobility of the population



Realization of the tourism potential of the country

Transport

Implement measures to develop fair

competition in the freight carriage

market (motor, rail, air transport)

Denationalize the motor road and

Construct, reconstruct, and repair

routes (using PPP mechanisms)

systems and software

mostly in rural areas

Create and implement automated

in the road transport management

Open new passenger bus routes,

Develop the interdepartmental

transport and logistics system until

2035, including the forecast model

of cargo and passenger carriage

development strategy of the

stopping points on public passenger

railroad construction industry

Establish international bus

connection with the Russia,

Kyrgyzstan, Kazakhstan, and

and related services

Tajikistan

system

Key strategic initiatives for motor and railway transport



2025

Construct new and electrify existing roads and railways

2030

- Repair the existing and construct new airports, railway stations, bus stations, and small bus stations
- Technical development of mobile apps for easier use of municipal transport (similar to Yandex.Transport, Yandex.Maps, etc.)
- Form
 and improve the regulatory
 framework and harmonization it
 with the requirements of
 international laws
 and standards
- Reduce the negative impact of the motor transport sector on the environment and improve the environment
- Develop a plan of phased accession to international alliances under certain programs, for example, integration of bonus programs, cooperation in carriage of pass-through luggage in foreign airports, in case of through transit by two or more carriers

Implement a project to create dry ports and develop a multimodal carriage segment

2035

- Implement mobile solution technology in urban transportation
- Create a backbone network of public roads that would connect all administrative centers with a network of paved roads
- Phased implementation of electric buses and electric vehicles in the passenger transport system and complete withdrawal of motor vehicles running on gasoline and diesel
- Solve the problem of traffic jams and environmental degradation in large cities by setting a fee for entering the downtown area in personal vehicles, developing bicycle and motor transport, prohibiting the entrance of trucks in downtown areas of cities
- Use PlasticRoad technology

 Construct the Sky Way transport system

personnel



finance





legislation and state regulation



infrastructure

Transport

Key strategic initiatives for air transport

2025

2030



- Prepare intergovernmental agreements on air traffic, restrictions on the number of carriers, established routes, frequency, and fares
- Implement a program to increase the number of low cost airlines and introduce the open skies program
- Amend the legislation to enable attraction of foreign citizens as aviation staff
- Divide the country into the main aviation regions: Western, with the main airport in Urgench; Eastern, in Namangan/Fergana; Southern, in Termez; Navoiy will continue its further development as a cargo port of the country
- Tashkent airport has a separate status as the main hub airport of the country
- The following transformations in the aviation industry:
 - Transform the State Aviation Supervisory Agency into the aviation administration body of the country (state independent agency) in charge of implementing the aviation policy and state supervision
 - Separate Uzairnavigation from NAC and make it a state enterprise with private shareholding, which would provide services to all air space users at uniform tariffs
 - **Privatize NAC airports**
 - Establish the Uzbek Aviation Academy
 - Create fuel farms for the stable delivery of aviation fuel to air enterprises (local and foreign) at market price and based on PPP

- Develop a mechanism to predict the demand for air transport along routes that are subject to state support measures, including analysis of price characteristics, elasticity of demand, and other market parameters
- Develop the main airports of aviation regions (Urgench, Namangan/Fergana and Termez) as hub airports
- Transfer air ticket sales functions to IT companies (Google, Amazon) through implementation of IIOC, IIOT, and IIOM

personnel



finance



legislation and state regulation

infrastructure

Development of AIC, industry, fuel and energy, and infrastructure



Current development level of construction industry



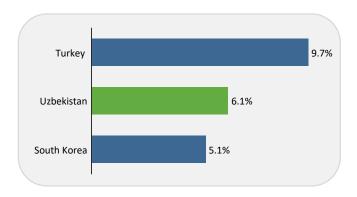
Key challenges

- Lack of construction projects involving foreign capital
- Growing population
- Growing business demands, which must be satisfied with industrial and civil buildings
- Poor technological and innovation potential
- Lack of qualified personnel
- High level of regulatory barriers
- Implementation of modern international construction standards

Key findings

- The stock of raw materials in the Republic of Uzbekistan is enough for the production of construction materials to satisfy domestic demand
- Production of construction materials is decreasing due to significant growth in prices of natural gas and electricity in 2018 for manufacturers of individual sectors
- There is a large share of workers engaged in construction (1.2 million employed people), but there is a lack of qualified staff in the industry (only 10 higher educational institutions teach specialists for the construction industry)
- There are regulatory barriers that negatively affect the construction industry's development: complicated access to cartographic and geodetic materials

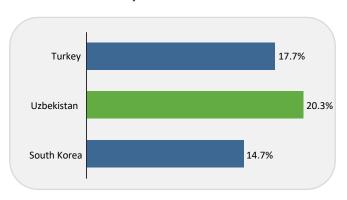
Construction share in GDP, 2017, USD million



Comments

- Construction industry is 6.1% of GDP in the Republic of Uzbekistan
- By this indicator, Uzbekistan holds an intermediate position between Turkey and South Korea

Construction industry share in the total volume of industry, 2017

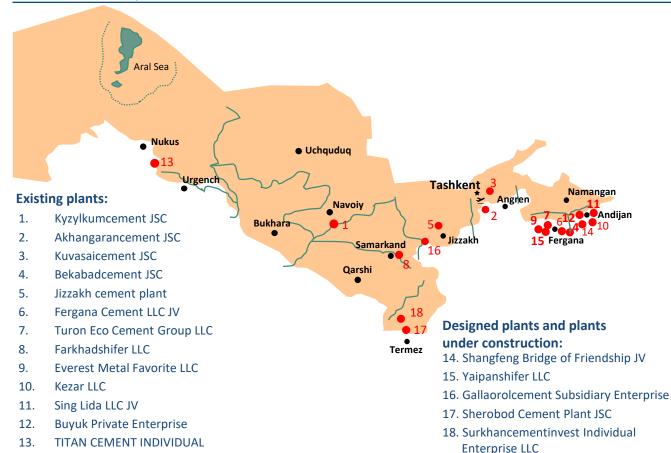


 The construction sector occupies a rather large share in the total industry volume – 20.3% in Uzbekistan vs. 17.7% in Turkey and 14.7% in South Korea

Current development level of the resource base

Location of cement plants

ENTERPRISE LLC



Designed cement output of the enterprises, thousand t

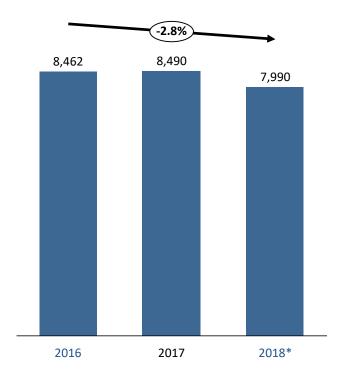
5 to the designed defined output of the effect prises, thousand t					
Existing plants:	1		Designed plants and plants under construction:		
Enterprise*	Output	Enterprise*	Output		
Kyzylkumcement JSC	3,500	Surkhancementinvest Individual Enterprise LLC	360		
Akhangarancement JSC	1,740	Shangfeng Bridge of Friendship JV	1,200		
Kuvasaicement JSC	1,250	Yaipanshifer LLC	100		
Bekabadcement JSC	1,080	Gallaorolcement Subsidiary Enterprise	100		
Jizzakh cement plant	1,000	Sherobod Cement Plant JSC	1,500		
Fergana Cement LLC JV	120	Total:	3,310		
Turon Eco Cement Group LLC	100				
Farkhadshifer LLC	100				
Everest Metal Favorite LLC	100				
Kezar LLC	60				
Sing Lida LLC JV	100				
Buyuk Private Enterprise	60				
TITAN CEMENT INDIVIDUAL ENTERPRISE LLC	221				
Total:	9,341				
Total		12,482			

^{*} All existing and planned enterprises and those under construction are plants with a complete production cycle.

Current development level of the resource base

Cement production,

thousand t/yr

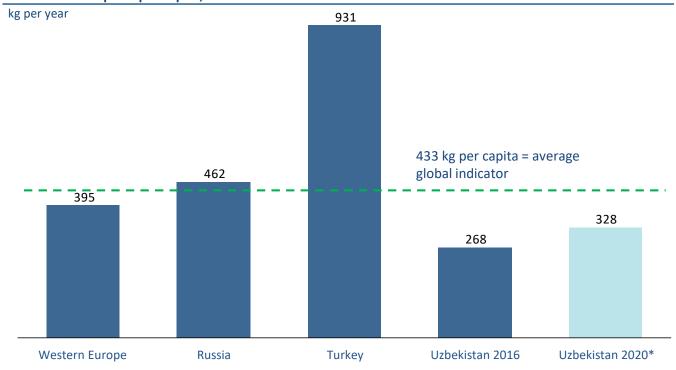


^{*} Note: predicted cement production volume in 2018

Comments

- One of the main reasons for cement production's decline in 2018 was a significant price increase for natural gas and electricity for manufacturers of certain industries
- Gas and electricity tariffs for construction enterprises, including cement producers, rose by 60% in 2018
- Domestic consumption volume of cement is 8.79 million tons per year and will continue to grow, since its annual consumption per capita is nearly half the average level around the world
- Therefore, Uzbekistan increased the cement import volume
- According to the State Statistics Committee, Uzbekistan imported cement for USD 79.8 million in the first half of 2018, which exceeds the figures of 2017 six-fold¹

Cement consumption per capita,



Current development level of the staff training system for the construction industry

Creation of a new department



- In May 2017, President of Uzbekistan Shavkat Mirziyoyev issued the decree "On the measures for radical improvement of activity of the State Committee for Architecture and Construction of the Republic of Uzbekistan"
- The updated State Committee for Architecture and Construction will unite the committee for architecture and construction, the inspectorate for quality supervision in design engineering and urban development, and some industry-related educational institutions will be transferred to the State Committee
- Also, the State Committee for Architecture and Construction will be responsible for compliance with the technical standards in design engineering and for the implementation of innovative project solutions, technology, and construction materials.

Staffing



institutions*







> 24,000 enterprises

* Education in Construction and Architecture is provided in the following higher educational institutions: Islam Karimov Tashkent State Technical University; Tashkent Institute for Design Engineering, Construction and Operation of Motor Roads; Tashkent Institute of Architecture and Construction; Tashkent Institute of Railway Transport Engineers; Turin Polytechnic University; Jizzakh Polytechnic University; Karshi Engineering and Economic Institute; Namangan Engineering and Construction Institute; Samarkand State Institute of Architecture and Construction; Fergana Polytechnic Institute

Regulatory barriers

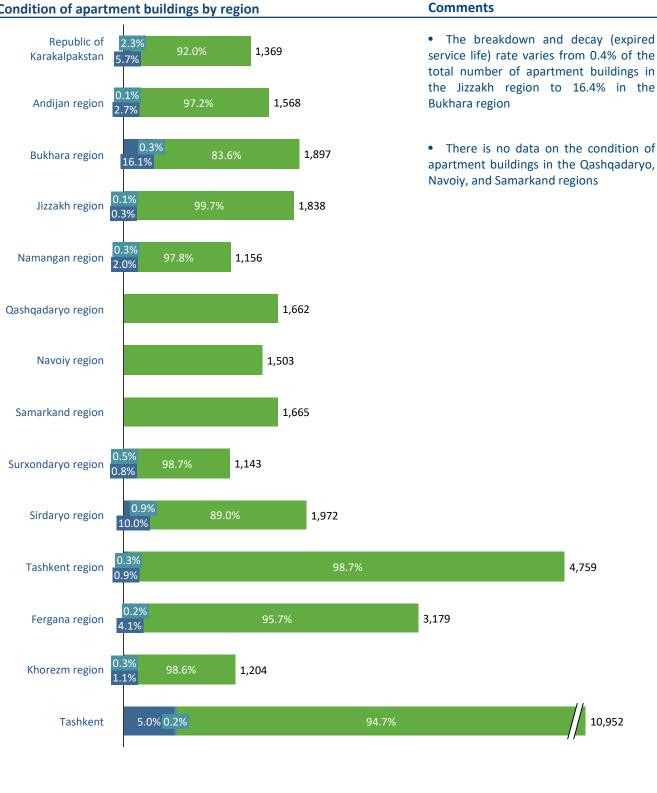
Creation of a new department

The following regulatory barriers exist:

- The complexity and expensiveness of current access to the materials of the republican cartographic and geodetic fund and data from hydrometeorological observations for the purpose of engineering surveys
- In May 2018, by decree the President established a price limit for cement for a number of contracting organizations. Cement enterprises were allowed to sell 2 million tons of cement to contracting organizations engaged in the construction of affordable housing for people in need of improved housing conditions, social facilities, transport infrastructure, and water facilities through centralized sources at a price of 367,000 sum per ton (including VAT) subject to a 100% down payment

Current level of housing development

Condition of apartment buildings by region



Slum housing

Dilapidated housing Repaired housing

Current level of development



Key challenges

- Low share of the population connected to the main water supply line
- Complicated procedure for connecting to the power supply system and supplying electricity to the population
- Low telephone network capacity
- Low level of railroad and motor road electrification
- Slow and unreliable internet

Key findings

- The share of expenditures on supporting information and communications technology in the Republic of Uzbekistan is quite small
- Only 64% of the population of Uzbekistan have access to the central water supply
- 35% of the population of Uzbekistan with access to the central water supply have not connected their homes to the water supply system and instead use outdoor standpipes to collect water
- Uzbekistan has a rather low price for electricity (USD 0.068 for 1 kW). However, the process of connecting to the power supply system is very expensive and takes a long time
- Railroads in the Republic of Uzbekistan are a link for eastern and western countries and organize the train traffic of six regional railway junctions (RRJ)
- The railway network density in the Republic of Uzbekistan is 14.5 km per 1,000 km2 of land

Current level of telecommunications network development

In use

Telephone network capacity of Uzbekistan¹

thousand numbers

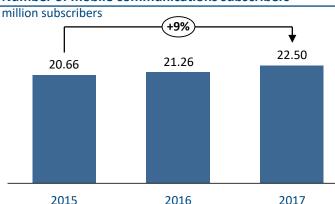
ATS 58% 42% 3,682

RTS 64% 36% 208

- In developed countries, the telephone network capacity decreases every year due to migration to virtual automatic telephone stations (ATS)
- Ordinary ATS already fail to satisfy business demands: they are limited in functionality and throughout capacity, and it is quite expensive to maintain them

Number of mobile communications subscribers¹

Installed



 Since 2015, the number of mobile communications subscribers increased by almost 2 million people

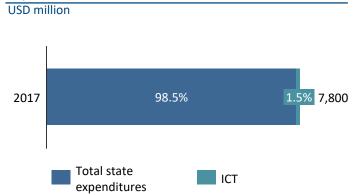
Sources: 1 = Ministry for Development of ICT and Communications of the Republic of Uzbekistan, analysis of the working group

Current level of telecommunications network development

Internet



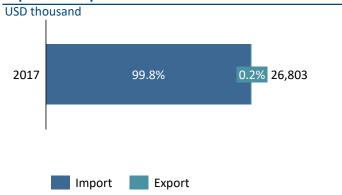
Share of ICT expenses in the structure of public expenditures



Comments

• The Republic of Uzbekistan is characterized by an extremely low share of expenditures on supporting information and communications technology. The same indicator in India accounts for over 19% of all public spending

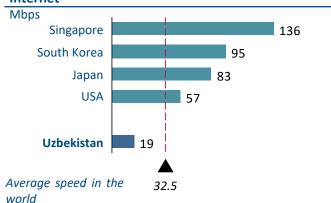
Export and import of ICT services



Comments

 Due to poor development of information and telecommunications technology in the Republic of Uzbekistan, almost the entire market of ICT services is imported. For comparison, imports in the ICT services market in the USA are about 40%

Average maximum data transfer rate of the Internet



Comments

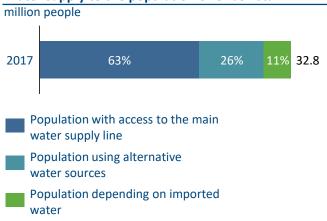
• The maximum data transfer speed of the internet in the Republic of Uzbekistan is 1.7 times slower than the average speed worldwide, which also demonstrates poor development of information and communications technology in the country

Current level of water supply development

Water supply



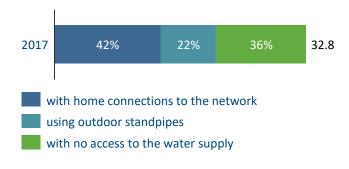
Water supply to the population of Uzbekistan



Coverage of settlements in Uzbekistan with centralized sewerage systems



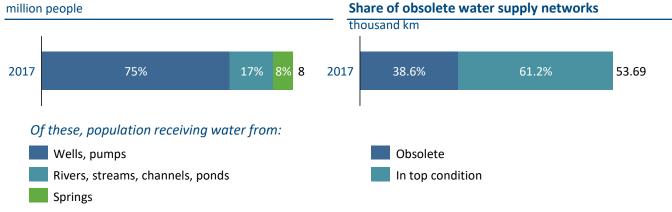
Population with access to the main water supply line million people



Comments

 Overall coverage of centralized sewerage systems in Uzbekistan is only 1.5%, which is extremely low compared to developed countries

Population using alternative water sources



Current level of power supply development

Place in the "Getting Electricity" rating

Comments

World Bank

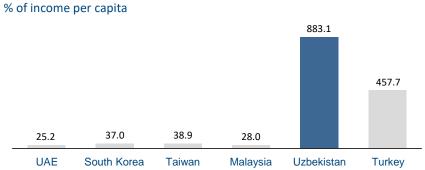
Doing Business 2017
"Getting Electricity"
indicator

27

out of 190 countries

 In one year, Uzbekistan rose from 112th to 27th place according to the "Getting Electricity" indicator, overtaking such countries as Turkey, Kazakhstan, and Georgia

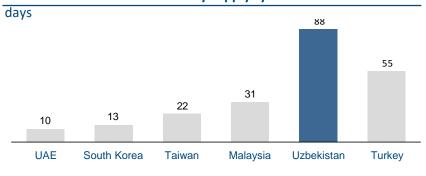
Cost of connection to electricity supply system



Comments

• The cost of connecting the electricity supply system decreased from 1393.1% ⁽¹⁾ of per capita income to 883.1% **(37% drop)**, which simplified the ability to connect to the electricity supply system

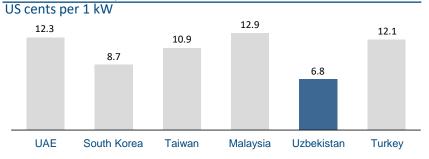
Time for connection to electricity supply system



Comments

• In 2016, it took 89 days to connect to Uzbekistan's electricity supply system. Within a year, this process became 1 day quicker, but still takes a long time compared to other countries

Price for electricity



Comments

• The price for electricity rose by 0.8 US cents during the year but still remains low compared to other countries



Place in the Doing Business 2017 rating for "Getting Electricity"

Sources: World Bank, analysis of the working group Note. (1) Data for 2016

Strategic options

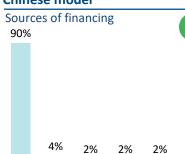
Government commercial enterprises

PPP

Budgetary appropriations Full private financing

International financial organizations

Chinese model



 More effective management of project development thanks to the managerial staff with sufficient competence in financial and technical issues



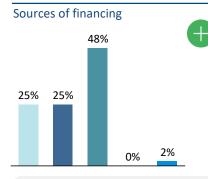
 Enterprises that are monopolists in their infrastructure sector have no incentive to operate more efficiently

· Fund raising through the issuance of infrastructure bonds

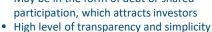
· Potential difficulties with fund raising may transfer the debt burden onto the state since it owns such enterprises in full or in part

Almost 100% of infrastructure projects are funded by the state

Australian model



 May be in the form of debt or shared participation, which attracts investors



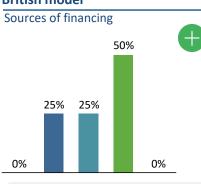
of nongovernmental control Cheap borrowed funds for the state



- Limited financing due to the government's fiscal plans
- Political pressure due to which the best projects may not be chosen

Private investments comprise about half of the portfolio

British model



 Possibility for the state to implement important projects even in light of fiscal restrictions

 High level of transparency and simplicity of nongovernmental control



----- Target development option --

- · The need to have an established environment for PPP operation (legal, functional, technical)
- Long-term burden on the state budget due to payments on liabilities under PPP agreements

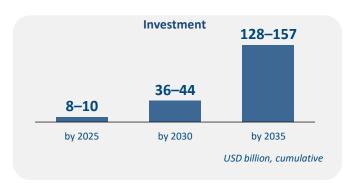
Over 75% of funding is provided by private investors, while the state plays a major role from the standpoint of planning and regulation

Target vision 2035

High-tech construction industry with advanced highquality infrastructure that meets the requirements of business and the population

- Over 75% of funding is provided by private investors, while the state plays a major role from the standpoint of planning and regulation
- High level of transparency and simplicity of nongovernmental control over infrastructure financing
- Use of the best international practices for road construction (e.g., Dutch project PlasticRoad)
- Construction of new and modernization of obsolete infrastructure: increase the share of people with access to the main sewerage (17%) and water supply (64%) networks to 90–100%
- Expansion of the broadband internet access and telephone communication network by increasing the number of cellular communications base stations from 20,000 to 40,000
- Implementation of 5G data transfer technology
- Implementation of public-private partnerships in infrastructure construction
- Use of Big Data for analysis of traffic and road conditions

Figures		
	2017	2035
Place in the Doing Business 2017 rating for "Getting Electricity"	27	Top 10
Population with access to the main water supply line, %	64	100
Covered by centralized sewerage networks, %	1.5	35
Average maximum data transfer rate of the Internet, Mbps	19	2048
Share of mobile communications subscribers in the total population, %	68%	>90%
Provision with housing, sq. m per 1 person (UN recommendations)	-	18



Key strategic initiatives

2025

2030

2035

- Expansion of internet and telephone communications network coverage
- Increase in the average internet speed
 Implementation of 5G mobile
 communications technologies
- Reconstruction and upgrading of the heat supply system to achieve reductions in excessive loss by migrating to a closed heat supply system, automated control of the heat supply system, full-fledged accounting and monitoring of the customer database with the respective control and accounting of debts
- Full coverage of the population with highquality drinking water
- Increased access to the centralized sewerage network for the country's urban population
- Creation of an apartment building management system that would encourage development of a market for operation and maintenance of apartment building stock
- Elaboration of the legislative and regulatory framework for energy conservation by developing standards that govern heat consumption by residential buildings and promoting adoption of measures for energy conservation and improvement of energy efficiency of buildings using Germany's experience
- Improvement of the educational process in industry-related educational institutions for the purpose of improving the process of training qualified staff in the field of architecture, design, and construction
- Implementation of energy efficient technology in the street lighting system and energy efficient lightbulbs in residential and public buildings

- Improved public-private partnership in housing and utility construction and in creation of telecommunications networks
- Rehabilitation and improvement in energy efficiency of buildings (heat insulation of facades, attics, etc.)
- Implementation of an automated billing system for payment and accounting of housing and utility services
- Improvement and updating of the legal framework for urban construction and urban development activity
- Development and implementation of state standards for engineering and technical work, which would be in line with the international standards, urban development standards and rules
- Implementation of effective mechanisms of infrastructure project financing for PPP and for private investors

- Full renovation of central boiler units and construction of local boiler units to supply heat to apartment buildings, social infrastructure facilities, and business entities
- Complete solution to the dilapidated and slum housing problem
- Implementation of vertical and horizontal technical quality control schemes at all stages of the production cycle of engineering and technical works to ensure high quality of construction

personnel



finance





legislation and state regulation



infrastructure

Economic development



Current level of development



Key challenges

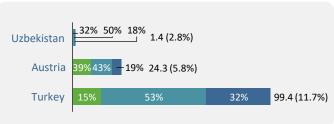
- Complicated visa policy and registration system
- Poor development of the tourism infrastructure in popular cultural centers, and its absence outside the main tourist places
- High prices for airfare, poor coverage of potential markets by Uzbek and international airlines
- Senior age of tourists (55+ years old) and near absence of young visitors
- Shortage of qualified staff in the tourism industry
- Poor development of the leisure and entertainment and service industries
- Lack of an aggressive PR strategy for Uzbekistan in the international market
- Lack of tourist organizations, including foreign (international) ones
- Lack of a national tourism brand and tourism product
- The tourism industry is not attractive to foreign investors due to high barriers for entering the Uzbek market

Key findings

- Over 50% of all hotels in the country are concentrated in three main cultural centers: Tashkent, Bukhara, and Samarkand
- Over 40% of tourists who visit the Republic of Uzbekistan represent an elderly generation (55+ years old), and Uzbekistan is not very popular among foreign youth (only 3% of tourists are under 25 years old). Therefore, 70% of tourists prefer museums, guided excursions, and shopping as leisure
- A difficult visa process is one of the main factors stopping people from choosing Uzbekistan as a travel destination (the time for processing documents is 10 days, while in Japan this process takes only 3 days; the cost is 60 USD, which is twice as expensive as a visa to Japan)
- Limited choice of air travel routes and high cost of airfare greatly increase the cost of visiting Uzbekistan and, therefore, reduce the country's competitiveness in the international travel market

Contribution of tourism to the economy





• Tourism's contribution to the economy of the Republic of Uzbekistan is extremely low and is less than 3%

Stimulating contribution

Money spent by hotel employees on housing, health care, clothes, etc.

Indirect contribution

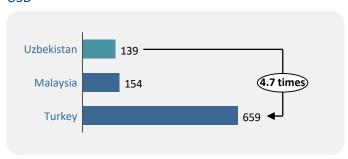
Capital investments in tourism, public spending on tourism, purchase of goods and services from suppliers

Direct contribution

Money spent by tourists on hotels, transport, meals, and other goods and services

Capital investments per 1 tourist

USD



- The amount of capital investments spent on one foreign tourist in 2017 is almost 5 times less than the same indicator in Turkey
- The country has a **rich cultural heritage**, but to uncover its potential, **Uzbekistan's** tourism industry **needs significant investments**

Target level of development

Potential tourist flow from cities with direct flights to Tashkent



Annual tourist flow, thousand people

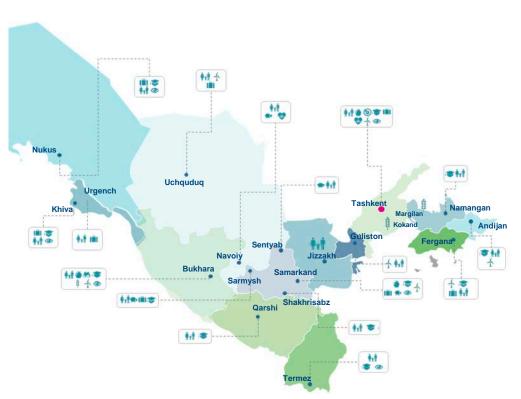


Selected countries with the potential for an annual increase in the tourist flow

- Cultural and educational, exotic, event, gastronomic, agricultural, recreational, ecological, and sports tourism
- Religious, event, recreational, gastronomic, and agricultural tourism
- Cultural and educational, religious, recreational, and event tourism
- 4 Cultural and educational, exotic, event, gastronomic, agricultural, recreational, sports, industrial, and ethnic tourism
- Cultural and educational, exotic, event, gastronomic, agricultural, recreational, ecological, sports, industrial, and ethnic tourism
- 6 Cultural and educational, exotic, event, gastronomic, agricultural, and ethnic tourism

Target level of development

Tourism development potential in Uzbekistan







Cultural and educational tourism

Traveling to Uzbekistan's most ancient cities, such as Samarkand, Tashkent, Bukhara, Khiva, Fergana, with their medieval architecture, historical, architectural, and archaeological monuments will create unforgettable experiences



Exotic tourism

Travel to places away from civilization using nontraditional transportation (camels, etc.)



Religious tourism

Visit Uzbekistan's holy places, such as the original Koran of Osman the khalifah of the 7th century, the mosque and tomb in holy Bukhara, and a necropolis in Samarkand where the brother of the Prophet Muhammad was buried



Event tourism

Trip with visits to Uzbekistan's main events, such as the World Nomad Games, Silk and Spices International Festival, Sharq Taronalari International Music Festival, and others



Gastronomic tourism

An excellent opportunity to enjoy the specialties of Uzbek cuisine and, most importantly, to try real Uzbek pilaf, which is included in the list of UNESCO World Heritage objects



Agricultural tourism

Unique trip that would allow guests to the country to visit families and live in the homes of various peoples of Uzbekistan, in towns and villages, and even in nomads' yurts in the desert



Recreational tourism

Ability to spend your vacation away from noisy cities: take a trip to the mountains and stay in health spas, visit salt therapy rooms, including special procedures



Ecological tourism

Traveling to an area where the sun shines almost year round, to the kingdom of dry hot summers, warm winters, soft honey falls, and bright blooming springs will impress any traveler



Sports tourism

Alpine skiing, water sports, horseback riding, or walking – all of these will help you stay fit and admire Uzbekistan's picturesque environment



Industrial tourism

Learning about the manufacturing processes of household appliances ("SamRosKholod") and foods and visiting a real factory would be interesting not only to students but to the employees of any industry



Ethnic tourism

Guests to Uzbekistan will meet an ancient, eastern ethnic group whose indigenous culture and national heritage go back centuries

Strategic options

Tourism as a public policy

Involves the presence of a strong ministry where significant control over the tourism industry will be concentrated

Government activity is aimed at:

- Stimulation of tourism development
- Ensuring the necessary level of safety for tourists
- Simplifying border and customs formalities
- Creating a national network for economic and social studies in the field of tourism
- Creating conditions for development of the tourism industry











- Existence of a branched structure (departments and divisions)
- The state as the main regulatory body



- Slow application of the latest technology
- Lack of qualified personnel

Strong Ministry of Tourism Development

Tourism and related industries

Involve establishing a joint ministry that would handle, apart from tourism, other related areas (and would perform a coordination function for the government bodies on tourism-related issues)

Combination of tourism and other industries:

- Material area (industry, energy, engineering, trade, transport, communications)
- Nonproduction area (culture, sports, information, environmental protection, natural resources, and other)

---- Target development option ---











- Tourism is a priority area of economic and cultural development
 - Clear distribution of powers between the central and regional tourist administrations
- Poor development of the material and technical base in tourism
 - Quality of service requires improvements

The Ministry of Tourism together with:

- **Production sector** (joint ministries of tourism and areas of the material sector)
- Nonproduction sector (joint ministries of tourism and areas of culture, environment, and other sectors)

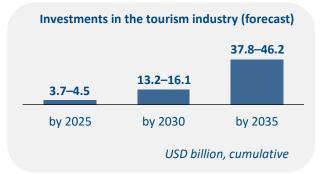


Target vision 2035

Realization of tourism potential of the Republic of Kazakhstan as one of the main tourist destinations in Central Asia

- Form target tourism segments
- Form a tourist product
- Ensure the safety of arriving tourists
- Launch a marketing campaign
- Simplify the visa policy for target groups of countries
- Develop modern hospitality infrastructure involving international networks
- Build new network-connected hotels
- Create a competitive tourist product for target segments, including young people
- Develop mass tourism using the tourism potential of the Republic of Uzbekistan:
 - Cultural and educational tourism
 - Exotic tourism
 - Religious tourism
 - Event tourism
 - Gastronomic tourism
 - Agricultural tourism
 - Recreational tourism
 - Ecological tourism
 - Sports tourism
 - Industrial tourism
 - Ethnic tourism
- Form and implement the scope of national and individual international quality standards in the service sphere, and consistent harmonization and bringing these standards in line with the international level
- Form of an information base for creating digital infrastructure of the transportation network
- Create national platforms for tourism industry digitalization
- Develop private business in the transport and tourism industries
- Attract foreign travel operators with experience in international tourism
- Develop home-based tourist accommodations in the residential sector, including through preferential tax benefits

Figures		
	2017	2035
Rank in the rating of countries by competitiveness of the tourism industry (out of 136 countries in 2017)		Top 50
Rank in the population hospitality rating (out of 153 countries)	96	Top 30
Rank in the tourism export rating of countries (out of 185 countries)	149	Top 80
Rank in the country rating by contribution of tourism to GDP (out of 185 countries)	117	Top 50
Rank in the country rating by level of investment in the tourism industry (out of 185 countries)	180	Top 50



Key strategic initiatives



Economic development



Current level of development



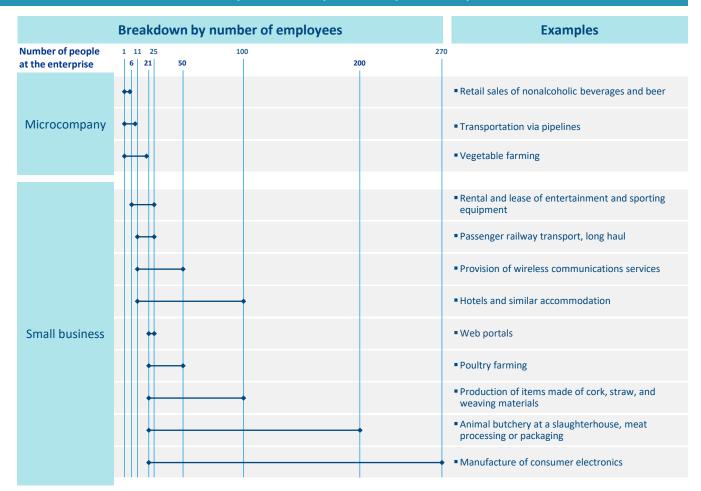
Key challenges

- SB&PE statistical accounting
- Low level of SB&PE penetration
- Stagnation of SB&PE development
- Low level of conversion from private entrepreneurs into small and medium companies
- High share of the shadow economy
- High cost of borrowed financing
- High debt burden and a complex tax system
- Underdeveloped simplified tax system
- Non-transparent and bureaucratized tender procedures
- Complicated access to land plots and real estate
- Trouble obtaining construction and architectural permits
- Tax regulation problems
- Problems of banking sector regulation
- Lack of attention from local authorities to entrepreneurs' problems
- Lack of collateral value of the clients small and medium entities
- Export barriers
- Lack of a network of SB&PE support infrastructure, including a regional one
- Absence of a unified institute of SB&PE support
- Dissatisfaction of entrepreneurs with the support measures
- Lack of well-built internal processes (including those related to reporting)
- High inflation

Key findings

- Criteria for the assignment to SME in Uzbekistan do not correspond to international practices, medium business is not singled out
- There are problems with statistical accounting of SB&PE, accurate data on the number of private enterprises are not available
- Uzbekistan lags behind developing countries by the number of SME and behind developed countries by the level of added value per one SME
- A new system of online registration has simplified and reduced time and labor on the registration of enterprises
- There are no tax incentives for SB&PE, except for the possibility to apply a simplified tax system, which needs improvement
- A low level of conversion from private entrepreneurs into small and medium companies is observed in Uzbekistan
- A high share of the shadow economy is observed: while the share of the shadow economy is estimated to be 50%, GDP loss is up to USD 16–17 billion
- In the business environment, the key problems are high cost of borrowed funds, high taxes, and non-transparent and bureaucratized tender procedures
- The main infrastructure problems include access to land and real estate, and obtaining construction and architectural permits
- From the point of view of regulation, entrepreneurs negatively comment on the problems of tax regulation and banking sector regulation, as well as the lack of attention by local authorities to existing problems
- Among the key barriers to attracting foreign investments are the staffing issue, lack of information for investors, and lack of interest from local authorities
- Lending to SB&PE grew by 23%, however, the lack of collateral value of SMEs is a problem
- Uzbekistan is characterized by a high level of self-employment (27%), which is typical for an undeveloped SME sector
- SB&PE financing with 18% share of SME in the credit portfolio is not enough
- State regulation of export procedures and customs barriers greatly complicate export development by SB&PE
- There is no unified consolidating body in charge of development of the SB&PE support strategy and subsequent monitoring of its implementation

Definition of small business and private entrepreneurship in the Republic of Uzbekistan



- The SME sector in the Republic of Uzbekistan is defined as "Small business and private entrepreneurship" (SB&PE)
- Small business entities are individual entrepreneurs, microcompanies, and small enterprises
- This classification is regulated by Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 275 dated August 24, 2016, and includes only the criterion "Staff size"
- The number of employees differs for different industries
- There is no "medium-sized business" segment

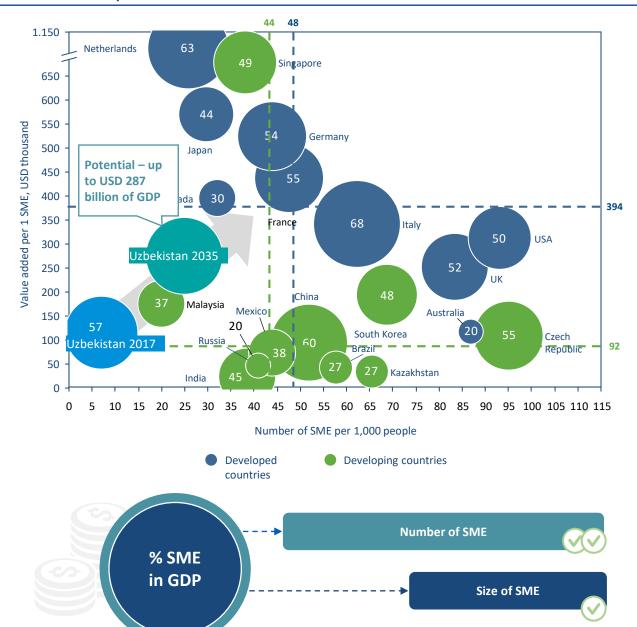
The criteria for defining small business and private entrepreneurship do not entirely match international practice:



Preservation of the industry-specific differences is necessary subject to certain tax (e.g., stimulation of individual industries) or statistical (e.g., comparison of labor productivity) tasks set by the state

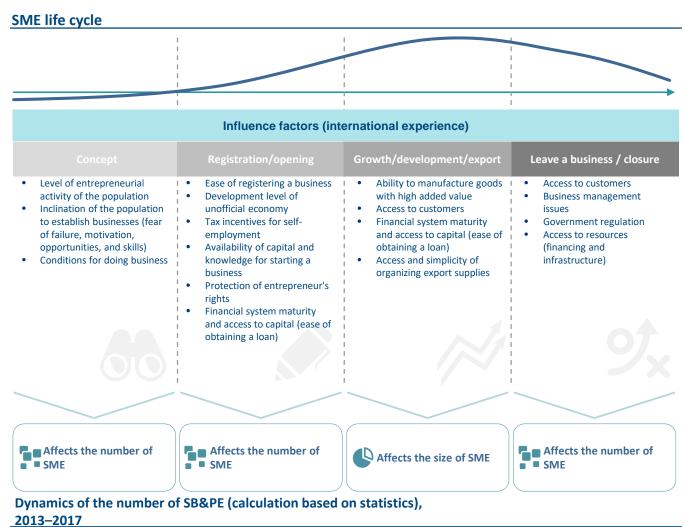
SME development level in developed and developing countries, 2016

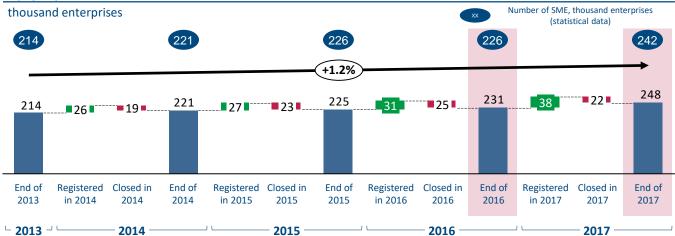
Uzbekistan lags behind developing countries by the number of SME and behind developed countries by the level of added value per one SME



- With 7.1 SMEs per 1,000 people, Uzbekistan lags behind developing countries with a median of 44 SMEs (difference of 37 SMEs per 1,000 people at the average delta of 17 SMEs in developing countries)
- Furthermore, the added value of SMEs in Uzbekistan is comparable to similar countries: USD 113,000 (median value of USD 92,000)
- The added value of SMEs in Uzbekistan is less than half than in emerging countries (USD 113,000 vs. USD 394,000)

Small business and private entrepreneurship problems depending on their life cycle stage

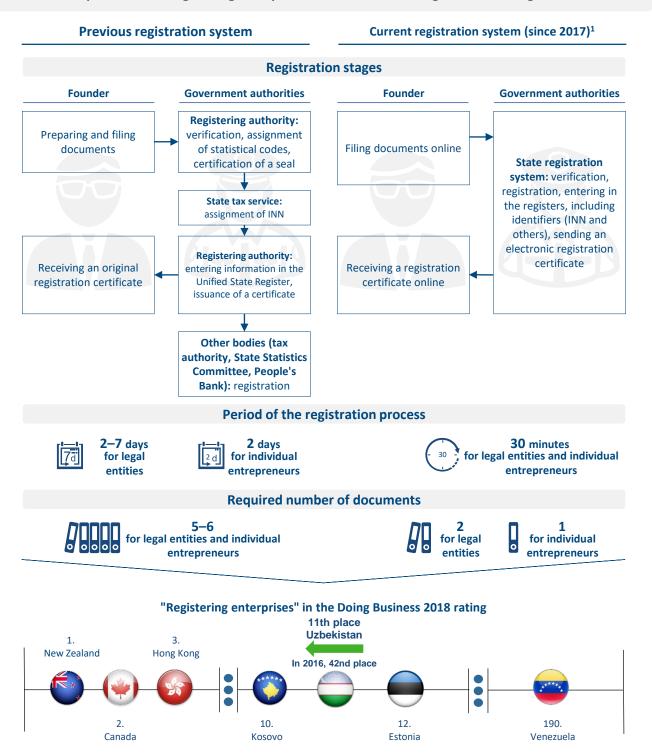




- Statistical data differs from the data calculated on the basis of the same statistical data, which proves problems with accounting and statistics
- Insignificant growth of registered SMEs is observed, in particular, due to the outrunning growth of registrations compared with the number of SMEs being closed

Changes in the SME registration system

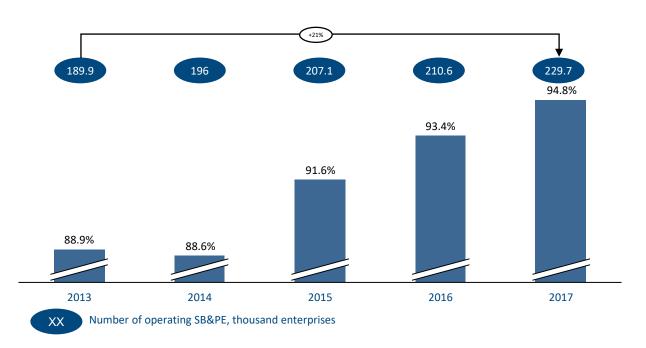
- Growth in the number of registrations is observed, including due to a considerable simplification of the registration process, which takes 30 minutes online
- A new registration system conforms to the latest international practices, which allowed Uzbekistan to rise to 11th place in the "Registering enterprises" section of the Doing Business rating



Note: 1 = According to Decree of the Cabinet of Ministers No. 66 dated February 9, 2017 "On Measures to Implement the Resolution of the President of the Republic of Uzbekistan No. PP-2646 dated October 28, 2016 'On Improvement of the System of State Registration and Entry in the Registers of Business Entities"

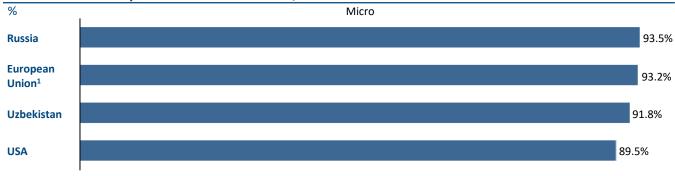
Share of operating SB&PE in the total number of registered SB&PE





- Growth in the number and share of current SMEs in the total number of registered enterprises is observed
- The **share** of operating SB&PE was **95%** in 2017, the **number** of operating SB&PE grew **by 21%** to 230,000 enterprises (**outpacing growth** compared to the number of registered enterprises, which increased by 16% over the same period)
- Growth in operating companies is due to the closure of idle companies and to business "coming out of the shadows" (companies starting to register some of their activities)
- However, there are no tax incentives for SMEs, except for the ability to apply a simplified tax system
- · The general tax system is complicated, which leads to the high cost for administration of tax accounts
- The simplified tax system requires improvement, since entrepreneurs are only able to pay tax on revenue
- Possible improvement: introduction of income tax payment, which is relevant for newly opened enterprises with small income

Share of microenterprises in the SME structure, 2017

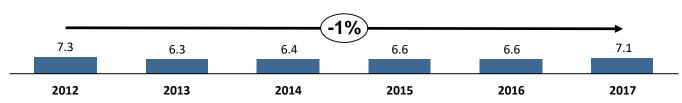


- The share of microenterprises in the SME structure of Uzbekistan corresponds to international practice
- · Every country has its own principles for dividing companies into micro, small, and medium ones
- For analysis purposes, we used the national criteria for grouping the companies

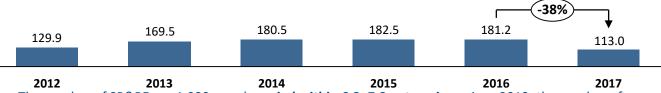
Small business and private entrepreneurship development level in Uzbekistan, 2012–2017

SME development stagnates both in terms of quantity and the size of one SME

Number of SME per 1,000 people



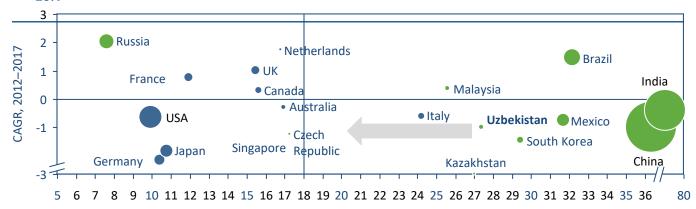
Value added per 1 SB&PE, USD thousand



- The number of SB&PE per 1,000 people varied within 6.3–7.3 enterprises; since 2013, the number of
 enterprises grew slightly, but compared to 2012 the current number of SB&PE has not recovered
- Taking into account the shadow economy, the number of SB&PE may be higher
- The number of SMEs grew throughout 2012–2016, but in 2017 it **fell by 38%**, including due to weakening of the national currency

Self-employment level and trend in developed and developing countries, 2016

- Uzbekistan is characterized by a high level of self-employment (27%), which is typical for emerging countries
- When the SME level is developed, the self-employment rate decreases by 15% on average
- With further development of SMEs in Uzbekistan, the self-employment rate may drop to approximately 20%



Share of self-employed, 2017

Developed countriesDeveloping countries

Size = able-bodied population

- In general, a high level of self-employment is typical of developing countries
- Over the last five years, the self-employment level in Uzbekistan decreased by 1% annually on average
- The current level of self-employment is 27%

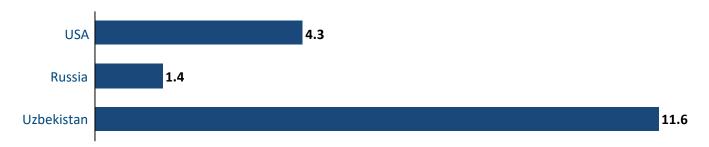
Estimated number of private entrepreneurs (million people)

There is a lack of accurate data on the number of private entrepreneurs in the Republic of Uzbekistan



Number of private entrepreneurs per 1 SME

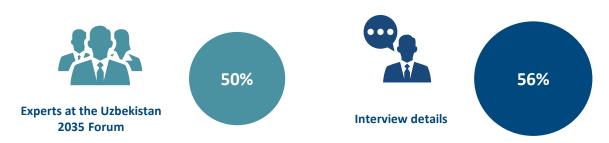
A low level of conversion from private entrepreneurs into small and medium companies is observed in Uzbekistan



- In most countries, the number of private entrepreneurs exceeds the number of SMEs
- There are about 11.6 private entrepreneurs per 1 registered company in Uzbekistan (with an estimated number of 2.8 million private entrepreneurs)
- In the US, there are 4.3 entrepreneurs per 1 company, and in Russia, 1.4 entrepreneurs

Assessment of the share of the gray economy

- A high share of the shadow economy is observed
- While the share of the shadow economy is estimated to be 50%, GDP loss is up to USD 16-17 billion

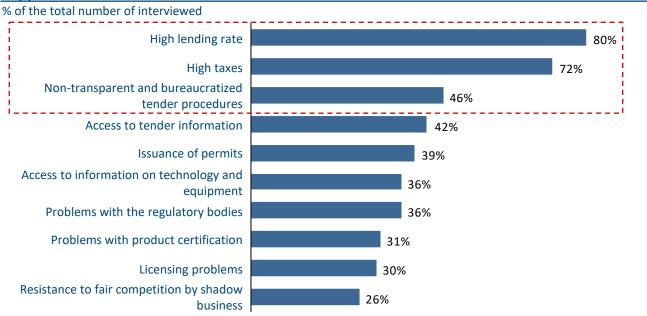


Factors negatively affecting the development of entrepreneurship

The interviewed entrepreneurs identified a number of factors that negatively affect the development of entrepreneurship:

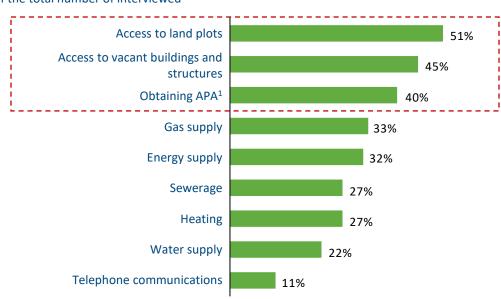
- In the business environment, the key problems are high cost of borrowed funds, high taxes, and nontransparent and bureaucratized tender procedures
- The key infrastructure problems include access to land and real estate, and obtaining construction and architectural permits

Key problems of the business environment



Key infrastructure problems

% of the total number of interviewed



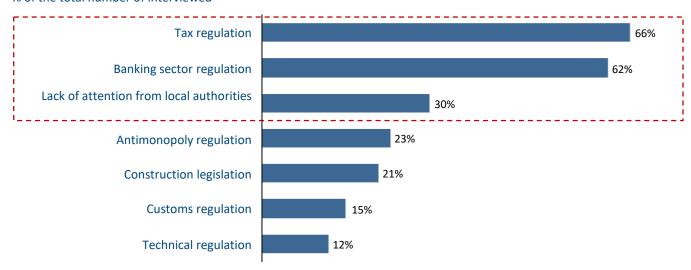
Factors negatively affecting the development of entrepreneurship

The interviewed entrepreneurs identified the following factors that negatively affect the development of entrepreneurship:

- From the point of view of regulation, entrepreneurs negatively comment on the problems of tax regulation and banking sector regulation, as well as the lack of attention by local authorities to the existing problems
- Among the key barriers to attracting foreign investments are the staffing issue, lack of information for investors, and lack of interest from local authorities

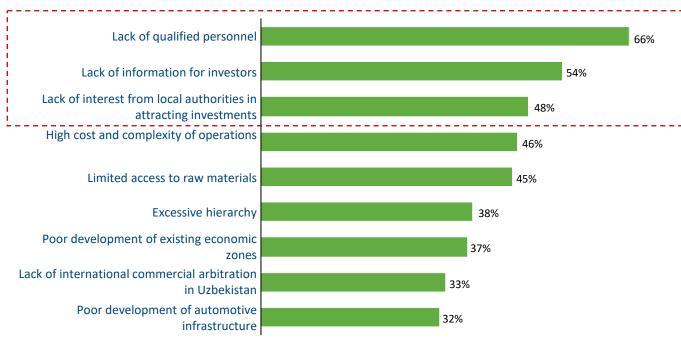
Regulatory factors with the most negative impact on business development

% of the total number of interviewed



Key barriers to the growth of foreign investments

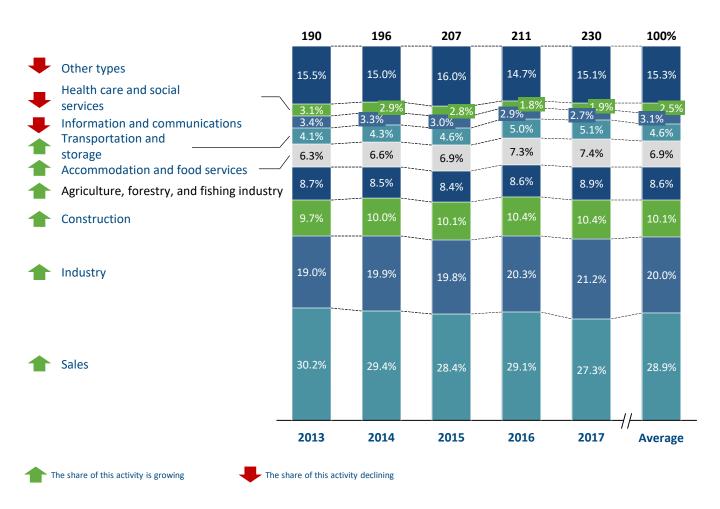
% of the total number of interviewed



Division of existing SB&PE by type of activity

%, thousand enterprises

Analysis of the last five years shows that SME, from an industry-specific point of view, are undergoing stagnation with insignificant growth in trade and industry

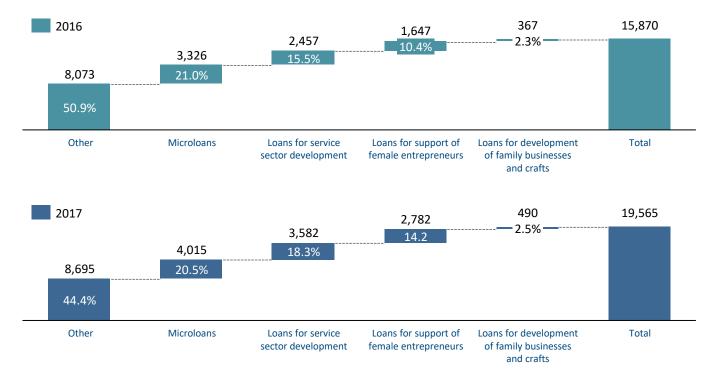


- Trading enterprises comprise the largest share in the SME structure, though their share slightly declined from 30.2 to 27.3%
- The share of enterprises involved in the industry grew by 2.2%
- The growth in enterprises is also observed in construction, agriculture, forestry, and the fishing industry, as well as in hospitality services, transportation, and storage

Loans granted to small businesses

UZS billion

- 23% growth in lending to small business and private entrepreneurs is observed, but microloans comprise the major share
- The problem is the lack of collateral value of SME, which leads to the impossibility to issue traditional loans and also to a significant volume of microlending



Loan portfolio structure, 2013-2017



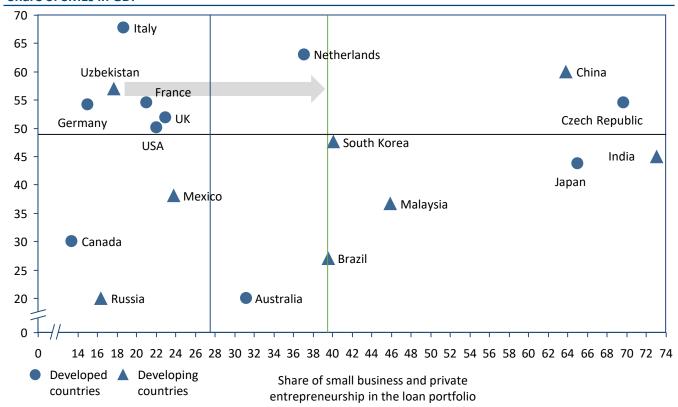
- In absolute terms, lending to SB&PE grew by +23% in 2017 compared to 2016
- Microloans constitute a significant portion of loans (about 20%), which evidences the impossibility to receive traditional bank loans
- The share of small businesses in the loan portfolio is growing due to a decline in the corporate segment and currently accounts for 18%
- The real share of small businesses in the loan portfolio may be higher due to a portion of loans to individuals that are used for the needs of small businesses

219

Share of small business and private entrepreneurship in the loan portfolio* and share of SMEs in GDP

- Developed countries with a high share of SME in GDP are characterized by a low share of SME in the loan portfolio
- Emerging countries are characterized by more intensive financing of SME in order to stimulate their growth
- Compared to developing countries, Uzbekistan lags behind in financing small businesses and private entrepreneurship with a share of SMEs in the loan portfolio of 18%
- The target value for Uzbekistan for the purpose of growth stimulation may be 30–40% in the loan portfolio

Share of SMEs in GDP



- A moderate share of small business and private entrepreneurship in the loan portfolio with a high level of SMEs in GDP is typical of developed countries: Italy, Germany, France, UK, USA
- **Developing countries** are characterized by **a higher share of small business and private entrepreneurs** in the loan portfolio: China, India, South Korea, etc.
- Uzbekistan, with its high share of small business and private entrepreneurs in GDP, has a relatively **low share of small business and private entrepreneurship** in the loan portfolio (about 18%), where the median is 39.8% in developing countries

- International ratings on the state of the economy and society show weak development of the entrepreneurial climate in Uzbekistan
- Uzbekistan is not represented in a number of important ratings, such as Global Entrepreneurship Monitor

Index

Index of Economic Freedom, 2017



Description

Index of Economic Freedom, that is, the lack of government intervention or obstruction in the production, distribution, and consumption of goods and services, except for the protection required for citizens and the support of freedom

Position of the Republic of Uzbekistan



Doing Business, 2018



Assessment of indicators that contribute to the expansion of entrepreneurial activity as well as the norms that restrict it



Indigo Index, 2018



Assessment of the economy's ability to adapt and develop when transitioning from the use of raw materials and natural resources to the use of innovations and technologies





3

Is in the top part of the rating

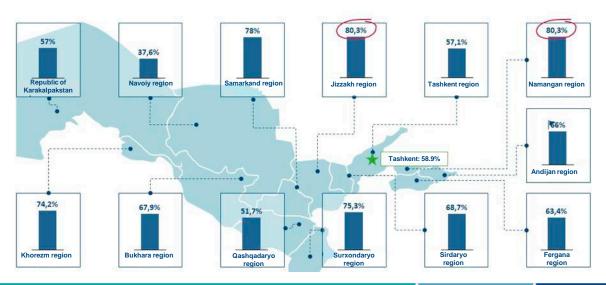




Is in the lower part of the rating

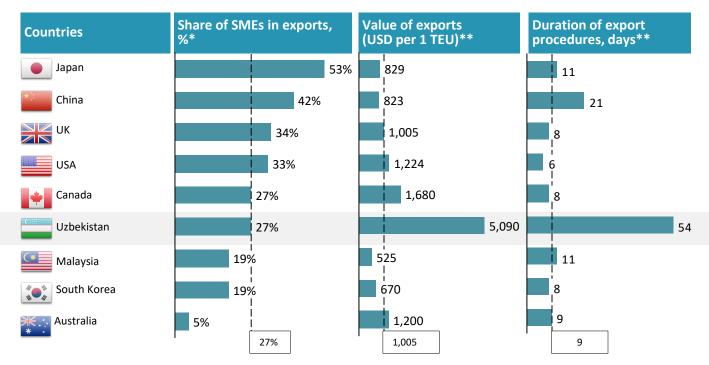
SB&PE share in GRP (gross regional product) of regions, 2016

- Jizzakh and Namangan regions are the leaders in SB&PE's share in GRP of the region
- Regional development of SB&PE is largely shaped by historical reasons, including the presence of large businesses, population density, etc.

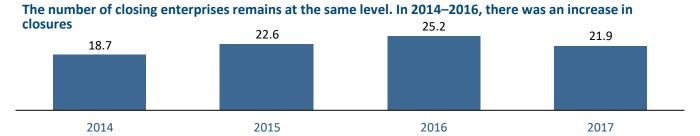


Source: data of relevant ratings, analysis of the project team; International Labor Organization, data from open sources, Uzbekistan 2035 Forum

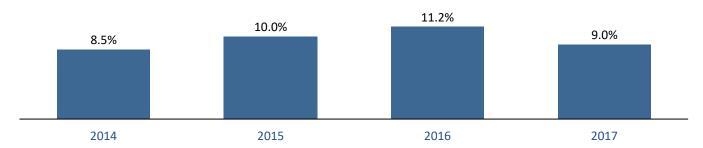
State regulation of export procedures and customs barriers greatly complicate export development by SB&PE: documentation of goods takes a long time along with a high export cost



Dynamics of the number of small and private enterprises closing down (calculation based on statistics), thousand enterprises, 2014–2017







Note: * data for the last available period (2015-2017) from open sources ** data for the last available period (2014)

Lack of SB&PE support infrastructure

Development institute



Fund for Support of Export of Small and Medium Businesses and Private Enterprises



- The institute set up to expand the export potential of small and private business entities
- Provision of the necessary legal, financial, and organizational support to SME in increasing the manufacture of modern products that would be competitive in foreign markets



State Support Fund for the Development of Entrepreneurship under the Cabinet of Ministers

- The main area of activity is to expand entrepreneurs' access to financial services (warranty support)
- Participation in the implementation of special state, industry-specific, and regional programs, projects, and activities



Chamber of Commerce and Industry (CCI)

- Non-government non-commercial organization whose purpose is to improve the business environment and create favorable conditions for entrepreneurship development
- Provides advising services
- Has regional branch offices
- Despite a number of development institutes, some key elements of SB&PE support are not represented
- In Uzbekistan there is no regional consultancy infrastructure, in particular, ESC (entrepreneur support centers), ExSC (export support centers), regional financial infrastructure (regional guarantee funds), and other kinds of support infrastructure (technology parks, business incubators)

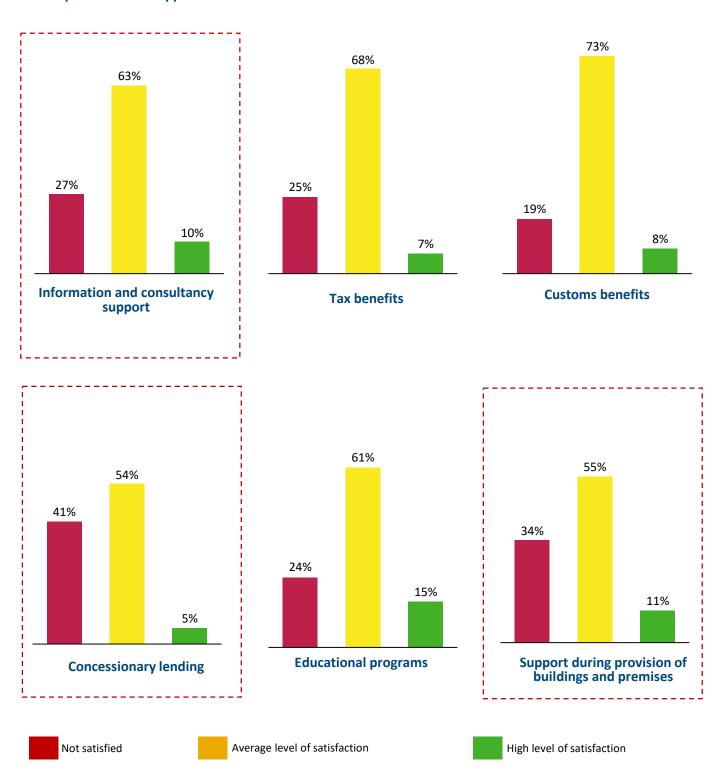
Lack of a unified body of SB&PE support

There is no unified consolidating body in Uzbekistan in charge of development of the SB&PE support strategy and subsequent monitoring of its implementation

		•		
		Development of SME strategy	Introduction of support measures	Monitoring
(::	Singapore	SPRING Singapore		SPRING Singapore, Ministry of Trade and Industry of Singapore
	Malaysia	SME Corporation		SME Corporation
	Japan	SME Agency		SME Agency
	USA	SBA		SBA
*	Vietnam	SME Development Council	Several organizations	SME Development Council
	Thailand	OSMEP		OSMEP
•	India	Ministry of SME		Ministry of SME
>=	South Africa	Small Enterprise Development Agency		Small Enterprise Development Agency
# h	South Korea	SMB Administration		SMB Administration
	Russia	Ministry of Economic Development of Russia		Ministry of Economic Development of Russia
Calling	Uzbekistan	None		Several organizations

Satisfaction with entrepreneurship support measures

- The following support measures have the lowest satisfaction level: concessionary lending, support during provision of buildings and premises, and information and consultancy support
- In general, a low percentage of complete satisfaction with support measures is observed; maximum satisfaction is observed in educational programs, which evidences the need for reorganization and improvement of support measures



Strategic options

1

Financial support to SMEs

Use of credit support to small and medium-sized enterprises as the main support instrument. Financing is provided from the state funds and by extending concessionary loans in commercial banks, which in their turn receive certain preferences from the state. Skills and competencies are developed through the efforts of entrepreneurs themselves





Ability to quickly start a business and get results



- Risk of unprofitability of SMEs due to insufficient analysis when issuing loans
- Short-term effect of support
- Need for large budgetary expenditures

Provision of resources to SMEs in the short term

2

Nonfinancial support to SMEs

Use of mainly nonfinancial support to SMEs. Main support instruments are consultation, education, assistance in progressing to foreign markets, and provision of guarantees. SMEs do not have quick access to the financial resources required to establish new companies





- Long-term effect of support
- SMEs have better business management skills, which has a positive impact on their profitability



 The problem of the lack of financing is made greater by low income and poor investment opportunities of people in Uzbekistan

Development of knowledge and skills of entrepreneurs amid insufficient resources for SMEs

3

Mixed support of SMEs and regulation

Combination of financial and non-financial support upon removal of regulatory and infrastructure barriers. The state supports functioning of a stable institutional environment along with the delivery of targeted financial or non-financial support through the regional infrastructure network, subject to the presence of an SME policy coordinator



--- Target development option --

UK France



Ability to launch SMEs quickly, with long-term support



Need for significant administrative efforts to establish a support system

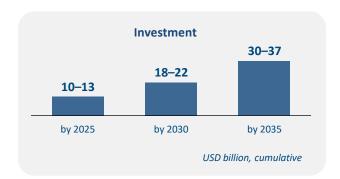
Combination of available financial resources and skills of SME representatives subject to a stable institutional environment

Target vision 2035

The country uses various financial and non-financial measures of state support for the comprehensive development of entrepreneurial spirit and business, which allows entrepreneurs to easily open and freely conduct and develop their business. Mixed support model

- Legalization of unofficial employment through the amnesty of capital (including tax amnesty)
- Creation of a single support institution, support infrastructure (business support centers, expert training centers, technology parks, accelerators, etc.) and introduction of new support products
- Provision of access to financing through guarantee support
- Greater access of SMEs to state orders (quotas) and export incentives
- Improvement of the tax system, including introduction of a profit tax in the simplified tax system
- Separation of medium-sized enterprises and differentiation of the state policy with respect to support products depending on the size of an enterprise

Figures	2017	2035
Share of SMEs, per 1,000 people	7.1	25
Value added per 1 SME, USD thousand/SME	113	273
Doing Business Index (rating position)	74	Top 20
Index of Economic Freedom (rating position)	152	Top 50
Share of small business and private entrepreneurship in the loan portfolio	18%	40%
Period for connecting SMEs to electrical supply network (days)	88	20
Export clearance period (days)	54	9



Guidelines for action



Key strategic initiatives (1/2)

2025

- 2030
- Improvement in legislation: separation of medium business and reform of accounting criteria for SMEs in accordance with international practice
- Creation of a single SME support institution, transfer of all SME development functions to such single institution ("one-stop solution"), and assignment of this status in the legislation
- Appointment of a manager in charge of SME support at the government level
- Legalization of private enterprises through amnesty and registration as simple notification
- Creation of regional support infrastructure (independent or jointly with regional producers) in two areas: guarantee funds and consulting centers as well as expert training centers, technology parks, accelerators, etc.
- Introduction of measures to support SME lending, including guarantee support
- Improvement in the simplified taxation system due to the introduction of income tax
- Reduction in the cost of SME administration by reducing the number of reports
- Introduction of supervisory holidays: ban on inspections of SMEs during the first 3 years of their activity, including regulation of the supervision system
- Digitalization of the interaction between the state and SMEs in order to reduce administration costs
- Differentiation of the state policy with respect to support products depending on the size of an enterprise

- Popularization of entrepreneurship at the state level for the purpose of stimulating conversion of private entrepreneurs into small businesses (holding educational and marketing campaigns)
- Development of business education (increasing the number of training areas in higher educational institutions, training courses for young teachers, management courses for experienced entrepreneurs)
- Introduction of a simplified procedure for SMEs' access to infrastructure, including access to the electrical supply network
- Simplification of the SME closure procedure
- Improvement in the business climate: enter TOP 80 of the Corruption Perceptions Index and Index of Economic Freedom
- Shift of the industry focus to trade and tourism
- Development of export of SMEs by providing export loans and insurance
- Expansion of access to the state order through implementation of a program of firm order from SMEs
- Introduction of strict penalties for illegal activities
- System of grants to establish SMEs
- Reform of the SME accounting system based on a SME support institution

Creation of a unified know base for SMEs based on a single SME support institution

2035

- Expansion of the guarantee support program to increase lending to the SME sector
- Stimulation of creation of mutual guarantee funds
- Simplification of state regulation (application of the principle of regulatory guillotine)
- Support of high-tech and innovative enterprises
- Maximization of support coverage (by number of supported SMEs)
- Creation of a favorable business climate: enter TOP 50 of Corruption Perceptions Index, Index of Economic Freedom, and TOP 20 of Doing Business Index

personnel

l 🌎 fi

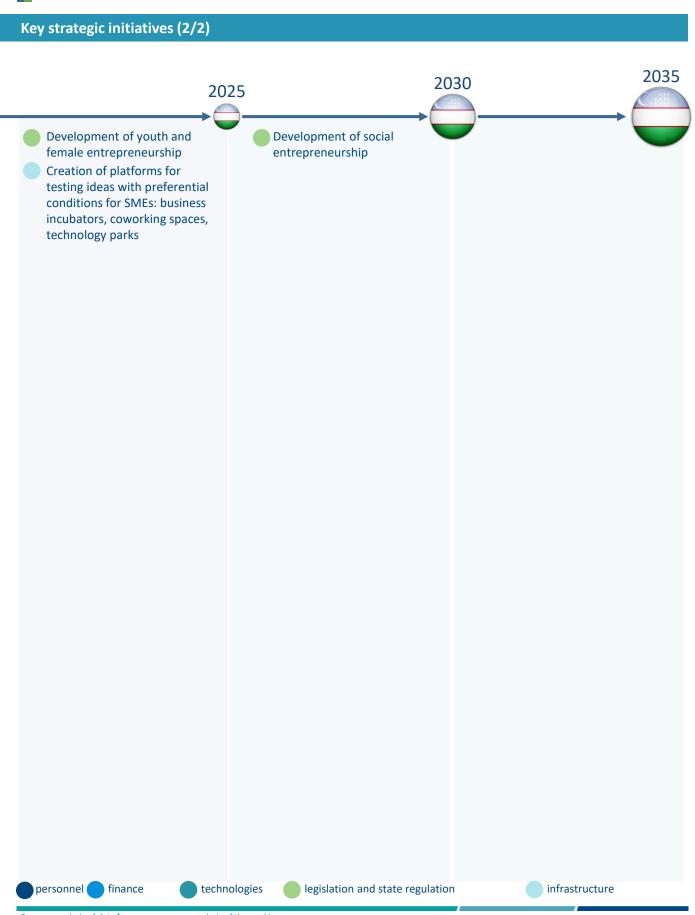
finance

technologies

es (

legislation and state regulation

infrastructure



Financial system

Economic development



Economic development



Current level of development

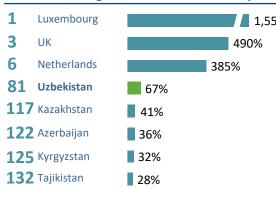
Key challenges

- Inefficient mechanisms of transferring financing to the economy's strategically important areas
- Range of banking products does not meet the requirements of the economy
- Low volume of the banking sector: 86th place in the world
- High cost of borrowed capital: over 23% per annum
- Low level of public confidence in the financial system, less than 60%
- Low level of market processes, international accounting systems, and compliance practices
- Lack of trust from international investors
- Lack of competition, closed market of processing services, and high cost for banks
- Low level of integration with international payment system

Key findings

- The Republic of Uzbekistan lags behind developed countries considerably by the banking system size (assets), which needs to be increased significantly in order to achieve the goals of economic development. The total growth of assets for the year was 98%, but 60% was due to devaluation of the exchange rate and the proportional growth in foreign currency assets
- Banks with state participation occupy a dominant position both in terms of the size of capital and the size of the loan portfolio, but this situation is acceptable for a developing economy, as it allows one to direct credit flows to strategically important sectors of the economy
- There is a crisis of confidence in the banking system of Uzbekistan among the population, which slows development and helps maintain the shadow economy. However, the share of banking services is gradually increasing due to the development of infrastructure. At the moment, more than half of the population is still not provided with basic banking products

Ratio of banking assets in % to GDP and place in the global ranking



- 1,550% In 2017, the total assets of commercial banks increased by UZS
 82.6 trillion, or 98.2% in percentage terms (in 2016, 29%), and amounted to UZS 166.6 trillion as of January 1, 2018, while the country's GDP reached more than UZS 249.13 trillion
 - At the same time, 64% (or UZS 52.8 trillion) of the total increase in the total assets were due to sharp devaluation of the exchange rate of the national currency. Under the influence of this factor, the ratio of bank assets to GDP in 2017 increased to 67% (in 2016, 42.2%), which allows the Republic of Uzbekistan to take 81st place in the world

Share of bank cards

million bank cards

2017 2018 19.52 19.23

31.03

Number of bank cards

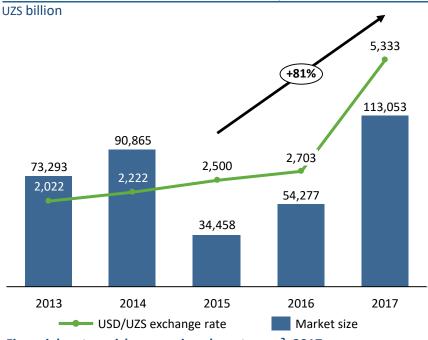
~60%

31.29

- The share of the banking services is gradually increasing due to the development of infrastructure, but a significant part of the population is still not provided with basic banking products
- A low share of banking services generally hinders the development of the banking sector due to the lack of sources of cheap liabilities – deposits from the population. At the moment, UZS 1 of cash accounts for only UZS 0.55 of deposits of individuals

Current level of development

Size of the financial services market of the Republic of Uzbekistan¹

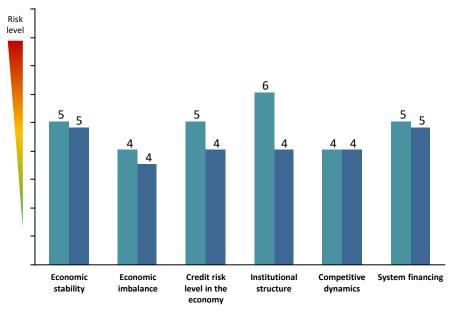


Financial system risk comparison by category², 2017

Categories 1 to 9 (9 = high risk, 1 = low risk)

Kazakhstan

Russia





Argentina

Kenva

Comments

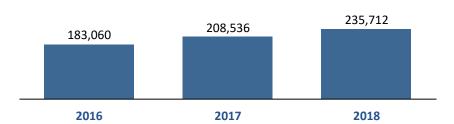
- The capacity of the domestic financial market is small. The domestic capital market is underdeveloped, and there is no active market for the issuance of speculative debt of the private sector in the country
- Investment in the banking system and the country is very risky due to the high degree of state participation, lack of transparency, and selective law enforcement
- Low effective demand from the population significantly limits the attraction of liabilities and the development of banking products
- There is a low level of compliance with international requirements, including in respect of the compliance system, financial reporting, and corporate governance standards
- Lending practices and underwriting standards in Uzbekistan lag behind the global level. The state often interferes with the decision-making process on lending
- The Central Bank issued a resolution³ increasing the transparency of the banking system, including recommendations to reduce tariffs and cancel fees on a number of banking services
- Introduction of new standards aimed at improving the financial stability of financial institutions as well as improving the population's deposit guarantee system
- Liberalization of the monetary policy and improvement in inflation targeting to reduce shocks and increase the investment attractiveness of the banking system
- One of the problems for development is the lack of laboratories and cooperation of banks and state institutions on products

Tunisia

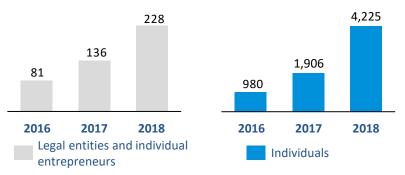
Georgia

Current level of development

Number of payment terminals in the Republic of Uzbekistan¹



Number of users of the remote banking service system² in Uzbekistan



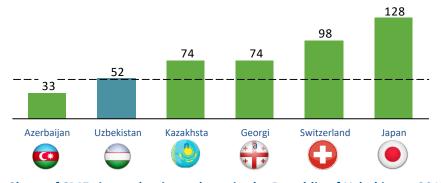
Comments

- The number of payment terminals increased by 29% in 2 years
- However, the entry to the market of payments implies high expenditures on purchasing mandatory devices from a single player and payment of high fees on system maintenance

Comments

 In 2018, the number of users of the remote banking service increased greatly: nearly 3 times among legal entities and individual entrepreneurs, and 4.3 times among individuals

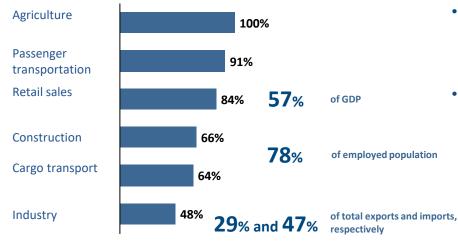
Number of ATMs per 100,000 people, 2017



Comments

 The share of the banking services is gradually increasing due to the development of infrastructure, but a significant part of the population is still not provided with basic banking products

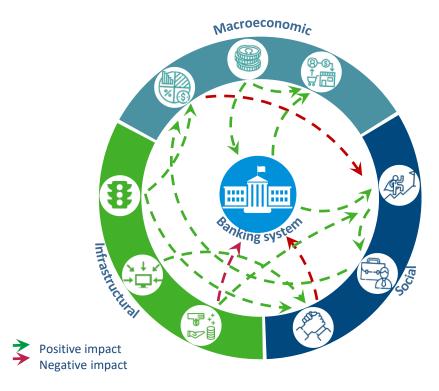
Share of SMEs in production volume in the Republic of Uzbekistan, 2017



Comments

- The high share of SMEs in the structure of production and job creation requires the expansion of the offer of banks products for this segment
- It is necessary to actively develop the following products:
- Work with current liquidity and placement
- Bank certificates, guarantees, and letters of credit
- Consulting services on the basis of financial institutions

Current level of development





Currency regulation

- Liberalization of the FX policy contributes to the development and activation of international trade
- Currency revaluation led to an increase in bank assets



Monetary policy

- A restrained monetary policy will reduce inflation
- → Toughening of the monetary policy will have a negative impact on business development



International trade and balance of payments

- → Development of trade will provide the country with equipment
- ☑ The open market will have a negative impact on local producers



Confidence in the banking system

- → The low level of confidence prevents the growth of liabilities
- The low level of confidence leads to a shadow economy





- The low employment level reduces effective demand in the country
- The low employment level increases the competitiveness of labor



Level of development of small- and mediumsized enterprises

- Large number of SMEs contributes to equitable distribution
- Large number of SMEs stimulates competition



Development of nonbanking financial institutions

▶ Development of leasing and insurance companies will expand opportunities for companies and citizens by reducing the share of banking services



Development of banking infrastructure

- Development of banking infrastructure will increase business activity
- → Development of banking infrastructure will increase transparency of the system



Increasing independence of the regulator

- ✓ It will increase the level of confidence in banks.
- → It will improve the stability of the financial system



Sources: analysis of the working group

Current level of development







The great importance of the SME segment for social and economic security **necessitates the priority development of banking services in this segment of the economy**, in particular:

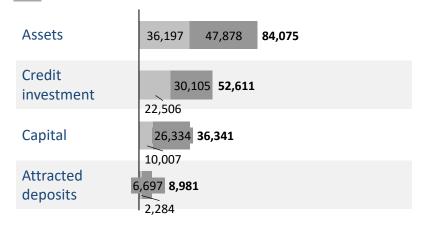
- Development of crediting
 - Creation of new, more flexible credit instruments
- Development of transactional products
 - Work with current liquidity and placement
- Expansion of export-import instruments
- Bank certificates, guarantees, and letters of credit

 Provision of consulting services on the basis of financial institutions
- Consulting of SMEs on legal, financial, and tax issues
- Improvement in operational efficiency and digital accessibility
 Improvement in service quality and rate reduction in decision-making time.
 - Improvement in service quality and rate, reduction in decision-making time, remote identification, online and mobile banking

Current level of development

Loans issued to small business entities1

2017



Comments

• In 2017, total liabilities of commercial banks increased by UZS 70.9 trillion, or by 1.9 times (1.3 times in 2016), and amounted to UZS 146 trillion as of January 1, 2018. At the same time, 71% of this growth (or UZS 50 trillion) was due to the increase in the value (in national currency) of loans and deposits that were raised in foreign currency as a result of sharp devaluation of the national currency.

2018

In UZS

In foreign currency











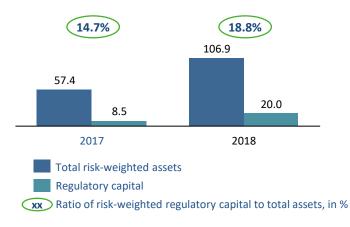




Current level of development

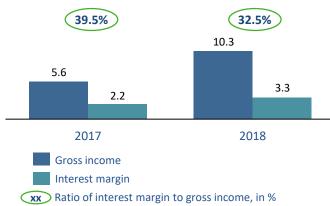
Capital adequacy indicators¹

UZS trillion



Financial performance indicators¹

UZS trillion

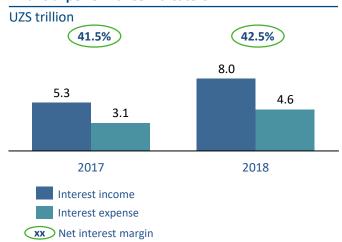


Capital stability indicators

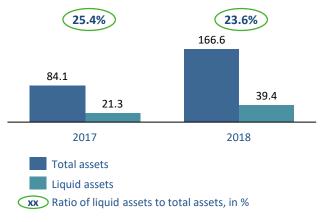




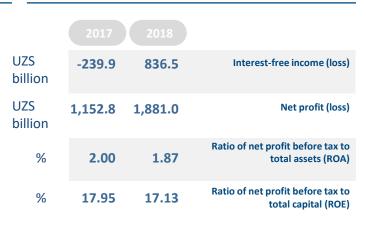
Financial performance indicators¹



Liquidity indicators¹



Financial performance indicators¹

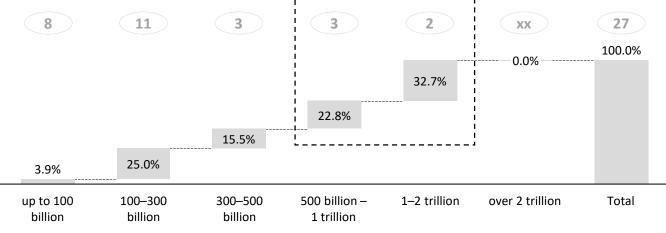


Current level of development

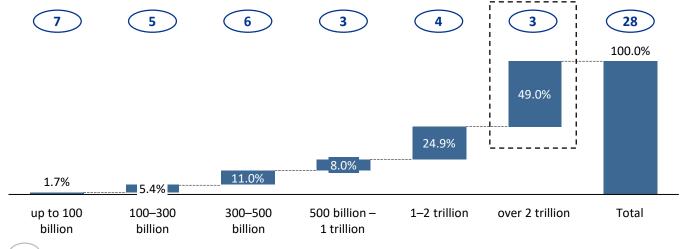
Classification of commercial banks by total capital¹

UZS

2017



2018



Number of banks



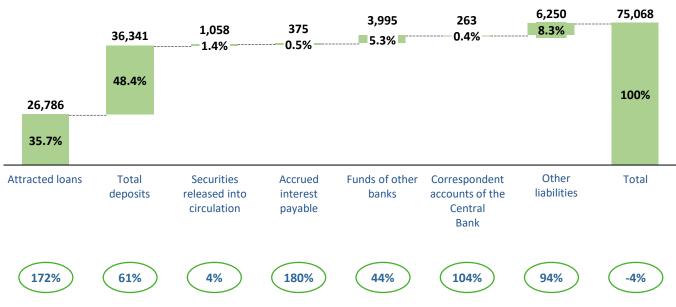
High level of banking sector concentration:

at the beginning of 2017, the **5** largest banks had half of the total banking capital, at the beginning of 2018, this dropped to only **3** banks

Current level of development

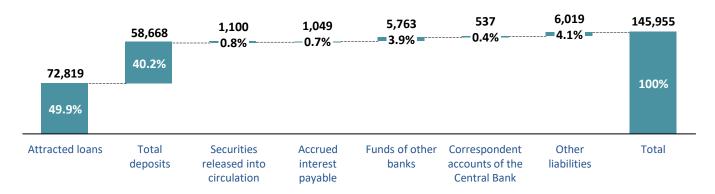
Indicator description, 2017¹ (as of January 1)

UZS billion



Indicator description, 20181 (as of January 1)

UZS billion



increase compared to the previous year, in %

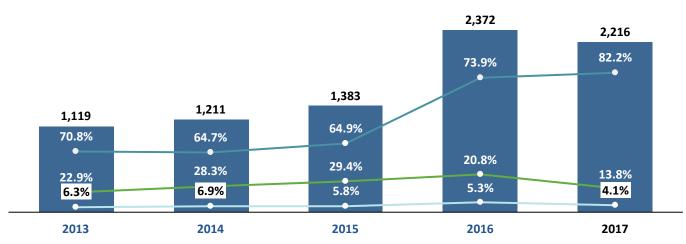


The volume of liabilities of the banking sector increased by 94% for the year mainly due to attracted loans and deposits

Current level of development

Dynamics of troubled loans¹

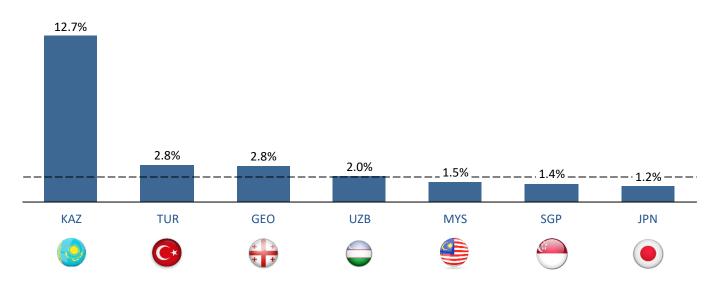
UZS billion



- Loans with revised terms
- Overdue loans
- In court proceedings
 - Troubled loans

Comments

In 2017, total liabilities of commercial banks increased by UZS 70.9 trillion, or 1.9 times
 (1.3 times in 2016), and amounted to UZS 146 trillion as of January 1, 2018. At the same time, 71% of this growth (or UZS 50 trillion) was due to the increase in the value (in national currency) of loans and deposits that were raised in foreign currency as a result of sharp devaluation of the national currency



Strategic options

nfluential development institutions*

Minor development institutions*



Japanese system

Creation of development institutions for implementation of state programs; withdrawal of state projects beyond the scope of banks



Russian system



High share (about 80%) of state participation in the banking sector and the practice of "manual control" of the country's financial flows



Singaporean system

Full liberalization of the banking market; absence of state players. The state retains only supervisory and regulatory functions





High share (about 80%) of state participation in the banking sector and the practice of "manual control" of the country's financial flows

Private banks State banks

Key problems today The system solves the specified problem Inability to direct funds to strategically important areas of the economy Image of banking products does not meet the requirements of the economy Range of banking products does not meet the requirements of the banking sector: Image of banking products does not meet the requirements of the economy Low volume of the banking sector: Image of banking products does not meet the requirements of the economy Low volume of the banking sector: Image of banking products does not meet the requirements of the economy High cost of borrowed capital: over 23% per annum Image of banking products does not meet the requirements of the economy Low level of public confidence in the financial system, less than 60% Image of banking products does not meet the requirements of the economy Lack of market processes and international accounting and compliance systems Image of banking products does not meet the requirements of the economy Lack of trust from international investors Image of banking products does not meet the requirements of the economy

Strategic options

Gradual

Gradual transition from the current model (high level of state sector involvement) to the distribution of financial flows through development institutions, privatization of the banking sector, and further full liberalization





- Does not require destruction of the traditional structure of the financial sector
- Allows support for priority industries through development institutions



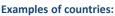
- Inefficient spending of public funds
- High share of the state in the banking sector
- Does not allow all the challenges of the banking sector to be solved

Slow evolutionary transition of the sector to full liberalization

Target development option*

Liberal

At the first stage, there are private and independent banks; state projects are implemented in development institutions. At the second stage, full liberalization of the banking market takes place; absence of state players. The state retains only supervisory and regulatory functions











- Relatively gradual transition bypassing the stage with a high share of state participation
- Allows support for priority industries through development institutions



Does not allow all the challenges of the banking sector to be solved in the short term

Gradual transition of the sector to full liberalization bypassing the stage with a high share of state participation

Shock

Sharp transition from the current state to the Singaporean model of the banking sector. Full liberalization of the banking market; absence of state players. The state retains only supervisory and regulatory functions







Allows all the challenges of the banking sector to be solved in the short term



- Requires destruction of the traditional model of the financial sector's operation
- Does not allow the state to use the banking sector to support priority programs and projects
- Possible "excesses" at the local level

Shock transition to complete liberalization of the banking sector

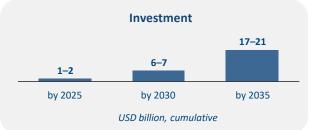
Note: * A number of experts specified the Strategic Option No. 3 "Shock" as the target development option; however, the Strategic Option No. 2 "Liberal" is supported as the target option by the majority as a more balanced one 242

Source: analysis of the working group

Target vision of banking in 2035

Private commercial banks and other financial institutions meet the people's needs for financial services, while development institutions and private investors finance state projects

- Infrastructure upgrades
- Implementation of modern banking practices and standards, including modern IT systems
- Adoption of digital banking and retention of service types implemented earlier
- Full liberalization of the banking sector
- The state retains only supervisory and regulatory functions



Figures						
	2017	2035	CAGR			
Bank assets to GDP, % (place in the rating)	67	Top 50				
Share of banking services	60%	90%	2.3%			
Share of cash in the money supply	27%	5%	-8.9%			
Share of the state in the capital structure	88%	10%	-11%			
Share of lending to small business and private entrepreneurship	17%	40%	4.9%			
Cost-to-income ratio	70%	40%	-3%			

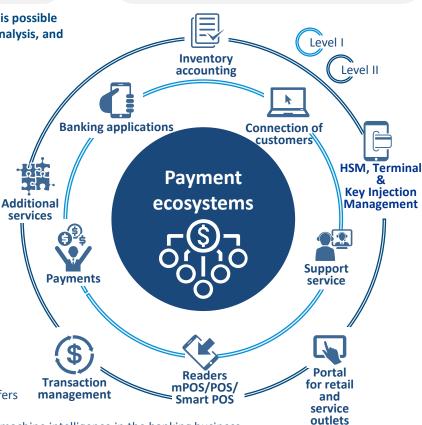
Further development of the banking system is possible thanks to innovations in digital labor, data analysis, and remote service

Level I, by 2020

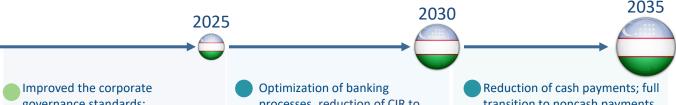
- Banking applications
- Connection of customers
- Support service
- Card readers and mobile terminals
- P2P settlement
- Fiscalization of payments, collection and processing of fiscal data

Level II, by 2025

- Inventory accounting and portal for retail and service outlets
- Transaction management
- Cryptographic identifiers of mobile banking
- Integration of related services into digital banking platforms
- Implementation of instant B2B, B2C transfers
- Open API
- Remote identification, products based on machine intelligence in the banking business
- Provision of financial services via retailers and telecom
- Introduction of several fiscal operators



Key strategic initiatives (1/2)



- governance standards: standardization of the structure of the board of directors with obligatory participation of independent directors; removability of a chairman; separation of the roles of chairman and chief executive officer
- Development of a product portfolio to better reflect the needs of retail customers, individual entrepreneurs, and medium-sized businesses. Expansion of support for import and export activities
- Convergence of international reporting standards
- Development of digital banking, expansion of banking services in remote regions
- Adaptation of international regulation standards and control in the banking sector
- Membership in the leading international banking associations
- Development of correspondent relations with international banks
- Mandatory installation of modern mobile cash registers in all service infrastructure companies
- Implementation of due diligence practices in the banking system

- processes, reduction of CIR to 40%, including through partial automation of processes
- Creation of investment incubators and accelerators for the development and growth of small- and medium-sized businesses
- Introduction of cryptographic identifier technologies and portable platforms of the mobile bank
- Integration of related services into digital banking platforms
- Creation of banking ecosystems that will help integrate related services; development of commission systems of cooperation
- Gradual termination of the issue of small denomination banknotes
- Implementation of KYC database on the basis of digital data held by government bodies

- transition to noncash payments
- Banking applications are integrated with a personal digital device and managed by a voice
- Middle office and back office are fully automated thanks to modern developments in digital labor
- Development of mutual investment and lending mechanisms
- Development of contactless payment systems using wearable devices
- Creation of liquidity placement systems and integration with banking products
- Integration of banking, insurance, investment, and savings products into a "one-stop solution"
- Transition from a product sales model to a model of support of the customer's life cycle and customer's actual financial needs

personnel

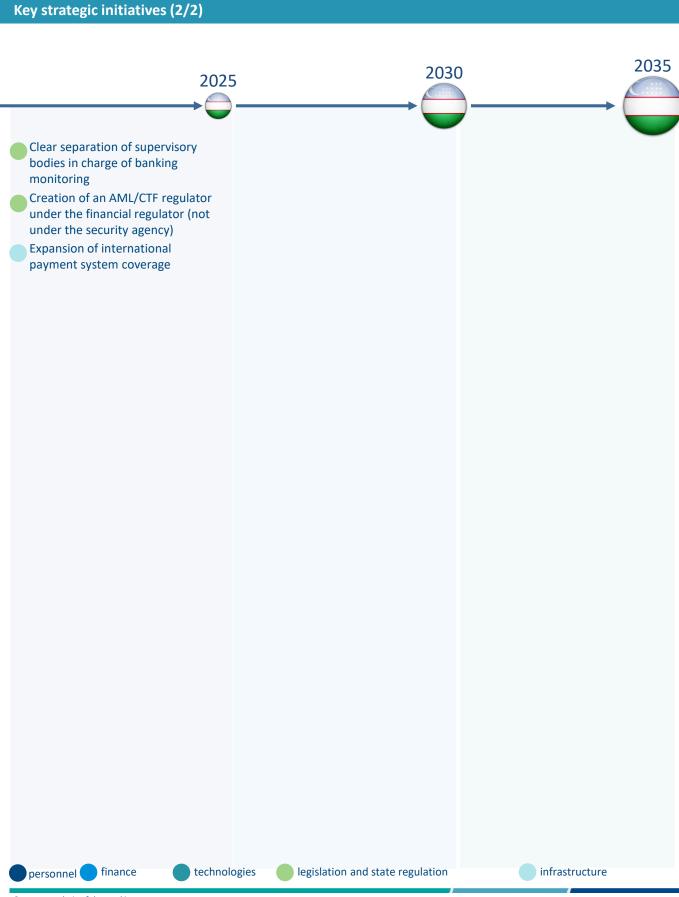


finance



legislation and state regulation

infrastructure



Target vision of compliance in 2035 Financial market Fair competition Trusted environment

Counteract the use of insider information: implementation of modern standards to combat the use of insider information

Antimoney laundering and

combating the financing of terrorism (AML/CFT): application of remote identification; introduction of strict internal rules of zero tolerance to unfair and illegal practices, including AML/FT of heads and owners of financial institutions and their clients, adoption of a cross-sectoral approach, creation of conditions for zero tolerance to illegal practices, achievement of full compliance with FATF recommendations

PSD2 (SCA, API) (detailed information is provided in the Financial Inclusion section)

Toughening of requirements for personal data protection: adoption of the **General Data Protection** Regulation (GDPR), which is a directly applicable law and applies to all companies processing personal data of anti-corruption system in the personal data subjects in the EU, regardless of the company's location

Financial stability

Improvement in financial market regulation; optimization of the regulatory load on financial market participants: further implementation and development of the global financial market regulation rules - Basel 2/3 and Solvency 2, implementation of modern standards and requirements for transactions involving politically exposed persons and persons having an equivalent level of authority: creation of regulatory requirements for such operations

Application of electronic interaction mechanisms in the financial market: improvement of the mechanism for piloting innovative financial technology, products and services; use of blockchain technology / use of cryptocurrencies, creation of Sandbox for testing financial products and services

Development of control over the practices of corporate governance, transparency, and reporting: creation of a regulatory framework to govern the scope of participants of the management bodies of financial organizations based on the "fit and proper" principle, frequency of their rotation, information disclosure on independence and the amount of remuneration, as well as principles and frequency of communications with

PSD2 (SCA, API) as a legislative framework:

- improvement of the remote customer authentication mechanisms, including biometric data – SCA (Strong **Customer Authentication)**
- development of open software platforms (API -**Application Programming** Interface) for the development of cross-banking interaction and integration of non-banking providers

practices; prevention and suppression of misconduct in the financial market: expansion of legal and regulatory requirements for implementation of an integrated anti-fraud and financial institutions both with respect to their activity

and within the framework of

operations financed by such

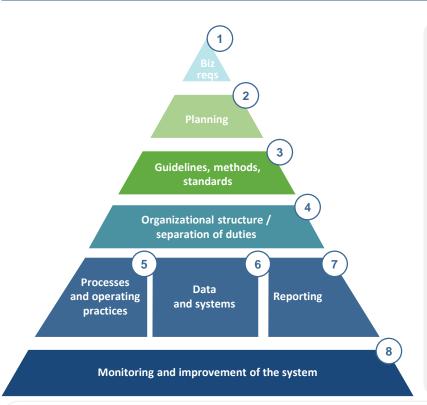
institutions

Counteraction to unfair

investors

Target vision of compliance in 2035

Antifraud and anticorruption system



1. Creation of a compliance system paradigm

- Strategic goals and principles
- Estimated level of acceptable risk of fraud and corruption
- Instilled culture of the fraud and corruption risk management system

2. Implementation and control

- Implementation plan for strategic initiatives
- Continuous system audit plan
- Mobilization plan for effective functioning of the system

3. Methodology

- Implemented Code of Ethics
- Risk management standards for the entire company structure
- Set of necessary policies ("Know your customer," "Know your product")

4. Separation of duties

- Separation of duties in the system
- Establishment of an operational risk management department and compliance department
- Description of functions of the operational risk management department and compliance department

5. Process audit

- Creation of a fraud and corruption risk identification process
- Fraud and corruption risk assessment procedures
- Internal control procedures

6. Data analysis

- Determination of IT requirements for the system
- Determination of data storage principles
- Differentiation of database access rights
- Implementation of spare systems in the event of main system disturbance
- Implementation of a testing practice for all systems

7. Reporting and cascading of objectives

- System of internal and external reporting on fraud and corruption risks
- Key risk indicators (KRI) of the fraud and corruption risk management system

8. Continuous monitoring

- Formation and improvement of the fraud and corruption risk monitoring system
- Collection of data on external and internal fraud and corruption risks
- Development of measures to improve the risk management system and process
- IT system monitoring by the regulator
- Outsourcing monitoring by the regulator
- Regular monitoring of financial institutions by the regulator
- Automation of reporting to the regulator

A similar system should be implemented not only in the banking and financial systems but also in every company in the Republic of Uzbekistan, especially in state bodies and companies

Target vision of compliance in 2035

Implementation of the international standard PSD2 as the legislative framework



Regarding customer authentication, it is necessary to develop remote methods, since it will accelerate and reduce the cost of banking services:

- SCA (Strong Customer Authentication) is mandatory for EU banks only, but other countries should also implement this standard, since it will facilitate international banking cooperation and will greatly increase the possibility of cooperation with large international banks
- Implementation of PSD2 in the Republic of Uzbekistan will reduce the cost of KYC procedures¹ for international banks and will significantly lower the cut-off of the transaction volume the international banks will be ready to work with
- Development of remote authentication will also increase the remote service quality and expand the Uzbek population's coverage with banking services



In the field of interbank and cross-platform interaction, it is necessary to develop platforms with open source code

- API interfaces provide banks with the technological ability to link their payments and services for data transfer with third parties, which is the main goal of PSD2
- This cooperation will allow operators and competitors to use clients' data and innovations to create new income flows and personalized offers of services
- Development of stable and secure "platforms with open source code" (API) is the underlying project for implementing
 the initiatives on creation of financial marketplaces from 2025 to 2030, and for the subsequent integration of
 banking, insurance, and investment and savings products

Implementation of current FinCEN rules



According to this rule, financial institutions should establish procedures for:

- Identification of an individual who directly or indirectly owns more than 25% in the customer's/legal entity's capital ("ownership")
- Identification of an individual who is responsible for the control, management, and direction of the customer's activities ("right of control")
- Verification of the identity of the above persons in accordance with procedures performed on the basis of risk assessment, which should include a number of mandatory elements in accordance with the customer identification rule



The rule contains four main elements of the customer's due diligence process within AML/CFT:

- Identification and verification of a customer
- · Verification and identification of a beneficial owner
- Understanding the purpose of the customer relationship to determine the customer's risk
- Continuous monitoring to identify suspicious transactions; timely updating of information about a customer in its file
- Creation of a database of legal entities with open access to 2–3 basic identifiers (company name, year of founding)
- Creation of a database on the basis of the tax regulator's unified data

Target vision of compliance in 2035



FATF¹

Priority: In the area of correspondent banking

- Provision of banking services by one bank (correspondent bank) to another bank (respondent bank)
- The respondent bank may be provided with a wide range of services, including management of financial indicators (including maintaining savings accounts in various currencies), international bank transfers, payments by check, transit payments and transit (payable through) accounts, services for operations with foreign currency
- Correspondent banking does not offer one-time transactions and SWIFT messaging in terms of nonclient interaction but has a long-term recurring nature
- Major international banks act as correspondent banks for thousands of other banks around the world



FATF requirements

- Collect sufficient information about a respondent financial institution to get a full understanding of the respondent's business / to evaluate the reputation of the financial institution and the quality of supervision on the basis of publicly available information, including whether it is subject to AML/CFT regulation
- Assess the respondent's means of control with respect to AML/CFT
- **3. Get approval** from senior management before providing correspondent banking services
- 4. Have **fixed areas of responsibility for** financial institutions / respondents
- 5. For transactions made through correspondent accounts, make sure that the respondent bank has taken sufficient measures to identify and assess/manage the risks from customers who have direct access to the correspondent bank's accounts

Implementation stages of FATF recommendations (in respect of all recommendations)



- Start implementing the fundamental principles
- Tactic steps
- Training
 - Banks
 - Business
 - Main government agencies

- Step No. 1 followup
- Correction of errors based on FATF recommendations
- The main goal is to prepare for the next FATF audit
- FATF audit
- Work on technical systems
- Unified database for banks of businesses

FATF audit

FATF audit

Sources: analysis of the working group Note: FATF – Financial Action Task Force

Financial Action Task Force on Money Laundering (FATF)

The Financial Action Task Force on Money Laundering (FATF) is an intergovernmental organization founded to establish standards and facilitate effective application of legal, regulatory, and operational measures to combat money laundering, financing of terrorism, and financing of the proliferation of weapons of mass destruction, and other relevant threats to the international financial system's integrity. The main tool used by FATF in carrying out its mandate is 40 recommendations in the field of AML/CFT, which undergo revision every five years on average.

List of FATF recommendations*

Policy for Countering the Laundering of Proceeds from Crime and the Financing of Terrorism (AML/CFT) and coordination

- 1) Risk assessment and application of a risk-oriented approach
- 2) National cooperation and coordination

Money laundering and confiscation

- 3) Crime of money laundering
- 4) Confiscation and security measures

Financing of terrorism and financing of proliferation of weapons of mass destruction (WMD)

- 5) Crime of financing of terrorism
- 6) Targeted financial sanctions related to terrorism and financing of terrorism
- 7) Targeted financial sanctions related to proliferation of WMD
- 8) Nonprofit organizations

Preventive measures

- 9) Laws on protection of the secrecy of financial institutions
- 10) Due diligence of clients
- 11) Data storage
- 12) Public officials
- 13) Correspondent banks
- 14) Services for money transfer or transfer of valuable items
- 15) New technology
- 16) Electronic money transfers
- 17) Confidence in third parties' measures
- 18) Internal control and foreign branches and subsidiaries
- 19) Countries with a higher risk
- 20) Notifications about suspicious operations (transactions)
- 21) Disclosure and confidentiality
- 22) DNFBP client's due diligence
- 23) DNFBP other measures

Transparency and beneficial ownership of legal entities and formations

- 24) Transparency and beneficial owners of legal entities
- 25) Transparency and beneficial owners of legal formations

Powers and liability of the competent bodies and other institutional

- 26) Regulation and supervision of financial institutions
- 27) Powers of supervisory bodies
- 28) Regulation and supervision of DNFBP
- 29) Financial intelligence units
- 30) Liability of law enforcement and investigative agencies
- 31) Powers of law enforcement and investigative agencies
- 32) Cash couriers
- 33) Statistical data
- 34) Guiding principles and feedback
- 35) Sanctions

International cooperation

- 36) International instruments
- 37) Mutual legal assistance
- 38) Mutual legal assistance: freezing and confiscation
- 39) Extradition
- 40) Other forms of cooperation

Countries and organizations participating in FATF*

Countries

- 1. Argentina
- Australia
- 3. Austria
- 4. Belgium
- 5. Brazil
- 6. Canada
- 7. China
- 8. Denmark
- 9. Finland
- 10. France
- 11. Germany
- 12. Greece
- 13. Hong Kong, China
- 14. Iceland
- 15. India
- 16. Ireland
- 17. Italy
- 18. Japan
- 19. South Korea
- 20. Luxembourg
- 21. Malaysia
- 22. Mexico
- 23. Netherlands
- 24. New Zealand
- 25. Norway
- 26. Portugal
- 27. Russian Federation
- 28. Singapore
- 29. South Africa
- 30. Spain
- 31. Sweden
- 32. Switzerland
- 33. Turkey
- 34. UK
- 35. USA

Organizations:

- 1. European Commission
- 2. Gulf Cooperation Council

Observer states:

- 1. Indonesia
- Israel
- Saudi Arabia

Target vision of compliance in 2035

General Data Protection Regulation ("GDPR")

Organizations covered by GDPR:

- 1. Companies incorporated in the EU and being controllers and/or processors of personal data
- 2. Companies not incorporated in the EU and being controllers and/or processors of personal data and whose activity is related to:
 - Providing goods or services to EU citizens
 - Monitoring the behavior of personal data subjects within the EU

Basic principles of personal data processing



Legality, fairness, and clarity of personal data processing



Limiting personal data processing in accordance with the purposes of processing



Reducing the redundancy of processed personal data



Ensuring the accuracy and relevance of processed personal data



Personal data storage time limit



Ensuring the integrity and confidentiality of processed personal data

PSD2 is the second payment directive of the EU



Description of PSD – Payment Services Directive, the EU payment directive

The Payment Directive was adopted in 2007. It created a single market for payments (credit transfers, direct debiting of funds, payment cards) in Europe. The Directive laid the legal groundwork for the Single Euro Payments Area (SEPA).



New companies and services that needed regulation

After the implementation of the directive, gradual digitalization of the European economy began. New companies providing services for online payments were founded. The problem was that all of them operated outside the directive and were not governed at the EU level. The need for a new version of the directive arose



Aspiration to create a unified integrated market of the European Union

The purpose of the new PSD2 directive is to make payments safer, to improve customer protection, to stimulate innovation and competition amid equal opportunities for all market players, including its new participants



Key changes to be introduced by PSD2



New companies will get access to clients' payment accounts

New companies will be registered, will obtain a license, and will be regulated at the level of the European Union. All barriers for newcomers will be eliminated, which will promote competition in the market. As a result of this, prices for consumers will drop. New companies will get access to clients' payment accounts (account access is defined as "XS2A") to make payments on their behalf (only after preliminary approval).



How will it work?



The organization holding the client's payment account will grant access to the companies via the program interface ("API"). Its operation may be compared with a messenger that enables information exchange: it receives a request from the company and sends a reply.



Strong Customer Authentication (SCA) will improve the security of Internet payments

PSD2 directive is aimed at reducing the probability of fraud with electronic transactions. It should improve customer data protection. When using SCA in electronic transactions, there are two or more independent components from the list below involved:



Knowledge

Information available only to the customer (password, PIN number...)

Property



Items belonging only to the customer (card, etc.)

Customer



Client's biometric data (fingerprints, voice...)

+ additional component for remote transactions (Internet, mobile devices)



Unique authentication code that dynamically links the transaction with a specific amount and beneficiary

Key changes to be introduced by PSD2 (continued)

Cases of Strong Customer Authentication (SCA) application

Every time the customer makes a payment, except for the following situations:



Payment amount is below a certain level



Beneficiary has already undergone identification



When the customer views their payment account or requests summary information on all their accounts using an additional service



Upon the first view of the account (or several accounts)



Every 90 days



Geographic coverage of transactions is expanded

All transactions, even those in which one of the parties is outside the EU, will be settled within the framework of the directive. PSD2 will apply to transactions in all types of currency (except cryptocurrency). The directive will increase the awareness of customers and the security level of the European part of transactions



The EPC SDD rulebook on the unconditional right to refund a direct debiting amount becomes a formal legal requirement (effective for up to 8 weeks after making the payment)



Charging of additional fees for making most payments by card will be limited (the fee will change according to the interbank fee charging rules)



When trying to make a payment without authorization, the customer will not be able to spend more than EUR 50 (previously, EUR 150). A larger amount can be spent only in case of emergency, e.g., if the customer shows unacceptable negligence, or if thieves gain access to the customer's account

Main PSD2 participants and their roles



Credit institutions

In other words, banks. Their activity includes more than just payment processing



Payment organizations

Represented in PSD. They offer a number of payment-related services



External payment service providers (TPP)

Represented in PSD2. They are payment organizations that do not hold customers' accounts and, therefore, have a limited set of functions



Payment service user

Makes and/or receives payments. May be either an individual or a legal entity. Acts as the customer of all listed organizations



Account information service providers (AISP)

Collect data on all user's accounts, and show general information on daily expenses in a single place



Online payment initiators (PISP)

Facilitate the use of online banks for making payments (an alternative to cards)

Account servicing payment service providers (ASPSP)

Provide and support users' payment accounts

Opportunities of blockchain technology



Blockchain is a decentralized register of all transactions in a P2P network. Using this technology, participants can settle transactions without a centralized certification center. Potential applications include money transfers, settlements, product distribution, data storage, voting, and many others

Principal process flow chart



The user initiates the transaction



Check

Network of nodes checks the transaction and the user status with algorithms known in advance



A verified transaction may include cryptocurrencies, contracts, records, or other information



The transaction is completed



A new block is then added to the existing blockchain with a permanent and unchanged path



After verification, the transaction will be united with other transactions to set up a new data block for the register

Benefits



Enhanced transparency



Accurate tracking



"Eternal" register



Reduced expenditures

Disadvantages



Complex technology



Regulatory consequences



Implementation problems



Competing platforms

Cryptocurrency

Cryptocurrency is an exchange environment created and stored in electronic form in the blockchain using cryptographic methods of encryption to control the creation of monetary units and check money transfers. Bitcoin is the most popular example



Does not have value itself, Has no physical as it is not secured with gold and forex reserves (like the US dollar)



form and only exists online



Issuance of new units is not determined by the central bank, and the network is fully decentralized

Potential applications



Vehicles

Consumers may use a blockchain to control partial ownership in autonomous vehicles



Financial services

Quicker and cheaper payments may reduce transaction costs by billions of dollars and increase their transparency



⊕□≡

Voting

Using a block code, people will be able to vote using a smartphone, tablet, or PC, which will provide an instant and more accurate result



Health care

Encrypted medical information of patients may be shared with several parties with no risk of a breach of confidentiality

Economic development



Current development level of the insurance system



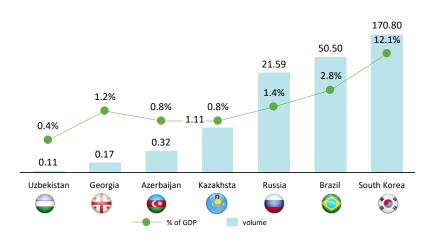
Key challenges

- The size of Uzbekistan's insurance sector does not correspond to the economic indicators comparison with international benchmarks
- The level of compulsory insurance in the country is much lower than the voluntary one
- The range of insurance products does not meet the economy's current requirements: there are no such types of insurance as medical insurance, life and health insurance, motor vehicle liability insurance, and overseas travel insurance

Key findings

- The insurance system is extremely small in relation to GDP 0.4%
- The low level of financial literacy, personal disposable income, and regulatory support from the state complicates the overall situation for development of the country's insurance system
- The total unprofitability is growing along with the volume of collected insurance premiums but is still low, which will attract additional players to the market
- The share of the state in the insurance sector is relatively low compared to Uzbekistan's financial system as a whole
- High concentration in the capital region
- Insurance companies widely use international reinsurance. The largest share of the outward reinsurance is owned by British companies
- To diversify the reinsurance portfolio, it is necessary to introduce a mandatory state reinsurer that will shift part of the risks of insurance companies onto itself

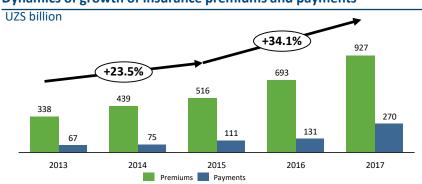
Insurance system, USD billion, 2017



Comments

- The overall insurance system is poorly developed, so the country has great potential for its development
- Uzbekistan has the smallest insurance portfolio in relation to GDP among the benchmarks
- The size of the insurance system in relation to GDP is 30 times smaller than in South Korea

Dynamics of growth of insurance premiums and payments



Comments

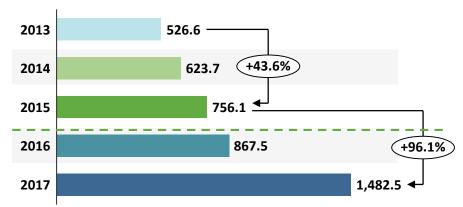
- In UZS terms, the insurance premium portfolio is growing rapidly, especially since 2015
- A significant excess of premiums of insurance companies over payments will lead to the emergence of new participants in the insurance market

Sources: World Bank, State Inspectorate for Insurance Supervision as of June 27, 2018

Current development level of the insurance system

Dynamics of growth of insurers' investments

UZS billion



Comments

- The volume of the investment portfolio of insurance companies is growing rapidly due to growth in collected premiums
- The sharp increase in investments in 2017 is due to weakening of the national currency against the US dollar

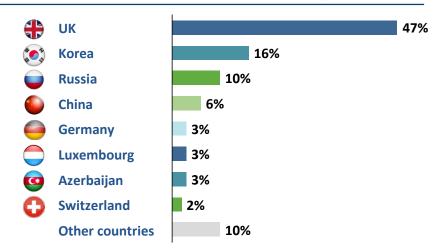
Structure of insurers' investments at the end of 2016



Comments

- The investment structure of the insurance sector is moderately conservative and shows a high level of diversification
- The high share of bank deposits is not typical for the investment structure of insurance companies, but in Uzbekistan's current market conditions it can be a rational option
- In the future, with the normalization of the banking service market and the reduction of the key rate, insurers will place a much larger share of their funds in securities

Structure of outwards reinsurance at the end of 2017, %



- Insurance companies widely use international reinsurance mechanisms.
 The largest share of the outward reinsurance is owned by British companies
- According to the Regulation on Solvency of Insurers and Reinsurers (Reg. No. 1806 dated May 12, 2008), reinsurance of risks abroad is allowed only by approved reinsurers and solvent insurers that have corresponding international ratings

Current development level of the pension system



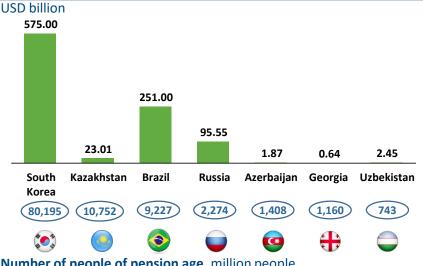
Key challenges

- The current size of the pension fund of the Republic of Uzbekistan does not match the number of pensioners according to a comparative analysis of international indicators
- The load on the country's pension system will continue to grow due to structural demographic changes, even despite the proposed pension reform
- All pension payments are based on budget allocations

Key findings

- The size of the fund does not allow it to adequately cover the demands of the population for pensions
- The high rate of population growth in recent years will lead to an increase in demands on the pension system by 2035 and, consequently, to an additional burden on the budget
- 48% of the pension fund is funded through unified social payment and, therefore, the need to diversify sources of revenue through nonstate sources arises
- Uzbekistan's pension system structure should be based on different levels of provision, including mandatory, supplemental, and one's own savings

Pension fund



Comments

• The pension fund of Uzbekistan places last in its group on payments per pensioner (the size of the fund cannot fully cover the entire pension population of the country)

Per pensioner (USD)

Number of people of pension age, million people



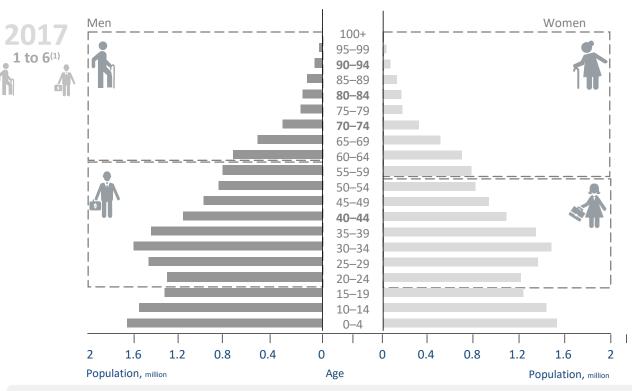
Comments

• The pension fund amount of the Republic of Uzbekistan is USD 743 per one pensioner. This makes it impossible to ensure the independence of the pension fund from the state budget

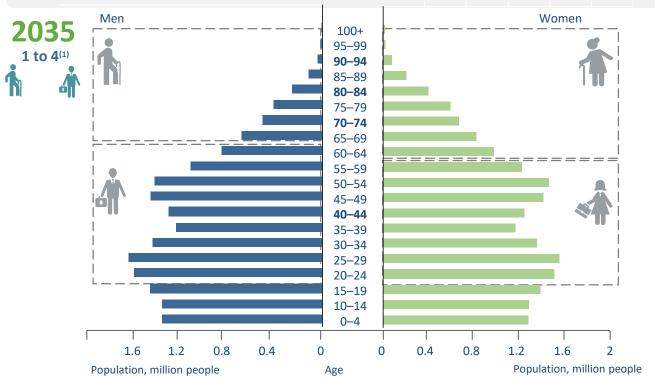
Source: World Bank Open Data

Current development level of the pension system

Population pyramid in Uzbekistan



The Republic of Uzbekistan is discussing raising the retirement age to 63 years for men (now 60 years) and to 58 years for women (now 55) in connection with the concept of reforming the state pension system



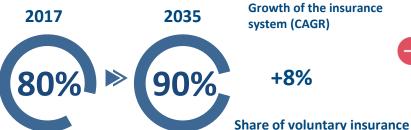
Current development level of the pension system

Natural growth

The state does not interfere in the country's insurance system and takes measures for minimum control over the main forms of insurance



• The low share of compulsory insurance does not create a heavy burden on business



Growth of the insurance system (CAGR)



- Slow development of the insurance system
- Additional burden falls on the state budget

The insurance system develops slowly; insurance coverage of citizens does not grow

Basic development

The state gradually introduces additional types of compulsory insurance, subsidizing private insurance



- The insurance system is developed more actively
- Protection of the population



Increased burden on business



Growth of the insurance system (CAGR)

+12%

Share of voluntary insurance

The insurance system develops at a medium rate; insurance coverage of citizens grows

Active assistance

Introduction of a significant number of compulsory forms of insurance, which would greatly limit financial losses of individuals and companies upon the occurrence of negative circumstances



- Increase in funds for the economy
- Broad social protection of the population

----- Target development option ----

 Development of health care and financial services



Additional burden on business

Share of voluntary insurance

Growth of the insurance

system (CAGR)

The insurance system develops rapidly; insurance coverage of citizens increases significantly; the burden on the state budget decreases

Sources: analysis of the working group

Strategic options for the pension system

Compulsory pension (one level)

The state is the only guarantor of pension income of the population. This type is specific to developing countries or for welfare states that do not have a shortage of resources to form the pension fund





- Additional funds in departments
 - Motivation of state and municipal employees

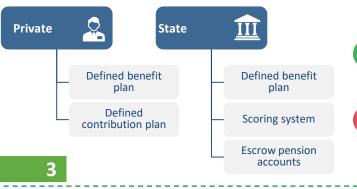


- Public pressure
- Additional burden on the budget

Compulsory pension + savings (two levels)

This type of pension system is characterized by the active involvement of employers in the formation of the pension income of their own employees. The state provides for the poorest sectors of society and makes payments from the budget





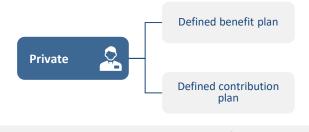
- Stimulation of the private financial industry
- Public pressure
 - Additional burden on the budget
 - Reduction of the sources of replenishment of the state budget

---- Target development option --

Compulsory pension + voluntary pension + savings (three levels)

The third level is based mainly on the voluntary and savings types of pensions. The state provides minimum payments to all citizens, but to achieve a comfortable standard of living, their own savings are needed





- Reduction of the burden on the budget Stimulation of the private financial industry
 - Reduction of public pressure

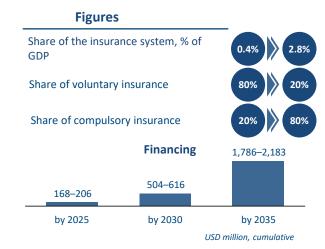
 - Reduction of the sources of replenishment of the

Gradual transition of pension support to a private system of pension support

Target vision of the insurance system in 2035

Active assistance to insurance system development

- Private insurance system that supports the main areas
 of the economy and society and is aimed at reducing
 the total costs of the population, business, and the state
- It is necessary to introduce compulsory medical insurance, motor vehicle liability insurance, insurance for tourists and individuals engaged in hazardous activities



Target vision of the pension system in 2035

Three-level pension system

- The pension system consists of three levels: basic state pension, corporate pension, and individual pension
- A private pension system with variable structure of accumulation allows citizens to determine for themselves what income they will have in the future

Figures

Share of the pension system, % of GDP

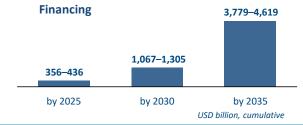
4%

Amount of the pension fund per capita, USD thousand

0.74

Share of the state pension in the total structure of pension payments

.00% 35%



Key strategic initiatives



Sources: analysis of the working group

Economic development



Current development level of capital markets



Key challenges

- Very low market capitalization of companies in Uzbekistan
- Ratings of players outside the banking sector are extremely low
- International investors have a relatively low share in the turnover compared to developed markets
- High expected return on capital due to the high level of country risks, which significantly limits the investment potential of the Republic of Uzbekistan

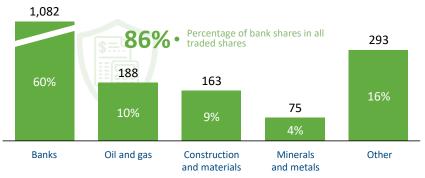
Key findings

- Low market capitalization of companies in Uzbekistan compared to emerging markets, the share of banks is 60%. Bank shares are the most traded and make up 86% of turnover
- High expected return on capital due to the high level of country risks, which significantly limits the investment potential of the Republic of Uzbekistan
- Due to the high level of expected return on equity, investors are not inclined to make significant capital infusions into Uzbekistan's market
- Institutional investors hold securities of the corporate sector of Uzbekistan as "exotic" assets designed to be more profitable than assets of an "investment" nature
- In the corporate sector, the level of communications with investors is extremely low (IR = investor relations)
- The lack of sufficient information about the corporate sector on the exchange portal hinders the active development of the market

Market capitalization of listed companies



Market capitalization of companies in the economy's sectors



Total turnover on the stock exchange

43% 32% 25%
Foreign Individuals Other

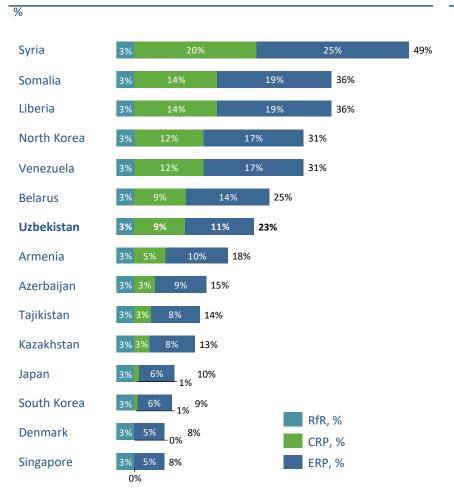
Comments

- At the beginning of 2017, there were 191 companies in the exchange quotation list
- Market capitalization lags behind many emerging markets not only in terms of its absolute value, but also in terms of its volume relative to the country's GDP

- The listed companies include commercial banks, insurance companies, oil and gas enterprises, construction material producers, agricultural companies, energy companies, metallurgy plants, etc.
- The largest part of the turnover is made up of foreign investors, as the market grows, their share may reach 80% (for example, South Korea)

Current development level of capital markets

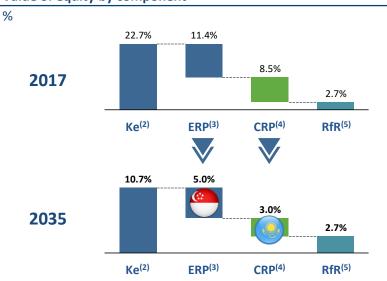
Value of equity in terms of other indicators, 2017



Comments

- High expected return on capital due to the high level of country risks, which significantly limits the investment potential of the Republic of Uzbekistan
- The high level of expected return on capital significantly limits the number of projects and companies in which local and, in particular, foreign investors are willing to invest
- Reduction in the cost of capital is possible by reducing the country risk, reducing the risk of doing business, establishing the supremacy of law and the judicial system, as well as reducing the risk of equity: increasing corporate governance and adopting global reporting and compliance standards

Value of equity by component



- Since the system will be based on Singapore's experience, the ERP indicator will decrease to 5% as the key institutions of capital markets develop
- With the further development of the financial system and state institutions, the CRP indicator of the Republic of Uzbekistan will reach 3%, which is equivalent to the level of the most developed countries of Central Asia

Strategic options

____ Target development option ____

Balance between debt instruments and equity

The proportional use of debt and equity allows one to receive the maximum benefit from a fast-growing market

 $D/E^{1} < 1$

Examples of countries:









- High financial stability
- Less dependence of an enterprise on borrowed capital and liabilities



- Heavy burden on business, especially during an economic recession
- Reduction in the capital supply during an economic

Equity and borrowed funds in equal proportions, on average

Primarily: debt instruments

A less conservative option that is usually typical for more mature economies. A moderate degree of susceptibility to $D/E^1 > 6$ the economic cycle allows one to ensure growth in the value of equity in the economic growth phase and supports the capital supply in the economic recession phase

Examples of countries:







- Facilitates a moderate increase in the value of equity
- Optimal choice for a mature economy



Is not an optimal choice for a country's fastgrowing economy

High level of borrowed funds in relation to equity

Maximum use of debt instruments

High corporate debt means a low risk appetite as well as low expectations for market growth and expected return of the corporate sector. Characterized by low sensitivity to investment

 $D/E^{1} > 9$

Examples of countries:







- Such model is less exposed to market fluctuations
- More beneficial for equity holders during the growth phase



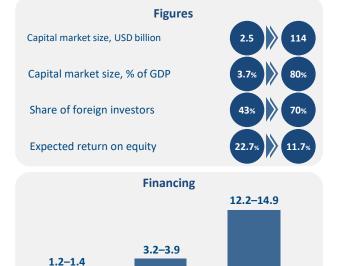
The high level of debt service puts the corporate sector at risk of bankruptcy in the event of economic shocks

Volume of debt instruments exceeds equity tenfold

Target vision of the insurance system in 2035

Balance between debt and equity

- The capital market meets all modern requirements in terms of regulation, infrastructure, and technology
- High quality of information delivery and high speed of access
- Stable supervision and transparent regulation
- Predictive tax policy
- Maintaining the balance between debt and equity financing
- Attraction of international institutional investments
- Development of local companies



by 2030

USD billion, cumulative

by 2035

Target structure of capital markets



Government bonds

Equity

by 2025

Corporate bonds and fixed income severities financial instruments2

Capital markets

2. Supervisory system

Regulatory bodies and their hierarchy 3. Institutions

Management and ownership

Division of players by type

4. Regulation and standards

Transparent rules

Predictive behavior of the regulator

5. Taxes

Predictive taxation

Tax benefits

6. Infrastructure and technology

High technological level

Organization and stability of trading

1. Basic principles and rules

Presence of

Capital

Capital demand

Openness to globa

Market

Ability to search for an

Target vision of the insurance system in 2035

Singapore's case study on increasing capital market capacity



1. Preparing long-term goals and achieving consensus

- In the late 1990s, the Prime Minister and Deputy Prime Minister chose a top-down approach to transform Singapore into a major financial center with a full scope of services in Asia
- This vision has become a national priority and is associated with achievement of the social and economic goals of creating jobs and ensuring a high growth rate of GDP, respectively

2. Creating and expanding the capabilities of regulatory institutions

- The powers to implement this vision were given to the supreme body: the Monetary Authority
 of Singapore (MAS)
- MAS is authorized to take all necessary measures to achieve the vision

3. Managing a wide circle of interested parties

- The private sector was actively engaged in the development and implementation of the policy
- The private sector was offered different stimuli to expand their participation in the market

4. Creating a growth driver by identifying the catalyst for change

- Stock exchanges were united and opened to a wide circle of participants
- The state bonds market was modernized to create additional points of debt market growth
- Management of funds and private banking were transformed so as to meet the current challenges of local capital market growth to a fuller extent

5. Ensuring long-term availability of talent

- The education sector was reformed, for example, with specialized training courses and invitations to foreign universities. Emphasis was placed on research and innovation in academic circles, etc. to create a talent tool for the financial sphere
- Foreign talent were supported in their arrival and stay in Singapore

6. Investments in strategic advancement

- Broad advancement and transparency from the government, including regular involvement of print media, and a high level of development of
 communications with investors by the state and companies
- Creation of a special promotions division for processing investors' roadshows and campaigns

Introduce MIFID1 II for the development of capital markets



- Entities must divide customers into certain categories: a company must know the level of financial literacy, which will be the main factor necessary to provide a more suitable service
- All organizations offering services must fully inform customers about trading terms
- Transactions must be performed immediately, after receiving the customer's request
- MiFID helps create a single market so that its participants are provided with more favorable conditions
- Financial services are regulated. Grounds for licensing entities that have permission to carry out activities are considered

Transparency

Key strategic initiatives

2035 2030 2025

- Adapt international standards of regulation and control, including standards of corporate governance, reporting of funds and companies (including IFRS), standards of customer classification, information storage and disclosure, etc.
- Create codes of ethics and standards of conduct for professional market participants
- Join the world's leading associations of member countries of capital markets, in particular, Asian and European supervisory and regulatory organizations
- Increase the attractiveness of the domestic capital market, introduce individual investment accounts, and provide tax incentives to individuals
- Issue investment-grade government and corporate Eurobonds
- Develop local brokerage companies in terms of standardization and supervision and integrate international players into the capital market as participants and/or partners
- License financial market employees through testing and checkups

- Create investment incubators and accelerators to integrate investors and business owners, in particular, in innovative areas of development
- Develop a product portfolio that meets the requirements of a modern economy to a greater extent, in particular, ETF for individuals, resource and currency derivatives for manufacturing companies, and structural products for institutional investors
- Develop the technological level and computing power of ICT infrastructure of exchanges
- Develop the principles of special tax schemes to attract foreign investors

- Create liquidity placement systems and integrate with banking products in the corporate segment
- Integrate banking, insurance, and investment savings products into the retail segment and transition to a life cycle service model

personnel

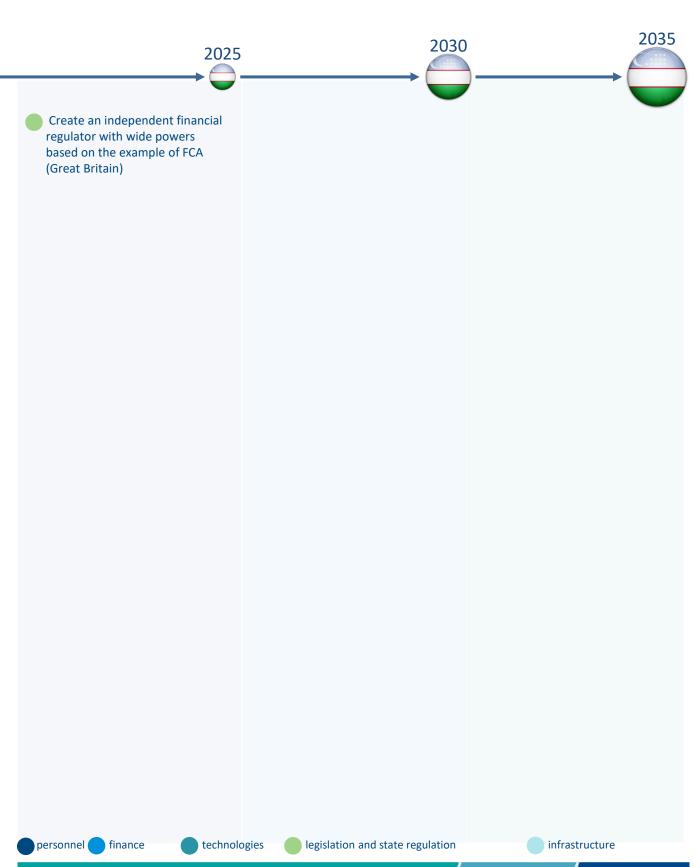
finance

technologies

legislation and state regulation

infrastructure

Key strategic initiatives



3. Social development

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Social development



Current development level of capital markets



Key challenges

- High rates of cardiovascular diseases and high infant mortality
- Low funding of the health care system
- Unequal access to health care
- Low wages of health care workers
- Low share of capital expenditures and, as a consequence, low level of technological development of health care (lack of facilities with modern equipment)
- Poor quality of medical training

Key findings

- The health of the population is characterized by average life expectancy at birth (72.3 years) and low mortality (5.5 deaths per 1,000 people). Life expectancy is affected by the high rate of cardiovascular disease and high child mortality (among the leaders of the corresponding ratings according to the WHO)
- The main problem in health care is the current state of the funding system, which is expressed in:
- Low health expenditures per capita (estimated indicator fell to USD 54 per capita in 2018)
- Unequal access to health care. Secondary and tertiary health care in most cases is paid, the share of payments by citizens in the funding of health care is more than 40%
- Undeveloped funding instruments. For example, there is no compulsory medical insurance
- As a consequence, the quality of medical care decreases, which may have a negative impact on the health of the population

Health expenditures per capita, USD, 2015



- Poor financing of the industry results in many problems, including the following:
 - Low salary of doctors, which leads to corruption
 - Corruption that limits access by low-income groups to health care
 - Low funding (including capital expenditures) reduces the quality of health care

Infant mortality, deaths of children under the age of 5 years per 1,000 newborns, 2016



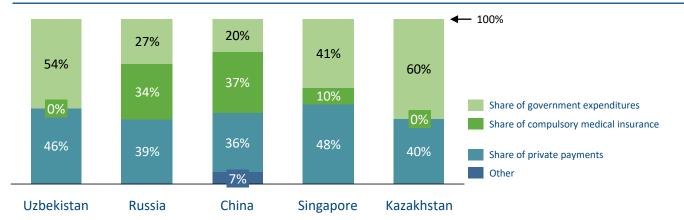
- Infant mortality is high in Uzbekistan. 24.1 of 1,000 children under the age of 5 die
- The highest mortality rate is observed under the age of 1 year 21.4 deaths per 1,000 newborns, and the mortality rate under the age of 28 days is 13.8 deaths per 1,000 newborns



Position in the international rating according to the World Health Organization

Current level of development

Private payments prevail in the health financing system. At the same time, there is no compulsory medical insurance, which limits equal access



- In Uzbekistan, **there is no compulsory medical insurance system**, and the voluntary medical insurance system is poorly developed
- The state health-care system in Uzbekistan includes the provision of primary medical visits free of charge, but additional services and repeat visits are paid
- Private payments include payments for medical services rendered in state institutions and private insurance contributions. In the Republic of Uzbekistan, private payments consist almost entirely of citizens' payment for medical services
- Health care funding systems in other countries, for example, in Singapore, operate on the basis of mandatory
 contributions from working citizens and state support for the lowest income groups of the population. The
 amount of mandatory contributions varies depending on the age and general health of a citizen

Average salary of a health care worker

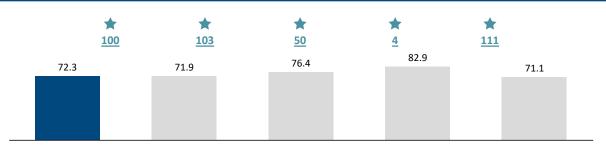
USD per month 3.116 671 3.067 1.004 279 T-13⁷ 1 480 581 848 189 402 Uzbekistan Russia China Singapore Kazakhstan

- Average salary of a health care worker
- Average salary in the country

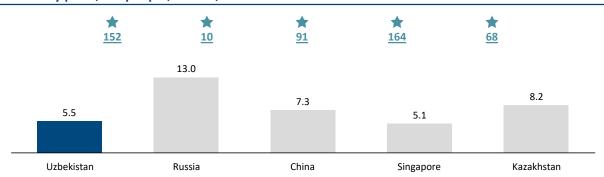
- The salary of doctors in Uzbekistan is lower than the average salary in the country
- Bonuses depend on a doctor's qualification category, length of service, and specialty. For example, the average salary of surgeons of the highest category is USD 351 (UZS 1,827,100)
- Low salaries of doctors lead to development of a shadow economy in the sector. For example, unofficial income from patients may be added to the salaries of medical staff. Also, according to experts, many medical workers work in pharmaceutical companies, which is contrary to ethics and adversely affects the quality of medical advice

Current level of development

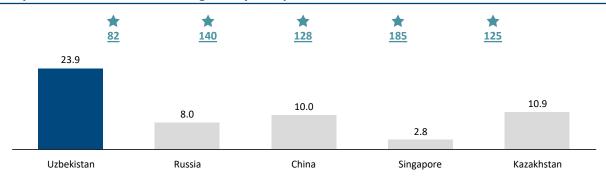
Life expectancy^(a), years, 2016



Total mortality per 1,000 people, deaths, 2016



Mortality rate of children under the age of 5 years, per 1,000 children, deaths, 2016

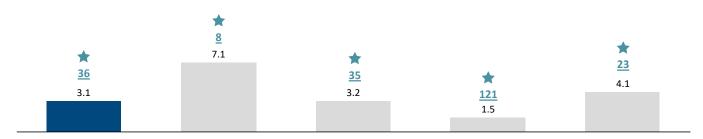


127 Position in the international rating according to the World Health Organization

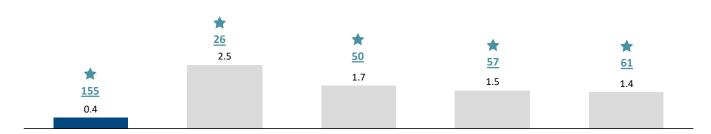
- **Uzbekistan has average life expectancy**. Despite the fact that Uzbekistan is one of the leaders in life expectancy in the post-Soviet space and a leader in Central Asia, Uzbekistan lags far behind the leading European and Asian countries, including China and Singapore
- Uzbekistan is characterized by a low mortality rate and is one of the leaders in the world rating according to the World Health Organization (152 out of 183 countries)
- · However, there is an acute problem with child mortality under the age of 5 years (82 out of 194 countries)

Current level of development

Mortality from cardiovascular diseases, deaths per 1,000 people, 2016



Mortality from cancer, deaths per 1,000 people, 2016



Mortality from gastrointestinal illnesses, deaths per 1,000 people, 2016

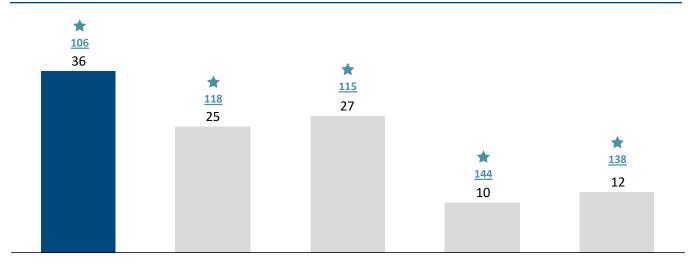


127 Position in the international rating according to the World Health Organization

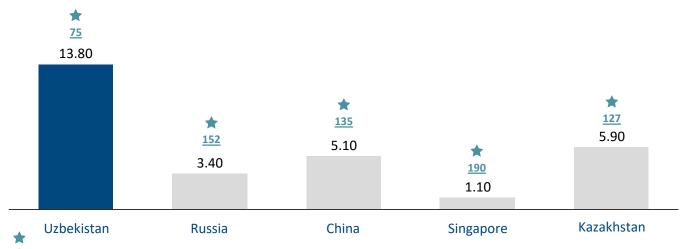
- Uzbekistan is one of the world leaders in mortality from cardiovascular diseases (36 out of 183 countries). 66% of deaths are caused by coronary heart disease and 17% by strokes
- Despite a high share in total mortality (8%), mortality rate from cancer in Uzbekistan is one of the lowest in the world
 - The most common cause of death from cancer is stomach cancer (14% of deaths), lung cancer (11%), and breast cancer (10%)
 - Among the causes of a high mortality rate from cancer are poor or late detection of cancer and poor development of preventative medicine
- Mortality from gastrointestinal illnesses in Uzbekistan is average compared to other countries. The main causes of death from gastrointestinal illnesses is liver cirrhosis (74%), which is caused by hepatitis B (39%), excessive alcohol consumption (26%), and hepatitis C (16%)

Current level of development

Maternal mortality, deaths per 100,000 newborns, 2015



Neonatal mortality, deaths of children under the age of 28 days per 1,000 newborns, 2016

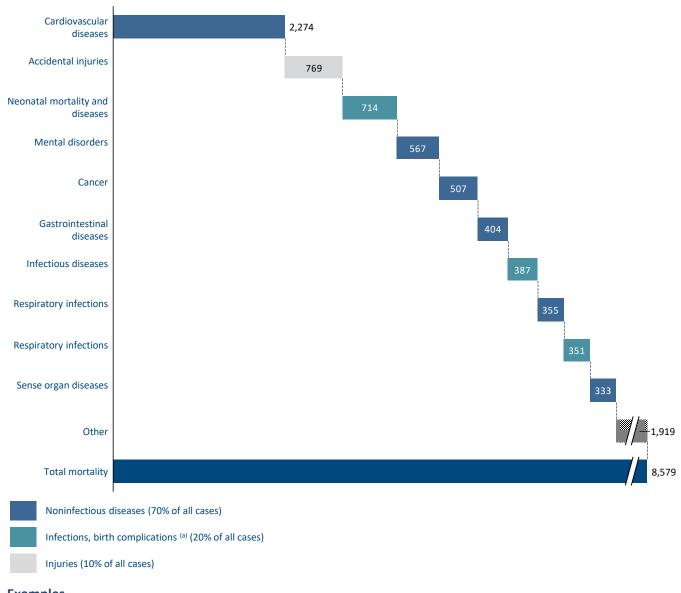


127 Position in the international rating according to the World Health Organization

- **Uzbekistan has an average maternal mortality rate**. According to the WHO, 100% of births in the country are supervised by medical specialists.
 - The causes of deaths include bleeding (45%), infections (12%), and late toxicosis (5%)
 - The care of a doctor during pregnancy and the correct actions of medical personnel may prevent maternal mortality
- Uzbekistan has a high neonatal mortality rate (77 out of 183 countries). The main causes of neonatal mortality are complications after premature birth (44% of deaths), fetal asphyxia and birth injuries (42%), and neonatal infections (16%)

Current level of development

Number of years lost due to premature death and disability caused by disease (DALYs), thousand years, 2016



Examples



Methodology: "Disability-adjusted life years" was used to assess the morbidity level. This indicator is a linear sum of potential years of life lost due to premature death and disability

Current level of development

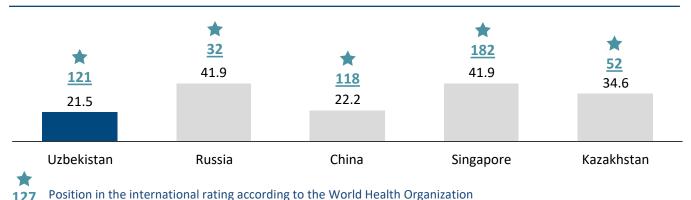




Number of years lost due to neonatal mortality and diseases, per 1,000 people, 2016



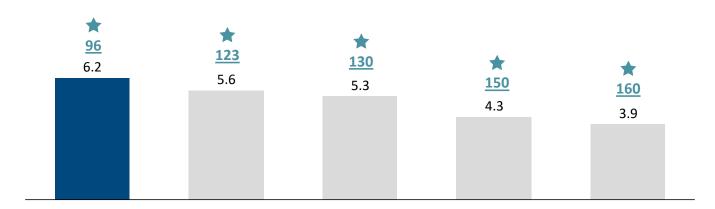
Number of years lost due to premature death and disability caused by accidental injuries, per 1,000 people, 2016



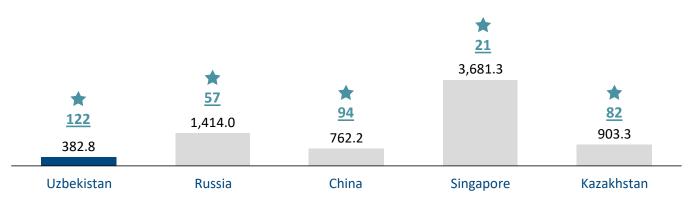
- Uzbekistan is one of the top countries in the world rating according to prevalence of cardiovascular diseases. 63% of cases are caused by coronary heart disease, 19% by strokes, and 11% by hypertension
- Uzbekistan is also characterized by a high level of neonatal illnesses with a fatal outcome. The main causes are complications after premature birth (44%), fetal asphyxia and birth injuries (31%), and neonatal infections (16%)
- Accidental injuries also worsen quality of life. The main causes include traffic accidents (27%), falls (21%), and drownings (10%)

Current level of development

Share of health expenditures in GDP1, %, 2015



Health expenditures² per capita, purchasing power parity index, 2015, international dollar





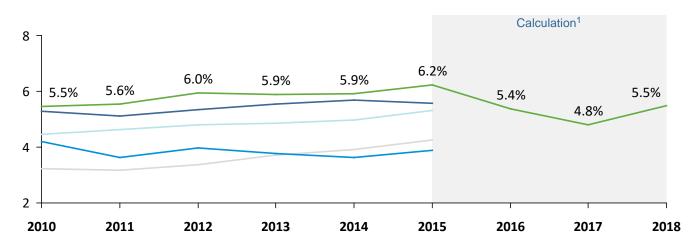
Position in the international rating according to the World Health Organization

- The share of health expenditures in the country's GDP is average compared to 189 countries ranked by the WHO
- However, the share of health expenditures per capita in Uzbekistan is lower than in other countries
- Uzbekistan is also at a rather low level (122nd place in the rating) according to the health expenditure per capita rating, which was calculated based on purchasing power parity
- Uzbekistan's low position in the rating is partly explained by the difference in GDP: the volume of GDP of
 Uzbekistan is lower in comparison with many other countries participating in the rating, so health
 expenditures in monetary terms are at a lower level

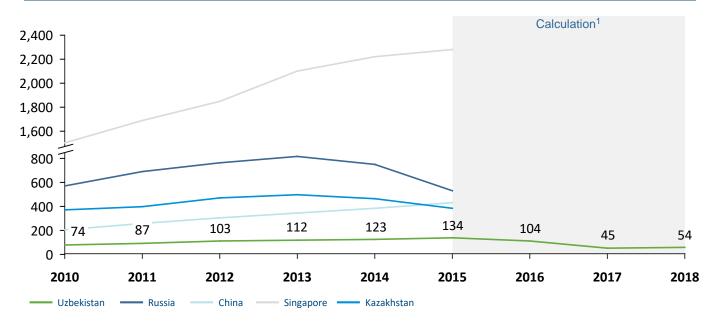


Current level of development

Share of health expenditures in GDP1, %, 2010–2015



Health expenditures¹ per capita, USD, 2010–2015



- Since 2010, health expenditures have been at 5–6% of GDP, while health expenditures per capita for the 8-year period have been fairly low lower than in neighboring countries and developed Asian countries
- In 2018, health care funding increased by 40%, but when calculating the expenditures per capita in US dollars, the amount appeared to be quite small due to the fall of the Uzbekistani som against the US dollar. Real health expenditures per capita in Uzbekistani soms increased by 5% in 2018

Current level of development

Available services by care type

Primar	v care
rillial	y care

Consultation with general practitioners

Secondary care

Consultation with doctors of relevant specializations

Tertiary care

High-tech methods of diagnosis and treatment

Treatment of the most common diseases, injuries, poisonings, and other emergencies

Examination and treatment of children

Examination and treatment of adolescents 15–17 years old and draft-age persons (18–27 years) according to draft board orders

Provision of obstetric services (except for paid institutions)

Immunization and vaccination against a number of infectious diseases

Acute care

Outpatient treatment of oncological, mental, infectious, and endocrine diseases, syphilis, AIDS and HIV, tuberculosis, drug

addiction, leprosy, and radiation sickness

Treatment and diagnosis of skin, venereal, cardiovascular, urological, and orthopedic diseases and the consequences of injuries

Neurosurgery, allergology, purulent, and surgical illnesses

Cardiology

Oncology

Orthopedics

Ophthalmology

Traumatology and orthopedics

Endocrinology

Neurosurgery

Cardiology

Urology



Available free of charge to all citizens(a)



Available free of charge only to certain categories of citizens(a)

Comments

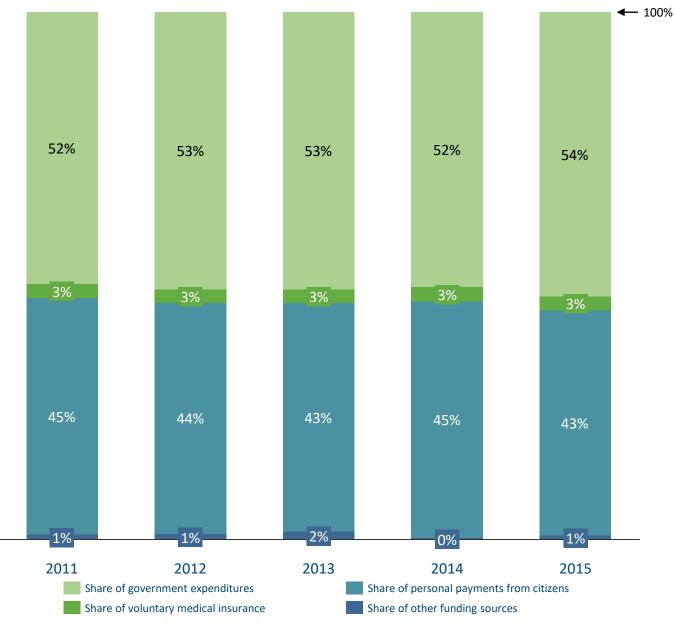
- Socially vulnerable groups of citizens have the right to receive free medical services of all categories
- Treatment of illnesses is not available to all categories of citizens. People may receive medical care only in case of a life-threatening emergency. Thus, diseases are not prevented from worsening
- A large number of paid services in the state sector can be a reason for development of the informal sector.
 According to experts, due to the practice of informal payments, primary care is paid for by the people in most cases
- In Uzbekistan, the share of the population's expenses on health care is high payments for medical services make up 45% of all expenses

Note: (a) list of citizens to whom secondary and tertiary care is available free of charge:

- Elderly citizens living alone who need care
- Disabled persons of groups I and II, disabled children
- Legally incompetent and incapacitated citizens
- Persons with socially significant diseases (e.g., HIV)
- Orphans and children left without parental care
 Invalids and war and labor veterans of 1941–1945
- Other persons

Current level of development

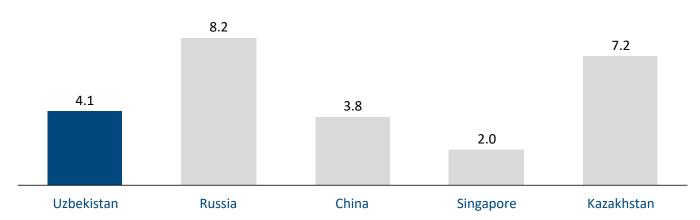
Share of expenditures by source type in total health expenditures, %, 2011–2015



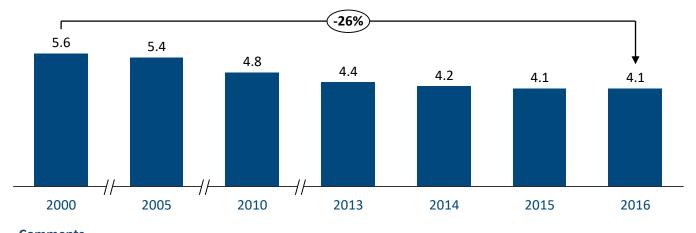
- The structure of health expenditures has remained virtually unchanged since 2011: government expenditures and private payments from citizens make up the majority of all expenditures
- Uzbekistan has introduced voluntary medical insurance, but it covers only 3% of total expenditures
- Since 2011, the voluntary medical insurance sector has not replaced other sources of health care funding

Current level of development

Number of hospital beds per 1,000 people as of the last available date



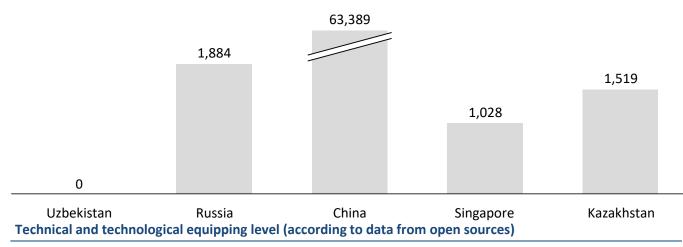
Number of hospital beds in Uzbekistan per 1,000 people



- The number of hospital beds (including emergency hospital beds) per 1,000 people has decreased since 2000 both in Uzbekistan and in other countries of the region
 - The available data reflects information on the number of hospital beds in Uzbekistan's public medical facilities that are financed from the state budget or from self-financing
 - Thus, the number of hospital beds available free of charge is lower than the indicated values
 - During the period of 1990–2016, **the hospital admission rate** for inpatient health care facilities per 100 people also **decreased gradually from 24.6 to 15.5 cases**
- The number of hospital beds must be considered along with their turnover ratios. The turnover of hospital beds reflects the effectiveness of management in the health-care system. For example, Singapore has the lowest number of hospital beds in medical facilities in the group of considered countries, but Singapore's medical system is characterized as highly effective^(b). Data on the turnover of hospital beds in Uzbekistan is not published in open sources, so it is impossible to draw a conclusion about the effectiveness of the management of hospital beds in medical facilities in the country.

Current level of development

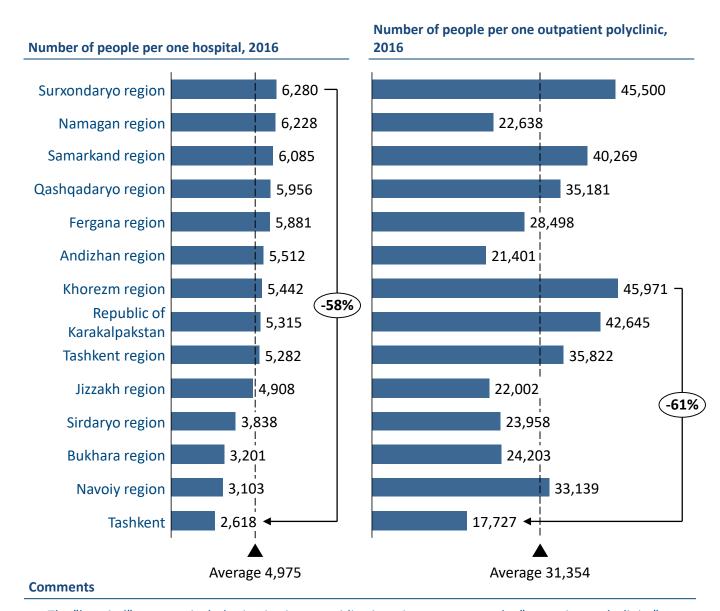
Total capital investments in health care, USD million, 2015



Area	Evaluation	Comments
Information technology		"Smart Medicine" program was launched in 2018
Electronic accounting or document management system		Since 2017, information from medical records cards is entered into electronic databases, but there is no system for information exchange between healthcare facilities
Medical equipment		Investments in purchasing equipment are insignificant

- Capital investments include costs for construction and purchasing equipment as well as repair works
- The amount of capital investments in Uzbekistan is insignificant. According to WHO data, in 2012–2015, they amounted to about USD 522,000 annually on average, which was much lower than in other countries
- Unlike countries with a more developed health care system, the Republic of Uzbekistan has no organization
 that determines the list of priority drugs, medical equipment, and devices for state procurement.
 Therefore, purchases are made using state funds, international loans, private capital, or through
 sponsorship
- In 2018, a program for the development and implementation of information technology systems was adopted "Smart Medicine" (system of remote communication between doctors and patients) and "Unified Medical Information Center" (unified digital database on patients' health)

Current level of development

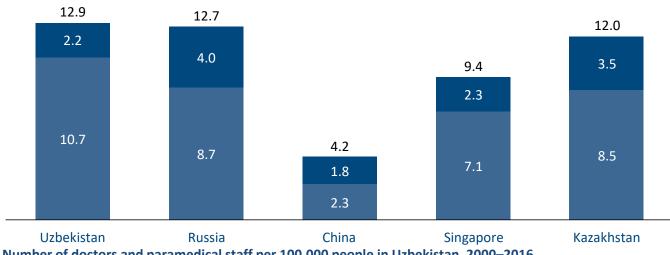


- The "hospital" category includes institutions providing inpatient treatment, the "outpatient polyclinics" category includes institutions providing primary care
- The number of people per one hospital differs between regions. The difference can reach 137%
- The number of people per one outpatient polyclinic is also unevenly distributed across the regions: the difference can reach 159%.
- The levels of population coverage with inpatient and outpatient health care facilities by district do not correlate with each other
- Tashkent is the region with the highest level of population coverage

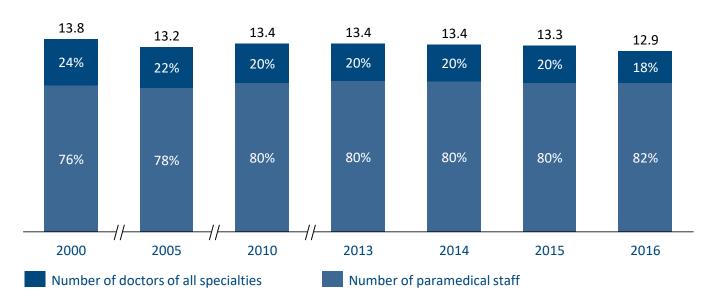
Health care

International experience

Number of doctors and nurses¹ per 100,000 people as of the last available date



Number of doctors and paramedical staff per 100,000 people in Uzbekistan, 2000-2016



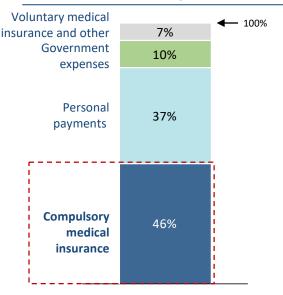
Comments

- Uzbekistan has the largest number of medical specialists per 100,000 people compared to other countries. For example, China suffers an acute shortage of medical personnel
- Uzbekistan is also characterized by the lowest share of doctors to nursing staff within the group of compared countries
- The number of medical specialists in Uzbekistan fell by 4%, and the number of doctors in the total number of specialists also decreased
- The number of doctors per 100,000 people has decreased by 18% since 2010. The same trend is observed in other CIS countries. Thus, in Russia this indicator fell by 20% in 2010–2015, and in Kazakhstan by 7% in 2010-2014.

Health care

International experience

Sources of health care expenses in South Korea, 2015



National Health Insurance Program

Working citizens and their relatives:

- Medical insurance that covers all working citizens and their relatives
- Working citizens deduct funds to a personal account that can be used by the payer themselves or their family
- The personal account is a savings account

Pensioners

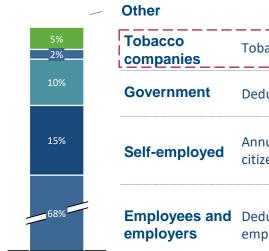
 After retirement, medical services are provided through a savings account and the government (15–20% of the cost of services)

Low-income groups

 The program covers expenses for unemployed and lowincome citizens (the state pays the cost)

South Korea

Sources of funding of the national insurance system, 2015



Tobacco companies	Tobacco companies must form 2% of the program's annual budget
Government	Deductions from collected taxes
Self-employed	Annual contributions depend on income, property value, age, etc. For citizens from rural areas, the amount of deductions is reduced

Employees and Deductions from salary (about 5%) are divided equally between the employers employee and the employer

Comments

• South Korea's health care system is **dominated by the private sector:** almost all hospitals and 94% of inpatient facilities were owned by nongovernment owners in 2012

System achievements:

100% coverage of the population with health insurance

System disadvantages:

• The highest share of private expenses on health care among OECD countries due to a partial payment system: apart from medical insurance fees, people also pay for treatment, stays in outpatient healthcare facilities, medicines, etc.

International experience

Canadian Institute for Health Information

The institute was established in 1994.

It is an independent nonprofit organization that centrally collects data on the health care system and the health of citizens in the country.

The institute has its own databases and own system of standards and reports. Its main partners are the Ministry of Health of Canada and Statistics Canada. The institute's databases can be used for research. Monitoring medical statistics makes it possible to identify existing problems in health care.

In 2016, the institute released a report on hospitalization due to drug intoxication: 13 Canadians are hospitalized every day with symptoms of drug intoxication. At the same time, the elderly are hospitalized more often than other population groups, and the highest growth rate of drug intoxications is observed among young people. Canada is currently combating drug abuse.

Canadian Patient Safety Institute

The institute was established in 2003. It is a nonprofit organization that aims to support and spread the best practices in the medical field that will help improve patient safety.

According to the Commonwealth Fund's forecasts, over the next 30 years, every year in Canada, 400,000 cases related to the violation of patient safety will occur. This will create an additional burden on the health-care budget in the amount of USD 2.75 billion.

Patient safety includes the safety of medicines, surgical operations, treatment at home, and the prevention of infectious diseases.

Activities of the institute:

- 1. Improvement in safety: creation of a mechanism to collect information on best practices and then use this information.
- 2. Wider coverage of information on the patient safety in the media
- 3. Implementation of standards and legal practices to improve patient safety
- 4. Creation of a unified network of interaction of state bodies

Financing is provided at the cost of the Ministry of Health of Canada

Health care

International experience

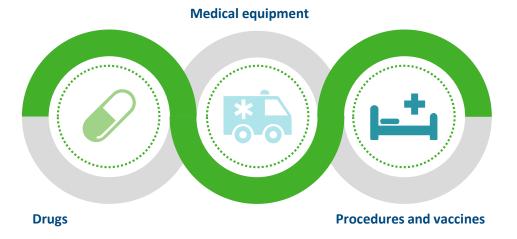
CADTH

Canadian Agency for Drugs and Technologies in Health (CADTH) is an independent non-profit organization founded in 1989 by federal, provincial, and territorial governments of Canada. It is responsible for providing unbiased information to the designated persons for making informed decisions on the best use of health care technology. CADTH uses the Health Technology Assessment as its methodology.

Health Technology Assessment

Health Technology Assessment (HTA) is the process of studying clinical, economic, and social consequences of the development, distribution, and use of medical technologies. HTA allows one to choose the most clinically and economically optimal choice of several medicines. Also, the results obtained during the technology assessment may be used for determining the economically optimal price of a drug in negotiations with pharmaceutical companies. The main task of HTA is to inform persons who make decisions of the consequences of implementing health care technologies.

Health technologies include:



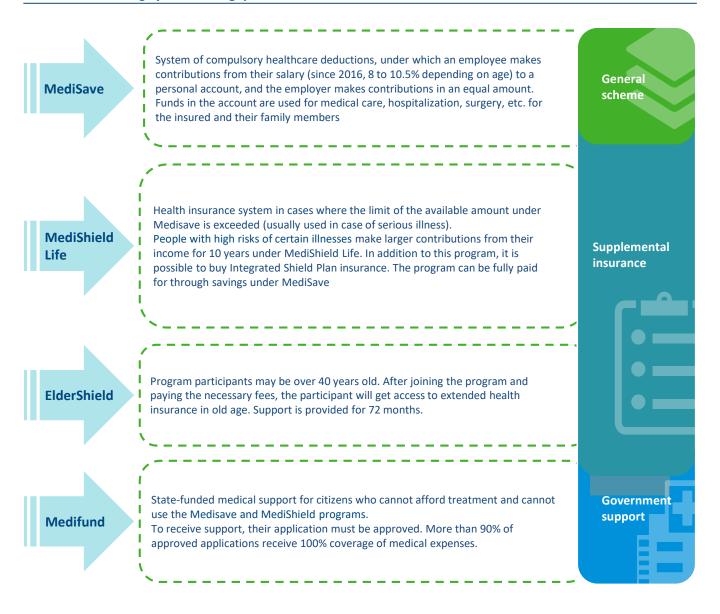
Today, health technology assessment is used in making decisions on funding in all developed countries of the world (USA, England, Europe, Australia, etc.). This approach allow one to make the process of decision-making on project funding and the tendering process in healthcare more transparent, and it saves billions dollars of state funds.



The economic effect from the implementation of just 10 projects, whose priority was determined with the help of HTA, amounted to GBP 3 billion annually in Great Britain.

International experience

Health care funding system in Singapore



Capital health care expenditures are funded from the state budget

Health care

International experience

Health care funding system in China

Category	Problem	Solution		
Basic medical insurance for urban workers	Lack of access to medical insurance for family members of an employee. Lack of mandatory accession to the medical insurance system	 Insurance coverage was expanded: the insurance program included non-government sector employees, self-employed individuals, and unofficially employed persons The state funded a program to support the most disadvantaged groups of the population in the event of unforeseen medical expenses 		
Cooperative medical insurance system for rural residents	The cooperative system of the rural economy practiced in the 20th century ceased to exist in the 1980s, after which the share of insured persons fell to less than 10%. In the 1990s, 65% of the rural population in need of hospitalization were not hospitalized. Lowincome citizens could not afford to pay for insurance	A new system was partially funded by the state and covered all family members		
Basic medical insurance for urban residents	Urban residents without official employment were not covered by insurance	A new system was funded partly by citizens and partly by the government – subsidies from the central office and local government accounted for 36%		
Basic medical insurance for migrant workers	Migrant workers – citizens migrating from rural to urban areas – did not fall into any of the insurance categories	Local authorities were required to provide medical insurance to all migrant workers. The sources of funding were insurance contributions from an employee and/or an employer, and for low-income migrants, subsidies from local governments		
Result of the progra provided with free n	nm: increased number of people medical care	Medical insurance coverage 2002: 55.2% of the urban population 2002: 20.9% of the rural population 2009: 94% of the rural population		

Health care

International experience

Health care funding system in Southeast Asian countries

China



- In 2010, the government established a scholarship for rural medical workers. Participants of the program received a five-year free medical education and a monthly stipend for the next 6 years of work in rural areas. Since 2010, 5,000 students have taken part in the program each year. 90.7% of the program participants met the conditions and worked in rural areas, while only 2.8% of students who did not participate in the program moved from cities
- In 2008, the government launched a program for doctors who work in rural areas. They are paid 20,000 yuan (about USD 3,000). According to the results of the program, 1,080 doctors were employed in 828 local medical centers
- From 2009 to 2013, the government has subsidized training programs for doctors in rural areas. Since 2010, the government has funded the development of medical infrastructure to improve the working conditions of doctors

Vietnam



- In Vietnam, the government launched development programs along with funding and support mechanisms
- In 2012, there were 1,816 training programs implemented in the country, mostly in rural areas
- From 2009 to 2014, the government issued laws to support medical specialists in rural areas. For example, medical workers in rural areas could receive a 70% increase in wages for the first 5 years of work in rural areas. According to a law adopted in 2014, medical workers who had worked in rural areas for more than 3 years could obtain the status of civil servants (stable and promising work in Asian countries)

Thailand



In 1968, Thailand introduced a period of mandatory work in rural areas for graduates
of state-funded medical institutes. The duration of such work was 3 years for doctors
and dentists and 2 years for paramedical staff

Cambodia



- In Cambodia, the government offered midwives USD 15 in medical centers and USD 10 in hospitals for each successful delivery
- Health-care institutions had the right to spend 60% of collected revenue to attract medical specialists to the rural area
- In 2000, the government with the participation of sponsors established the Health Equity Fund to pay for health services for low-income groups of the population
- Part of the fund's money was spent to improve the working conditions of medical personnel in rural areas
- Also, medical workers in rural areas had access to grants from international organizations
- In 2016, the Cambodian government announced that all medical workers were granted the status of civil servants

Strategic options

High share of state participation

Provision of services by the state; funding through tax revenues; the private sector and private insurance meet only the needs of the wealthy







High access by the low-income population



- Quality of health care depends on the amount of tax
- High risks of being provided low quality services, especially in secondary and tertiary care
- Low level of overall innovation development of the system

Guaranteed support for all groups of the population¹, but with limited opportunities to receive high-quality services

---- Target development option

Mixed model

Development of private service providers while maintaining state service providers for the low-income population; creation of a national insurance system and development of private insurance; creation of conditions for the development of science and innovation











- High accessibility to the health care system
- Uniform quality at all stages of health care



- Low development of the private sector
- Low development of private financing institutions

Wide scope of the population provided with health care, with stable quality

High share of private sector participation

Provision of medical services is fully delegated to private companies; funding is performed through private insurance companies or payment from citizens; state support is provided only for the low-income population through mechanisms for co-financing expenses



Examples of countries:







- High quality of service, especially in secondary and tertiary care
- The state as the main regulatory body



- Incomplete medical coverage
- High cost of medical services
- Primary care is poorly developed (since it is less profitable)

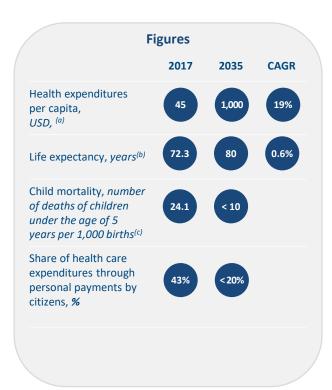
Low accessibility to health care, with high quality

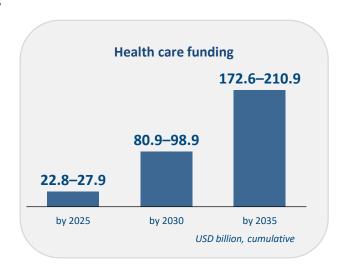


Target vision 2035

Affordable high-tech medicine based on the developed system of funding, high-quality education, and effective management

- Introduction of compulsory medical insurance and development of voluntary medical insurance
- Ensuring access to health care in rural areas
- Infrastructure upgrades (repairs, equipment)
- Implementation of IT tools
- Development of education of doctors and medical workers
- Increase in compensation and social package for doctors (not lower than the average market salary)
- Involvement of the private sector; development of private-public partnership (PPP) (up to 80%)
- Development of regulation of medical science and research procedures (GCP, project financing)
- Creation of conditions for innovative development of medicine (tax havens for R&D)
- Creation of highly innovative medical care centers
- Creation of the Health Technology Assessment process to secure the transparency of state procurements





Health care

Key strategic initiatives

2035 2030 2025 Development of a legal framework Introduction of compulsory medical Development of regulatory mechanisms (determination of the guaranteed volume insurance for all residents, development for medical science and research of private insurance of care, implementation of international procedures regulatory acts, etc.) Development of medical liability Creation of conditions for innovative Development of regulatory bodies related insurance (for doctors) development of medicine (technology to health care parks, benefits for research centers, Development of infrastructure (funds, involvement of foreign R&D centers) Development of clinical standards and agents) for financing private health-care Attraction of investments in the other regulatory acts necessary for providers on the basis of compulsory introduction of an insurance program medical insurance technological development of medicine Preparation for implementation of Development of high-tech infrastructure Optimization of the network of medical compulsory health insurance, carry out and preventive institutions; elimination Development of PPP tools within the of the least effective ones pilot launches projects on construction of new clinics Infrastructure updates (capital repairs, Creation of highly innovative health care Widespread introduction of electronic centers (innovative neonatal centers, construction, equipment purchases) medical charts etc.) Introduction of IT tools for disease Development of science (increasing recording and creation of unified Integration of Uzbekistan's medical funding of scientific activity in medicine; republican databases universities into a system of recruiting international specialists to international alliances; advanced Development of education (attracting work in Uzbekistan's medical universities training of doctors at international international specialists, upgrading both for teaching and research) centers equipment, creating conditions for Introduction of licensing of doctors' work advanced training) Creation of the Health Technology and a remuneration system based on Assessment process at the level of the Increase in wages and benefits for establishing wages depending on the regions and health care facilities doctors performance result Increase in healthcare affordability for Introduction of a system for retraining low-income population groups and medical personnel people living in regions Creation of conditions for the Implementation of a Code of Ethics for development of private health care doctors that regulates the rules of work providers of medical workers and also restricts their Development of educational and cooperation with pharmaceutical institutional components of the Health companies **Technology Assessment process** Creation of a national plan for the prevention of key illnesses (e.g., cardiovascular disease) Elaboration of a policy governing the approach to treatment of chronic illnesses personnel finance technologies legislation and state regulation infrastructure

Social development



Current level of development



Key challenges

- Low level of expenditure on social support programs
- High poverty rate: 10% of the population lives in extreme poverty
- High unemployment; support measures only partially solve the problem
- Unfriendly environment for the disabled
- Number of people in need may be higher than officially registered
- Nonfinancial support system is not developed

Key findings

- The model for social protection in Uzbekistan does not correspond to the current state of the economy
 - The priority of the government a high level of social support for all citizens – is difficult to achieve due to budget constraints
 - Uzbekistan places an emphasis on financial support of people in need, while developing countries pay much attention to non-financial support mechanisms
- There is **no unified centralized system** of all areas of social support in Uzbekistan
 - There is no unified body to regulate, manage, and coordinate social sector activity: these functions are divided between the Ministry of Finance and the Ministry of Health
 - Criteria for selecting the recipients of social support are not established in accordance with international standards
 - There are no objective statistics on the number of people in need of such support

		Scandinavian model		Uzbekistan model	Asian model
	State's role	Protection of the population		Social development	Ensuring economic growth
	Support objectives	Support for all population groups	—	Support for all groups with focus on pensioners	Support for the most needy
	Taxation level (share of tax burden)	60% (\$	←	40% (\$	10%
	Share of budget expenditures in social sphere ^(a)	20–25%	—	22% (a)	5–10%
(3)	Amount of social expenditures per capita	10–13 USD thousand		131	2-4 USD thousand
	Leading support institutions	State	—	State	Private companies
(9)	Key support tools	Financial	—	Financial	Nonfinancial

Current level of development

Most of the social spending is aimed at providing financial measures of social support, which does not correspond with the trends in countries with growing economies



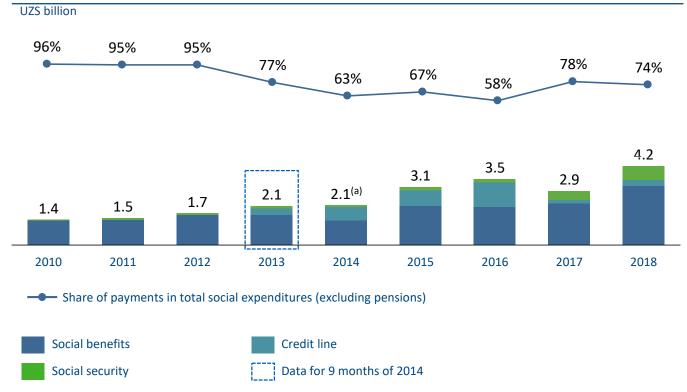
Financial measures: direct payments and benefits to recipients of social support (unemployment benefits, maternity benefits, discounted rates for housing and utility services, etc.)



Non-financial measures: provision of services to recipients of social support (training and consulting for successful employment, etc.)



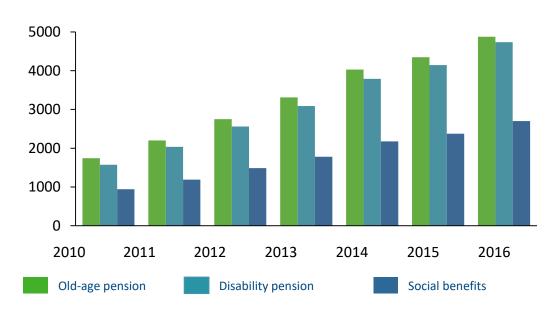
Social expenditures from Uzbekistan's state budget by category of expenditures,



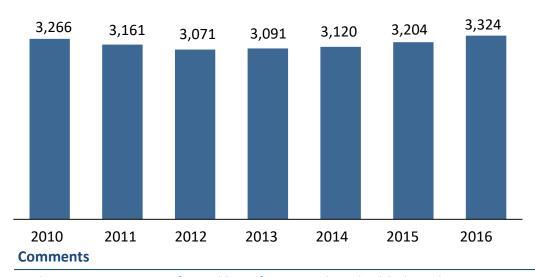
Current level of development

The volume of social payments in the Republic of Uzbekistan is increasing due to growth in the amount of social benefits and not due to growth in the number of recipients

Average amount of social benefits, UZS



Number of persons receiving pensions and social benefits, thousand people



- The average amount of social benefits more than doubled. At the same time, the number of people receiving social benefits increased by only 2%
- Thus, the increase in the payment amount is not due to an increase in the number of recipients of benefits but due to an increase in the size of social payments

Current level of development

Developing countries focus on several groups of support recipients, while Uzbekistan does not have a focus of support

Recipient groups of social support in world practice

Social support focus on recipient groups















Disabled

















Senior citizens

















Unemployed

















Families and children

- Families with children
- Families with adopted children
- Multichild families
- Low-income families
- Young families
- Single-parent families
- Victims of domestic violence

European countries













Asian countries











































Homeless and transient















Current level of development

Share of the population living in extreme poverty¹



- Poverty is one of the main problems in the social sphere in Uzbekistan
- In Uzbekistan there is no definition of minimum subsistence based on the consumer basket
- Uzbekistan ranks 78th in the Food Security Index 2017. The index calculates the accessibility and quality of food resources in terms of affordability and availability of healthy food in 113 countries

Unemployment rate in Uzbekistan and other countries







- According to international estimates, the unemployment rate in Uzbekistan is 4% above the officially registered rate
- According to unofficial EU estimates, the unemployment rate in Uzbekistan may be 35%, that is, every third citizen of working age of the country is unemployed
- A significant part (almost one-third) of the working population of the country works abroad. Migration flows are not controlled by the state
- According to experts, the share of Uzbekistan's shadow economy may be more than 50%

Current level of development

Existing support measures for low-income families partially solve the poverty problem

Financial



Benefits for low-income families

Benefit amount:

- For families with 1 child: 50% of the minimum wage
- For families with 2 children: 80% of the minimum wage
- For families with 3 children: 120% of the minimum wage
- The minimum wage (as of July 2018) is UZS 18...
- Benefits for families with 1–2 children may not cover the minimum wage

Household



Home repair

2018: 25 families from each district

Provision of housing

2018: 5 families from each district living in substandard and dilapidated housing

Purchase of household appliances

2018: 70 families from each district

- Less than 1% of the low-income population¹ receive such assistance
- There are no food supply programs for low-income families

Labor



Loans to low-income families

- Up to 100 minimum wages
- **4**%
- Up to 3 years

Commercial banks (the list is determined by the Central Bank of Uzbekistan)

Purpose of the loan:

- Purchase necessary equipment or develop household land plots (farming, gardening)
- Promotion of self-employment for lowincome families

Education



- Provide children from low-income families with free textbooks
- Provide primary school children with free winter clothing and footwear
 - Free access to kindergartens and boarding schools
- Lack of incentives for students to complete their education instead of working

Transport



Uzbekistan offers no benefits to low-income families for using public transportation



Current level of development

Existing support measures only partially solve the unemployment problem



Employment centers

- Employment of citizens who requested assistance
- Plans for the development of an electronic job bank of Uzbekistan

By year-end of 2017, 229,900 people were employed, which is 28% of the officially registered unemployed



Organization of public work



Participants: citizens recognized as unemployed who received a referral from the Center for Assistance and Employment



Duration: 2 weeks to 3 months of the financial year with an entry in the employment record book



Payment:

- for work organized by public organizations: no more than 5 minimum wages per month (100% compensation from the Public Work Fund)
- For work organized by business entities or nongovernmental nonprofit organizations: no more than 2.5 minimum wages per month (50% compensation from the Public Work Fund)

In 2017, **27,100 people were** involved in public work, which is 3% of the officially registered unemployed individuals



Creation of training centers for the unemployed: 240 seats in each center in 12 districts



Areas of training

 Electricity and electronics, information technology, agriculture, construction, repair and maintenance of vehicles and equipment, etc.



Source of funding:

Khorezm and Fergana regions:

 Grant from the Government of South Korea

Other regions of Uzbekistan:

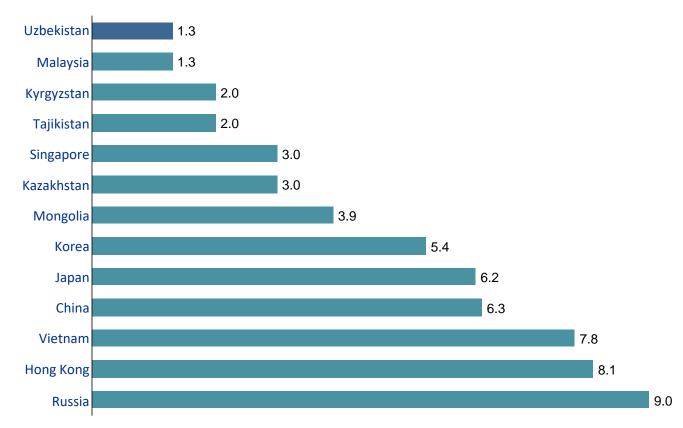
- State Employment Promotion Fund, grants from donor countries
- Preferential loans from international financial institutions

In 2017, **6,600 people completed training,** which is less than 1% of the officially registered unemployed. This shows poor coverage in the implementation of non-financial support measures, which greatly reduces their efficacy

Current level of development

Share of the disabled in the total population by country

%



Criteria for recognition of disability in Uzbekistan

It is necessary to go through the medical and labor expert commission and receive an annual medical examination, even in case of severe disability

do not comply with modern international criteria for recognition of disability

Comments

- A too complicated procedure for recognition and confirmation of disability in Uzbekistan often leads to the exclusion of part of the disabled population that need support
- The criteria for recognizing disability are based on methodology developed 40 years ago
- The process of recognizing disability is complicated by bureaucracy
- It is necessary to optimize the criteria and procedures for recognizing disability in accordance with international practices and standards
- Work on revising the criteria for recognition of disability has already begun in Uzbekistan, but the new criteria have not yet been approved

Current level of development

Uzbekistan does not have a favorable environment for daily living activities of the disabled because not all of their needs are met



Financial needs

2017:

- Payments to persons disabled since birth: UZS 336,880 per month
- Average salary (according to the State Statistics Committee of Uzbekistan): UZS 1.453 million per month
- Minimum wage: UZS 172,240 per month
- Payments to the disabled are 23% of the average salary, or 196% of the minimum wage

People with group III disabilities do not receive social benefits



Employment of the disabled

In Uzbekistan, there are benefits for companies who employ the disabled:

- Fixed tax rate for individual entrepreneurs with disabilities
- Assignment of quotas in the amount of 3% on enterprises

In 2017, the employment rate of the disabled was 2% (while the same indicator in South Korea in 2013 was 36%)



Barrier-free environment

- 2017: only 37% of public institutions in Uzbekistan are equipped for the handicapped
- Work on creating a barrier-free environment is in an early stage: on March 1, 2018, a ban on the purchase of city passenger vehicles not adapted for the handicapped was introduced
- According to experts, the barrier-free environment is characterized by poor quality



Inclusive environment

- In 2014, 38% of children with special educational needs were educated in an inclusive environment
- In 2010, an information campaign on protecting the rights of the disabled was carried out at the state level

Education of the disabled

- The quota for the disabled is 2% of places in higher educational institutions
- There are no statistical data on the disabled receiving an education

308

Current level of development

A system of nonfinancial support for senior citizens is not developed

Needs

Household

- Tax benefits: exemption from property tax (up to 60 m²) and land tax (under certain conditions)
- Reduced utility rates for pensioners

Transport



- Right to free transit on the subway (from 10:00 a.m. To 4:00 p.m.)
- Right to free transit on other public transport is granted to certain categories of pensioners

Health and wellness



- Free medical care only for pensioners living alone
- Free health resort care (about 85,000 places in Uzbekistan) is provided to about 3% of pensioners

Leisure



There are plans to open leisure centers for pensioners in every city in the Republic of Uzbekistan

In 2015, the government program "Year of Attention and Care for the Elderly" was implemented. A series of events were held to support certain groups of senior citizens, veterans, and disabled persons.

Strategic options

Scandinavian model

Wide coverage; high tax burden on the population and businesses; high social expenditures per capita; wide financial support; prevalence of the state's role in providing support







 Large number of the population provided with social security



- Need for greater social spending and larger tax revenues
- High tax burden does not contribute to economic
- High risks of providing poor-quality services

Considerable support for all population categories

Examples of countries:

Preserve the state's role in developing CSR

Support to the most needy and vulnerable groups of the population, high level of targeted support, medium level of spending on social support, focus on non-financial measures, attraction of private providers, including through the development of CSR





Singapore

South Korea



• Reduction of the tax burden while maintaining an average level of support

• Improvement of the quality of social support

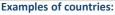
- Low development of the private sector
- Low level of CSR development

High coverage through nonfinancial measures

Minimize support

Provide support to separate groups of the population, low taxes, low level of state spending on social support, prevalence of non-financial support measures, social support imposed on private companies











- Poor coverage of social protection
- Underdeveloped private sector

Little support for some categories of the population

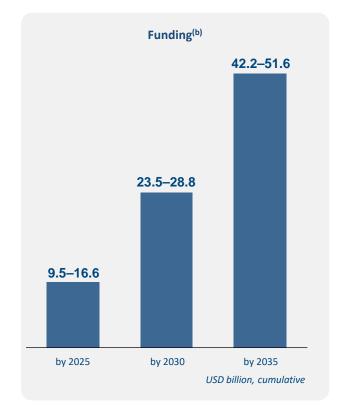


Target vision 2035

Effective social security of vulnerable categories of the population aimed at unlocking their economic potential

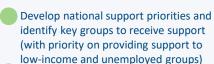
- Active use of nonfinancial support measures; involvement of the private sector in providing social support; CSR development
- Wide and highly targeted social support coverage; support for the most vulnerable people, thus ensuring social stability
- Focus of the system on combating poverty and unemployment; developed training and employment programs
- Development of social integration tools at the mahalla level
- Developed information and analytical support of social support
- Delivery of comprehensive social support to population groups that are more vulnerable: ethnic minorities, women, etc.
- Developed barrier-free environment that allows all citizens to unlock their economic and social potential (an environment facilitating upward social mobility)





Note: (a) less than USD 1.90 per person per day, (b) excluding social insurance

Key strategic initiatives



2025

- Detail the targeted criteria for recognizing a person as in need of support
- Update and detail the criteria for recognizing disabled persons in accordance with international practices
- Update and improve the effectiveness of social support infrastructure (social support centers, organizations)
- Develop and launch programs and tools to combat poverty and support the unemployed, including
 - **Training courses**
 - Trainings sessions to develop skills for employment
 - Programs to develop communication with potential employers
- Develop a system to train social support personnel (expansion of the number of universities providing training in this area)
- Invest in the creation of a barrier-free environment
- Launch programs aimed at providing equal opportunities for women (education, employment of women, equal income and opportunities for career progress, stopping domestic violence)
- Establish research centers dedicated to social policy
- Implement programs to fight drug, alcohol, and gambling addition

Develop corporate social responsibility and involve private companies in social support of vulnerable categories of the population (creation of national ratings of the level of social responsibility of companies; holding round tables with key employers)

2030

- Involve private providers in the provision of social support (transfer of social patronage services and other forms of support to private companies)
- Develop and implement IT systems to organize social support (identification of key social support problems; search of tools)
- Launch educational programs based on websites for those needing support
- Create and develop social institutions for caring for children, the elderly, and the sick
- Facilitate the development of nongovernmental organizations (NGOs) and charities

Technological development of social support

2035

- Application of IT tools to identify persons in need
- Application of IT tools to determine the individual amount of social support for people in need
- Increased application of financial measures of support for certain population groups
- Expand social support coverage (inclusion of additional categories in the focus of support: young mothers, socially disadvantaged workers, etc.)

personnel



finance



technologies



legislation and state regulation



infrastructure

Social development



Current level of development



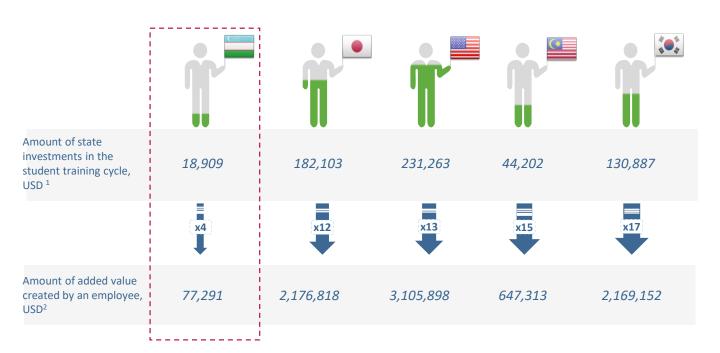
Key challenges

- The need to employ 20.7 million people of working age in 2035
- Lack of engineering and management personnel reserve for innovative development of the economy
- Unofficial unemployment rate (35%) is several times higher than the official rate (8%)
- Almost one-third of the working population of the country works abroad
- There is no relationship between the industry-specific higher educational institutions in terms of applied sciences and sectors of the national economy

Key findings

- Insufficient education level constrains innovative development in Uzbekistan: investments in education are 10 times lower than in developed countries. The situation is aggravated by low salaries of teachers (30 times less than salaries of teachers in developed countries), poor material and technical resources, and lack of computer classrooms
- More than 60% of university instructors do not have academic qualifications
- Uzbekistan has the necessary number of teachers, but a lack of places and low-quality infrastructure in educational institutions are one of the main problems in the school system
- Low enrollment in colleges and universities: less than 10% of students were enrolled in higher education institutions in 2017
- There is a shortage of higher education institutions (66 universities in 2016)
- Outdated educational infrastructure with a high level of depreciation of fixed assets: 3,644 schools (38%) are in need of major repairs, only 37% of schools have modern computer equipment, and just 7% have access to the internet

Investment in the full education cycle of a student and the return as added value



Note: 1 = education expenditures on the full education cycle of one student (from 3 to 22 years); (b) cumulative labor productivity of one citizen until retirement

Sources: World Bank Open Data, United Nations Department of Economic and Social Affairs Population Division 2017, OECD, data from open sources, analysis of the working group

314

Current level of development

At the present time, a number of problem areas related to education ministries limit the educational system's development in Uzbekistan

List of education ministries

01

Ministry of Preschool Education (MPrE)

02

Ministry of Public Education (MPE)

03

Ministry of Higher and Specialized Secondary Education (MHSSE)

Problem areas

Lack of integrated strategy

- The goals of each ministry are determined individually and do not have a unified development vector set out in the general strategy
- A number of areas to be developed may be not touched on by any ministry
- There is no single road map for "raising" specialists from pre-school to post-graduate

Lack of control of educational results

- The existing model has excessive focus on building the educational process without paying due attention to the results of educational institutions
- As a result, quality of education is at risk

Management crisis in the ministries and supervisory agencies

- There is not enough expertise in terms of implementation of suggested changes and new concepts
- Lack of qualified managerial personnel
- Lack of innovative methods of governance

Influence of the supervisory bodies

- The supervisory bodies have a significant influence on the education ministries
- A number of tasks and functions delegated to the ministries by the supervisory bodies are not connected with or are in conflict with the educational system's development vector

Current level of development

Average education expenditures per one student¹ in 2015



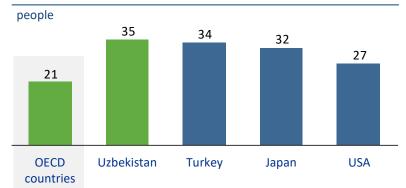
Average monthly salary of teachers in general education schools in 2017



Today, the average expenditures on education of one student in the Republic of Uzbekistan lag behind the same indicators in other emerging countries significantly

- Lack of investment in education has a negative impact on the physical infrastructure of educational institutions. According to experts, a big problem is the lack of water and electricity as well as the lack of computer classes in educational institutions in all regions of the country
- In the period from 2008 to 2015, the average education spending per one student more than doubled, but it is still significantly lower than the same indicators in other developed and developing countries
- Despite the existence of state support programs and annual review of wages, teacher salaries in Uzbekistan are lower (by 20–30 times) than in other countries

Average number of students in classes at general education schools

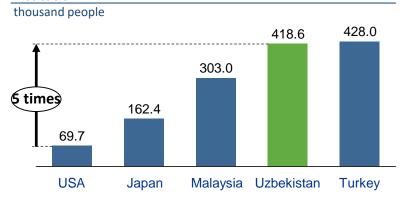


- In Uzbekistan, there is a general tendency to reduce the number of educational institutions, and the need for major repairs to them is observed.
 This has a negative impact on educational potential
- In some schools in the Republic of Uzbekistan, classes have 45–50 students, which prevents them from receiving quality education
- Over the past 8 years, 72 general education schools have closed in Uzbekistan

Designated ministries

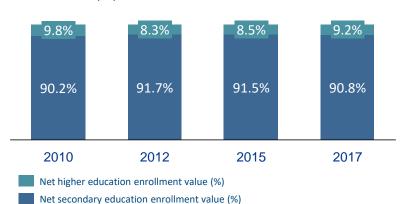
Current level of development

Average number of people per one higher educational institution

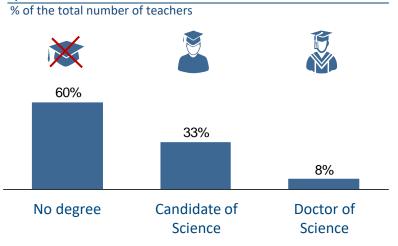


Share of people with secondary and higher education

% of the total population



Distribution of higher education teachers by academic qualification¹



Comments

- The inadequate number of higher education institutions and the existence of quotas for entrance to universities significantly slow the development of human capital in the Republic of Uzbekistan
- Despite an increase in the number of higher education institutions by almost 8% from 2008 to 2016, the number of graduates decreased by 20% as a result of the use of quotas (only 9% of applicants annually enter Uzbekistan's higher education institutions)
- The average number of people per one higher education institution is 5 times higher than in developed countries, which negatively affects the accessibility of education
- Today, students who finished secondary school may apply for admission to only one higher education institution

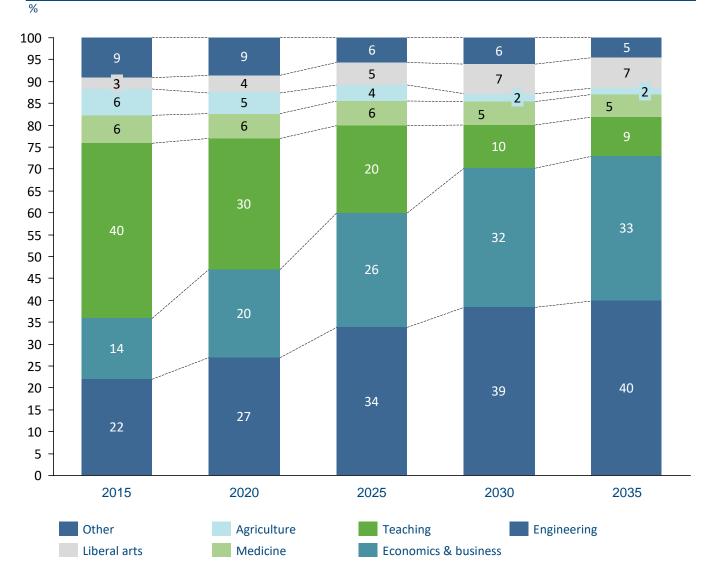
- The low quality of higher education in the Republic of Uzbekistan is caused by the fact that the most of the teaching staff do not have academic qualifications
- Only one-third of these instructors have academic qualifications
- The motivation system does not provide the necessary level of interest in the academic profession among young people

Designated ministries

Sources: State Statistics Committee of the Republic of Uzbekistan, UNESCO Institute for Statistics, OECD, data from open sources, analysis of the working group

Notes: 1 = not including temporarily employed teachers

Structure of workforce specializations



- The country has an acute shortage of engineers, technical specialists, and managers needed to implement innovative development
- It is necessary to ensure that the quality and structure of higher education meet the demands of the labor market
- In countries with above average income and the share of the manufacturing industry being at least 20%, there are on average 1,500–2,000 engineers and specialists in the natural sciences per 1 million people.
 In Uzbekistan, today the value of the same indicator is 540 specialists per 1 million people
- Also, there is a shortage in the reserve pool of managers for the innovative development of Uzbekistan's economy

Designated ministries



Strategic options for development of education

1

Model with a high level of state participation

Provision of services by the state; financing through tax revenues. The private sector meets only the needs of the wealthy





 High accessibility of public education to lowincome groups of the population



- Quality of education depends on the amount of tax revenues
- High risks of low-quality services, especially in public and higher education
- Low level of innovation development of the system

---- Target development option ---

Overall coverage with quality education only subject to sufficient tax revenues

2

Mixed model

Development of private service providers while maintaining state service providers for the low-income population; development of the private sector in education; creation of conditions for the development of science and innovation





- High accessibility to the education system
- Uniform quality at all stages of education



- Low level of private sector development
- Poor development of private financing institutions

Wide coverage of all groups of the population with high-quality education

3

High share of private players

Provision of educational services is fully delegated to private companies; funding is performed through private companies or payment from citizens; state support is provided only for the low-income population through mechanisms for co-financing expenses





High quality of educational services



- Limited coverage of educational services
- High cost of education

Low coverage of poor groups of the population with high-quality education

Export of low-skilled workforce

Uzbekistan continues to export workers; the current structure and training level of personnel remains the same to rapidly form a large workforce

Examples of countries:

Kyrgyzstan Tajikistan

Large number of available workers

Shortage of high-skilled workforce for the formation of a personnel reserve and economic development

Export of high-skilled workforce

There will be changes in the training methodology and programs according to industry needs in the formation of highly qualified personnel potential.

Preparation of labor resources for export to foreign labor markets to increase income from the exported workforce and gain experience abroad



4

- Overcoming the job shortage in Uzbekistan
- Increase in export revenue
- Professional development of domestic specialists
- Problem of family and generational disruption
 - Increased drain of high-skilled staff abroad

2

Norkforce flows

Import of low-skilled workforce

×

This option is not suitable for Uzbekistan

Import of high-skilled workforce

Recruitment of foreign experts for the development of Uzbekistan's economy, and use of the internal workforce while preserving the current education level

Examples of countries:





 Experience of foreign high-skilled specialists



- Need for large investments in recruiting specialists
- Dependence on foreign specialists

Workforce qualifications

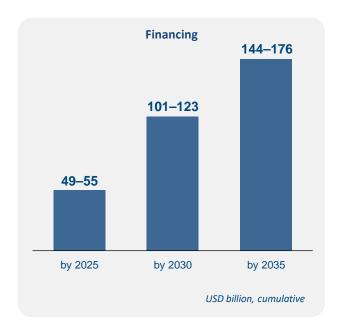


Target vision 2035

Human capital is the driving force of economic development. The concept of uninterrupted education has been implemented to raise high-skilled staff and promote innovative development

- Affordable and quality education for all population groups
- Unified development strategy of education ministries
- National system of education quality assessment
- Developed infrastructure; increased number of schools (no more than 27 students per class), universities (170,000 people per university), and kindergartens
- Transition from mass education to inclusive education
- Implementation of a voucher¹ system of education
- High salaries of university and school teachers (above the average salary)
- Active implementation of online education
- Developed private education market
- Lowered unemployment to 6.2%
- Strong protection of migrant labor rights
- Introduction of a continuing education system
- Qualifications of specialists meet the needs of the market: the market is dominated by engineers, economists, and managers (more than 70% of workforce)

Figures					
	2017	2035	CAGR		
Number of children involved in forced labor, million people	2	0	-100%		
Education expenses, % of GDP	6.4	7.5	0.9%		
Number of graduates who entered colleges and universities, per 100 people	9	80	13.7%		



Notes: 1 = educational system in which students receive state funding in the form of vouchers, which they can use to attend the school of their choice

Key strategic initiatives

2025

2030

2035

- Improve accessibility of preschool education (increase the number of kindergartens, major repairs to existing kindergartens, implement inclusive preschool education)
- Improve the material support of schools (lowering the average number of students in a classroom to 27)
- Adapt educational programs at all levels of education to the needs of the economy (increase the number of subjects related to engineering, economics, and business)
- Develop a system of professional and technical education (opening new specialized schools and vocational schools, expanding the list of educational programs with a focus on the target economic sectors)
- Develop a training and re-training system for teachers
- Increase the number of universities (reduce the population per one university from 419,000 to 170,000 people)
- Raise teacher pay
- Increase the inclusiveness of education and entry of children with disabilities to schools and universities
- Form and implement continuous education on the basis of pilot industry sectors
- Encourage private educational institutions
- Improve protection of migrants' labor rights (including development of a professional training system)
- Implement a national system of education quality assessment
- Create Foresight Centers¹ at leading higher educational institutions
- Improve the legislative framework to provide maternity leave and ensure pay equality

- Transition to mass online education (introduction of online education for all levels of the educational process)
- Develop and spread new technologies and forms of education in the professional education system
- Create a network of schools that implement experimental and innovative programs for trying out new technologies and the content of training and education
- Develop educational projects that allow students to work without discontinuing their education (methodological support of companies, etc.)
- Develop social entrepreneurship and creative industries as a key driver of economic development and job creation (grants for training in creative specialties, etc.)
- Increase the number of employees with academic degrees Promote the obtaining of academic degrees in order to increase the share of high-skilled employees
- Promote international cooperation between universities; recruit foreign teachers to improve the quality of education in colleges and universities
- Expand the list of industries for continuing education
- Develop a voucher educational system
- Introduce high technologies in education (e.g., virtual classrooms, digital paper and ink)

- Develop international cooperation; recognition of qualifications from Uzbekistan's universities abroad
- Assist in the development of virtual workspaces
- Promote the use of artificial intelligence, robots, and drones in agriculture, industry, and the service sector (tax incentives, methodological support)

personnel



finance



es

legislation and state regulation



infrastructure

Culture

Social development



Culture

Current level of development



Key challenges

- High level of state involvement in the cultural sphere, which hinders its development
- Lack of cultural and leisure facilities
- Despite the measures taken by the government to encourage the creation of private exhibition structures, this type of activity is not widespread
- Large number of libraries and low number of users
- Insufficient use of cultural potential to resolve foreign economic and foreign political challenges

Key findings

- High level of state involvement in the cultural sphere, which hinders its development (museums are 99% financed from the state budget, while in developed countries they are also funded through income from commercial activities, crowdfunding, various investments and contributions)
- Lack of cultural and leisure facilities (the number of museums per 1 million people on average is 20 times less than in developed countries)
- Despite the measures taken by the government to encourage the creation of private exhibition structures, this type of activity is not widespread (there are only 3 private exhibitions, but they are characterized by a high share of state participation)
- The number of libraries per one million people in Uzbekistan is more than in developed countries (1.5 times more than in the USA), but the number of users is less than 1%

Cultural Influence Ranking

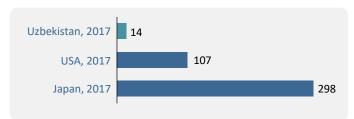


Cultural Influence Ranking, 2017

In the ranking of 80 countries

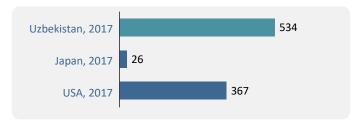
The Cultural Influence Ranking assesses
 countries according to seven criteria: a country is
 culturally significant in terms of leisure, fashion,
 happiness (World Happiness Index); its culture is
 important, modern, prestigious, and popular

Number of museums per 1 million people



- The number of museums per 1 million people in Uzbekistan remains low compared to developed countries
- The absence of a law on patronage prevents the attraction of private and commercial investments to develop this market segment

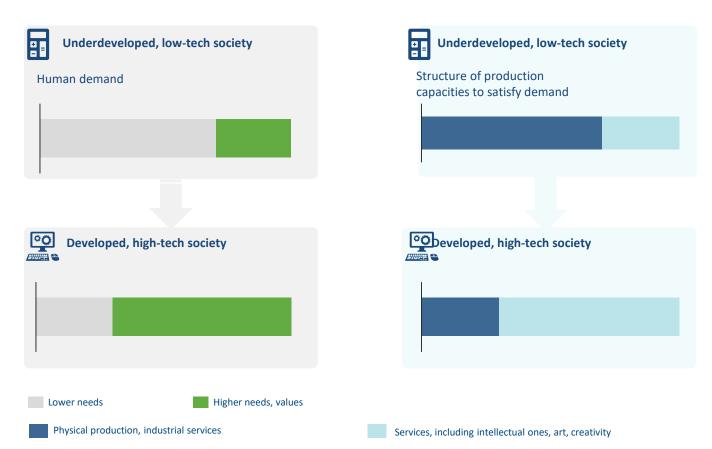
Number of libraries per 1 million people



 Digitalization of the book supply and giving citizens access to electronic information resources helps reduce the number of libraries

Culture

Current level of development



Top 6 countries according to the Cultural Influence Ranking



- A more developed society is characterized by a shift in human demand from satisfaction of lower, purely physiological needs to higher needs. At the same time, scientific and technological progress ensures the satisfaction of these needs through supply
- The development of culture spurs the advancement of higher needs in society; cognitive, aesthetic, and the need for selfrealization. This, in turn, is one of the determining factors in fostering scientific and technological progress

Current level of development

Private exhibitions



Chodra Hovli ethnographic museum in Khiva District



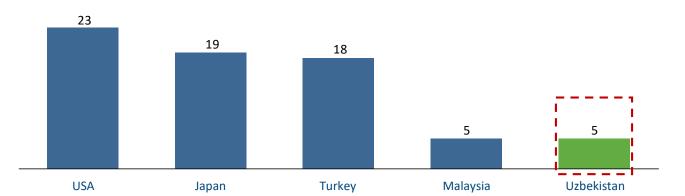
Bogishamol cultural complex in the village of Kyzyl-Su



The city of Khiva (historically significant site) in Khorezm region

Despite the measures taken by the Government of Uzbekistan to encourage the creation of private exhibition structures, this type of activity is not widespread. At the moment, three exhibitions are known, but even they are characterized by a predominant share of state participation

Number of UNESCO world heritage sites



UNESCO world heritage sites in Uzbekistan



Itchan Kala



Historical center of the city of Bukhara



Historical center of the city of Shakhrisabz



Samarkand: a crossroads of cultures

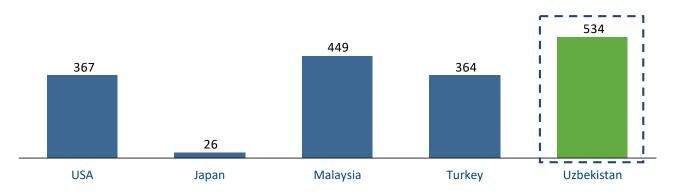


Western Tien Shan (Chatkal nature reserve)

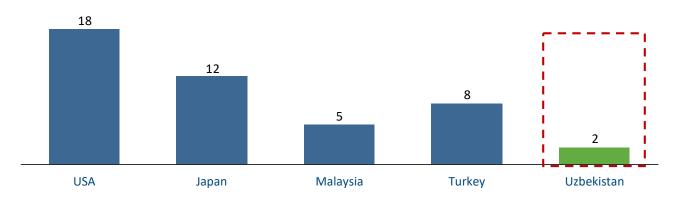


Current level of development

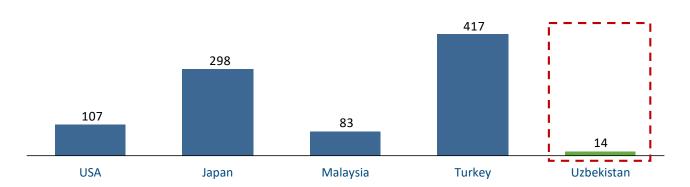
Number of libraries per 1 million people



Number of movie theaters per 1 million people



Number of museums per 1 million people, 2016

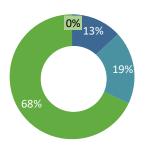


- Despite the large number of libraries in Uzbekistan, only 0.5% of the country's population use libraries
- There are 312 cinemas in Uzbekistan, but at the moment only 68 of them are in use

Strategic options

Private financing model

Sources of financing



Donations



Income from commercial activities

State support



High level of development of the cultural environment due to a significant share of private business participation



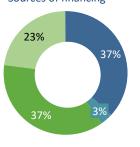
Russia

In an unstable economy, the cultural sphere "suffers" first

Lack of government interference

Diversified financing model

Sources of financing



Donations



Income from commercial activities

State support

A diversified approach to financing reduces intraindustry risks

----- Target development option -----

High share of private (unique) cultural and leisure sites

Examples of countries:



Finland

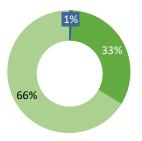
High share of financing through donations, which may cause a number of difficulties in the economies of developing countries

Diversified approach to financing

3

State financing model

Sources of financing



Donations

Crowdfunding/investmen ts/contributions

Income from commercial activities

State support

Significant share of finances comes from the income from commercial activities, which improves the quality of the cultural environment

Examples of countries:







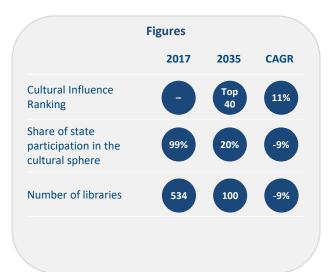
High degree of state participation, which may affect the quality and innovative component of the cultural environment

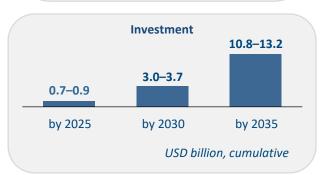
The foundation is state financing

Culture

Target vision 2035

- Modernization and development of regional and district centers of culture and leisure; introduction of cultural centers to help socially underadapted groups of the population
- Creation of a national code of ethics and professional/industry standards
- Involvement of private business in cultural projects (construction of private exhibition facilities and other culture and leisure facilities)
- Creation of motivation systems to improve corporate culture





Key strategic initiatives

- Creation of an incentive mechanism for employees of institutions of culture and corporate culture motivation; updating of qualification requirements for workers; retraining; advanced training; creation of prerequisites for the emergence of competitive specialists and managers in the public sector: preservation and development of the potential of cultural sphere employees
- Development and approval of professional standards for employees of cultural institutions
- Formation of a national code of ethics based on the experience of best international practices
- Modernization and development of regional and district centers of culture management
- Reorganization of inefficient cultural institutions
- Development of cultural development training programs (culture of speech, etiquette, etc.) in educational institutions with a focus on the international experience of Russia and Germany
- Formation of the concept of a national brand
- Taking comprehensive measures to preserve world heritage sites
- Digitalization of Uzbek printed items involving volunteers
- Creation of interactive museums
- Creation of conditions and incentives to attract private business

Application of qualification requirements for employees; retraining; advanced training

2025

- Approval of professional standards for employees of cultural institutions
- Approval of a national code of ethics
- Modernization and development of regional and district centers of culture management; modernization of cultural centers to help socially underadapted groups of the population
- Reorganization of inefficient cultural institutions
- Approval of cultural development training programs (culture of speech, etiquette, etc.) in educational institutions
- Approval of the concept of a national brand
- Taking comprehensive measures to preserve world heritage sites
- Creation of an electronic information resource; provision of access to citizens of Uzbekistan
- Creation of virtual museums; introduction of QR code system
- Engagement of private investors in culture and leisure projects

Ensuring the inflow of qualified personnel

2030

Implementation of professional standards for employees of cultural institutions

2035

- Implementation of a national code of ethics
- Implementation of cultural centers to help socially underadapted groups of the population
- Reorganization of inefficient cultural institutions
- Implementation of cultural development training programs (culture of speech, etiquette, etc.) in educational institutions
- Implementation of the concept of a national brand
- Introduction of comprehensive measures to preserve world heritage
- Ensuring access of citizens of Uzbekistan to the electronic information resource
- Creation of virtual museums
- Engagement of private investors in culture and leisure projects

personnel



finance



legislation and state regulation

infrastructure

Social development



Current level of development



Key challenges

- Shortage of water to satisfy the growing needs of the population, agriculture, and industry
- Soil salinization and pesticide pollution
- Desertification associated with deforestation
- Waste processing
- Aral Sea crisis
- Climate change
- Biodiversity conservation
- Transition to sustainable development
- Lack of education on environmental issues, ethical production, and ethical consumption

Key findings

- In 2018, Uzbekistan was ranked 52nd out of 156 countries by progress in sustainable development goals, which is high. However, it dropped 5 positions compared to 2017
- Though Uzbekistan is not in the Top 100 countries by ecological footprint volume, the country maintains an environmental deficit, which proves that its activity harms the global environment
- The State Committee of the Republic of Uzbekistan for Ecology and Environmental Protection developed measures to prevent the consequences of climate change
- Over 35% of the population do not have access to the centralized water supply, 11% depend on imported water due to the absence of alternatives
- The forest area of the Republic of Uzbekistan is shrinking as a result of illegal logging and desertification: since 2005, the forest area decreased by 2.3% and comprised 7.6% of the total area in 2015
- At the moment, the share of saline soils is over 50%
- There are 221 SHW2 burial and disposal landfills in Uzbekistan. At the present time, 33.4 million tons of SHW have accumulated
- In 1995–2015, energy generated by renewable energy sources (RES) grew by 3.3% annually. However, the share of RES in the total volume of generated electricity remains low compared to the leading international practices

UN Sustainable Development Goals

- Adopted in 2015 as part of the new sustainable development program "Transformation of Our World: Sustainable Development Agenda to 2030"
- Include 17 goals and 169 targets to be achieved by UN member states by 2030
- In 2016, 17 Sustainable Development Goals officially entered into force in Uzbekistan
- Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs
- To achieve sustainable development, it is extremely important to coordinate three main elements: economic growth, social integration, and environmental protection

























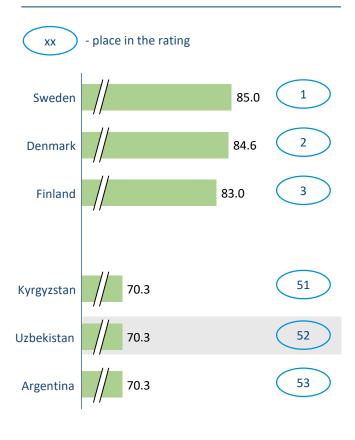
17

PARTNERSHIPS FOR THE GOALS



Current level of development

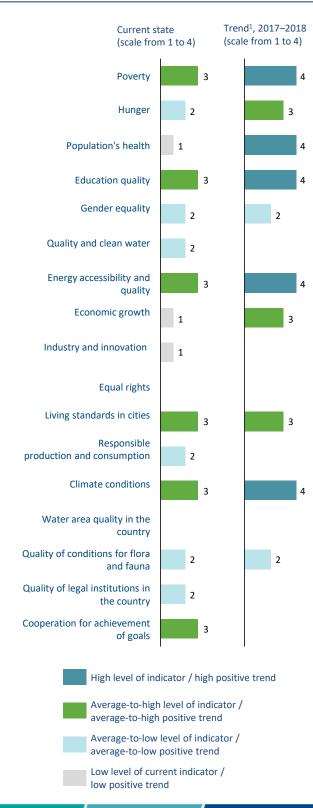
Sustainable Development Goals Progress Index, 2018



Comments

- In 2018, Uzbekistan was ranked 52nd out of 156 countries by progress in sustainable development goals, which is high
- However, compared to 2017, Uzbekistan dropped 5
 positions in the rating, which indicates an overall
 negative trend in terms of achieving Sustainable
 Development Goals
- Today, in accordance with the UN Sustainable
 Development Goals in Uzbekistan, special attention is
 paid to reducing the negative impact of waste on the
 environment and public health

Detailed information on Uzbekistan's Sustainable Development Goals Index, 2018





Current level of development: climate change

Key threats caused by climate change



Defense capability



- In October 2014, the Department of Defense published the Climate Change Adaptation Roadmap, which announced the beginning of work on protecting the US defense capability from possible consequences
- US Secretary of Defense Chuck Hagel called global warming a "threat multiplier" and noted that climate change may facilitate materialization of other threats, from dissemination of contagions to acts of terrorism



Food safety

- Research and intergovernmental organizations unanimously emphasize the urgency of the threat to food safety in the world
- Climate change involves risks related to growing agricultural products in a sufficient amount, which may lead to changes in agricultural practices and the population's diet
- Example of Australia: in 2018, the government allocated a total of USD 1.8 billion to support farmers due to unprecedented drought



"Limiting global warming to 1.5 °C will require 'quick and far-reaching' transition processes concerning land, energy, industrial systems, as well as buildings, transport, and cities. Global carbon dioxide (CO²) emissions caused by human activities will need to be reduced by almost 45% by 2030 versus 2010 levels to reach a 'clean zero' by approximately 2050".

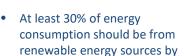
IPCC press release, October 8, 2018

Measures to prevent the consequences of climate change adopted in Uzbekistan



2030

Energy consumption





Forest fund

- Expansion of the forest area of the country by 20302
- Improvement in the quality of forest plantations and diversity of species through increased mechanization in forest restoration
- Implementation of new technology for creating planted forests
- Research on the creation of quickly growing forest plantations



Motor transport

- Introduction of motor transport standards
- Introduction of Euro-6 motor fuel standards

Source: State Committee of the Republic of Uzbekistan for Ecology and Environmental Protection, analysis of the working group

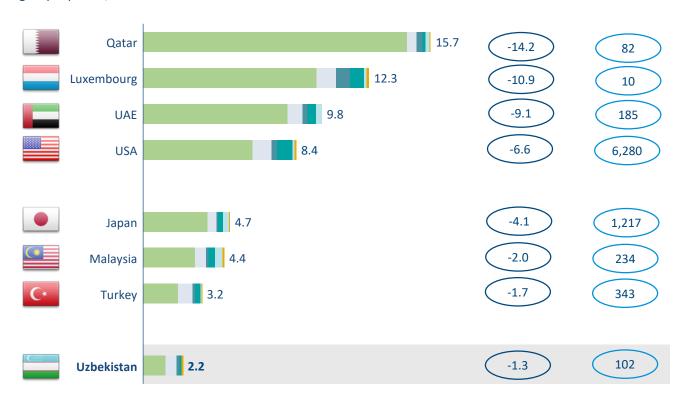
Note: 1 = Intergovernmental Panel on Climate Change; 2 = according to the data provided by the State Committee of the Republic of Uzbekistan for Ecology and

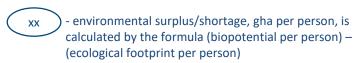
Environmental Protection

Current level of development: climate change













- The Ecological Footprint Index is prepared by Global Footprint Network and includes 190 countries
- Ecological footprint includes the area of biologically productive territory and water area necessary for the production of resources used by people and for waste absorption
- Though Uzbekistan is not in the Top 100 countries by ecological footprint volume, the country maintains an environmental deficit, which proves that its activity harms the global environment
- Furthermore, the amount of carbon dioxide emissions is low and comprises only 0.3% of the total emissions in the world
- In 2017, Uzbekistan signed the Paris Agreement, which will improve the environmental situation through activities to reduce emissions, and through modernization and measures to increase energy efficiency

Current level of development: Aral Sea

Water level reduction in the Aral Sea

1960







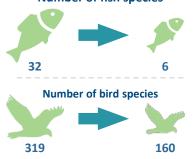
Main stages of the biodiversity decline in the Aral Sea as a result of salinization:

- 1971–1976: salinity exceeded 12–14 g/l, brackish water species of freshwater origin disappeared (carp, grass carp, river perch, Aral spined loach, European carp)
- 1986–1989: salinity exceeded 23–25 g/l, brackish water species of Caspian origin disappeared (sand smelt, stone moroko, sabre carp)
- 1990–2000: salinity exceeded 80–100 g/l, sea species disappeared (pike-perch, catfish, pike)

53.4	Water level, m	31 ⁽¹⁾	> x1.72
67.5	Area, thousand km ²	13.9	> x4.85
10	Salinity, g/l	91 ⁽²⁾	∢ x9.1
56	River flow, km³/hour	3.2 ⁽¹⁾	×17.5

Consequences of Aral Sea dryout

Number of fish species



Number of mammal species



Coastal grassy area



Environment:

- Disappearance of 90% of fauna as a result of increased water salinity
- Increase in climate drought and continentality
- Appearance and continuous growth of the Aralkum Desert with an area of 38,000 km2
- Disappearance of the natural barrier: the Aral Sea used to protect against the spread of dangerous bacteria that appeared in connection with the biological weapons tests at Vozrozhdeniya Island (Barkhan biochemical training center; years of activity 1942–1992)

Economy:

- Termination of fishing
- Unsuitability of water for irrigation of rice, cotton, and wheat

Social aspects:

- Increase in illnesses in the region: constant dust storms (75 million tons of dust annually) disperse sand and toxic chemicals from the bottom of the drying sea
- During 2012–2018, the population of the coastal city Muynak dropped by 25%

Current level of development: Aral Sea

Project for construction of an earth bank and a dam with a flood gate



Dam with a flood gate

Project description:

 In 1990–1998, the government of Kazakhstan built an earth bank to separate the Small and the Large Aral. In 2001, with the support of the World Bank, construction of a dam with a flood gate began. It was finished in 2005

Budget:

• USD 85 million

Result:

- Over the first 8 months, the water level rose 2 meters
- Water area increased by 18%
- Water salinity halved (from 20 to 10 g/l)
- Freshwater species of fish (pike-perch, European carp) returned

Project for creating windbreak forests



Forest ranges on the dry bottom of the Aral Sea

Project description:

 The Agency of the International Fund for the Aral Sea (IFAS) developed a comprehensive program for creating windbreak plantations at Akhantai and in Akkum ridge. The project will be finished by 2017–2019.

Budget:

• USD 300,000 (UZS 2.4 billion)

Expected result:

- Creation of plantations on a total area of 20,363 hectares (Akhantai: 11,660 hectares; Akkum ridge: 8,704 hectares)
- Prevention of salt and dust ingress in Muynak, Karadzhar, and Sudochye Lake
- Reduction in wind erosion
- Anchoring of moving sands

Additional options to solve the existing problem

- Reduction of water intake for the irrigation of fields; modernization of the entire irrigation system
- Development of an international general water strategy
- Replacement of cotton plantations with winter wheat
- Creation of a monitoring system

Current level of development: water







Population with access to the main water supply line,

million people, 2017



Of these, the population's share:



Population using alternative water sources,

million people, 2017



Of these, population receiving water from:



- Over 35% of the population do not have access to the centralized water supply, 11% depend on imported water due to the absence of alternatives
- However, about one-third of the population with access to the main water supply line need to use standpipes
- A quarter of the population using alternative sources need to use natural sources of water supply
- In some districts of Uzbekistan a high level of ground water is observed (e.g., Central Kyzylkum). With the development of desalinization technology, ground water may form the basis for a decentralized autonomous freshwater supply system.

Current level of development: water

The national project "Water" will be aimed at restoration and environmental rehabilitation of water bodies



Water resources yield capacity, GDP/m3 of pure water



Volume of domestic renewable water resources per capita, m3 per person

5,921

Project goals

Assurance of sustainable social and economic development with water resources

Guidelines for action

World

- Elimination of water resource shortages
- Increased efficiency of water resource use by businesses and individuals



Preservation and restoration of water bodies

- Reduction of the adverse man-made impact on water bodies
- Restoration and environmental rehabilitation of water bodies that lost the self-purification capability
- Monitoring of water bodies, including at the border areas

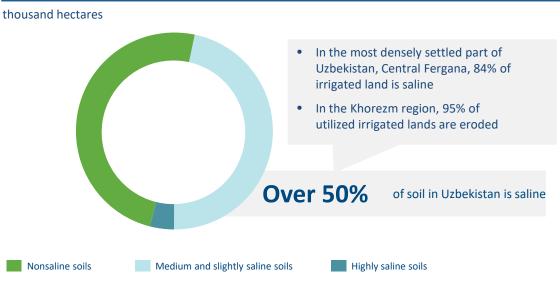


Ensuring protection of population and economic facilities from floods and other adverse impacts of water

- Increasing performance reliability of hydraulic facilities by bringing them into a safe technical condition
- Providing the population and economic facilities with engineering protection structures taking into account economic expediency

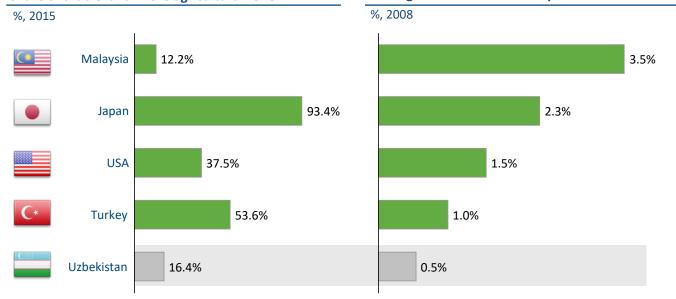
Current level of development: soil and forest areas





Share of arable land in the agricultural zone

Average carbon content in topsoil

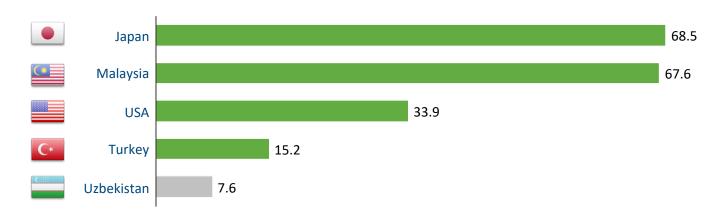


- The share of arable land is rather low
- Low carbon content also indicates a low level of soil fertility
- Over half of all soils in Uzbekistan remain saline, and in some regions the share of saline soils may reach
 95%
- The UN Stockholm Convention on Persistent Organic Pollutants has not been adopted yet

Current level of development: soil and forest areas

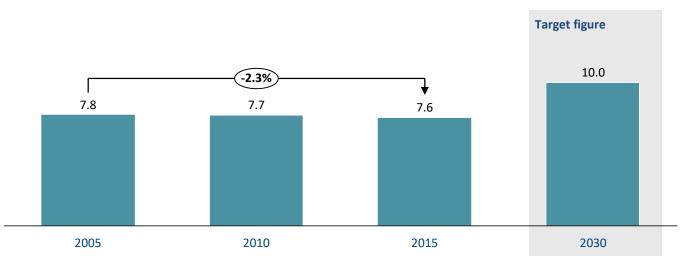
Share of forest cover in the total area

%, 2015



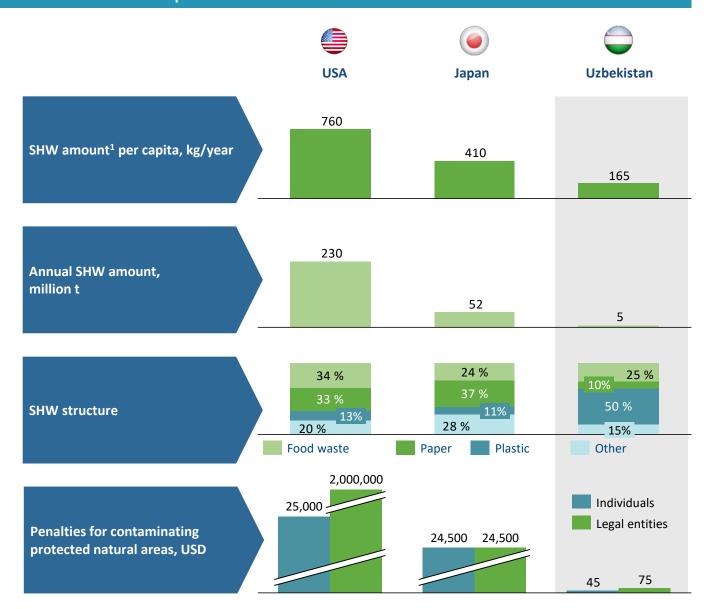
Share of forest cover in Uzbekistan (over time)

%



- Despite the International Fund for Saving the Aral Sea's project to create protective forest ranges on the Akkum ridge and the Akhantai section of the dry bottom of the Aral Sea with an area of 20,000 ha, the area of the forest cover in Uzbekistan is shrinking
- The main reasons for the decrease in the share of forest cover are:
 - Legal and illegal logging
 - Spread of deserts

Current level of development: waste



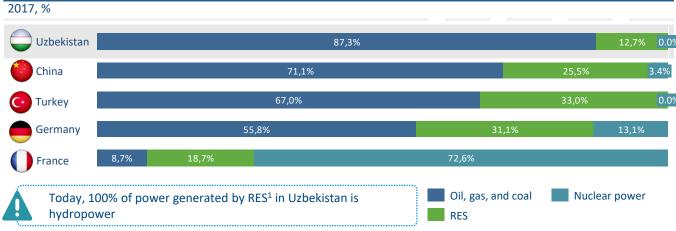
- In 2018, the country's first waste processing plant opened in the Surxondaryo region of Uzbekistan. The plant's capacity is about 182,000 tons of waste per year. The plant is involved in the collection, sorting, and processing of over 10 types of waste from Termiz and Angora districts, as well as the production of finished products on their basis
- There are 221 SHW burial and disposal landfills in Uzbekistan. At the present time, 33.4 million tons of SHW have accumulated
- There are penalties for environmental pollution in Uzbekistan, but they are ineffective



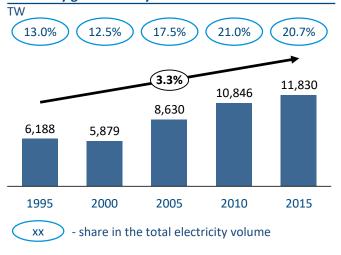
Waste processing plant in Surxondaryo region

Current level of development: renewable energy

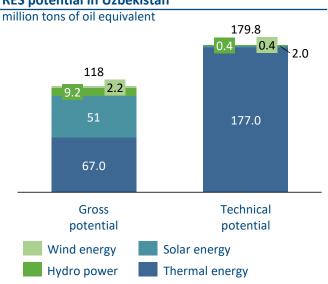




Electricity generated by RES



RES potential in Uzbekistan



- Despite the great potential of the use of solar and wind energy, today the main sources of electricity in Uzbekistan are natural gas, coal, and oil products. In 2017, they accounted for 85.8%
- In 1995–2015, electricity generated by RES grew by 3.3% annually. However, the share of RES in the total volume of generated electricity remains low compared to the leading international practices
- By 2025, plans are to spend UZS 314.1 billion (USD 81 million) from the state budget on the development of renewable energy sources in Uzbekistan and raise UZS 20.5 trillion (USD 5.3 billion) in the form of foreign investments
- Solar energy of the Republic of Uzbekistan can cover 98% of the total technical potential of RES in the country. Yet, the
 use of only one source of electricity involves economic risks. Combined use of different RES is the best solution from the
 point of view of risk assessment, economic costs, and efficiency

Strategic options

1

Focus on reducing emissions and creating resource-saving production

Introduction of restrictions (limits) at the state level in the form of permits for the emission and pollution level for a certain enterprise, for a city as a whole, for a river basin, etc. (the standard is determined by industry-specific ministries and departments)











 Control over the activity of each individual enterprise



The norms established by the state may significantly exceed the regenerative capability of natural resources

Environmental control of individual enterprises within the industry

2

---- Target development option ----

Focus on the maximum permissible level of annual use of natural resources

Introduction of restrictions at the state level, according to which natural resources are used only within their regenerative capability



Examples of countries:







Taking into account the natural resource reserves and their regenerative capability reduces the risk of destroying the environment of a region of the country



There is no incentive for a complete transition to resource-saving or environmentally clean production

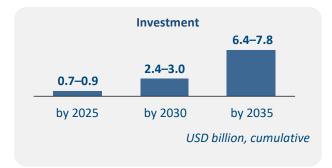
Environmental control over all industries as a whole

Target vision 2035

Uzbekistan harmoniously improves each of the elements of the Sustainable Development Goals, keeping a focus on the implementation of measures to control climate change, improvement of the water supply, development of the SHW management system, expansion of the forest fund, solving the Aral Sea crisis, and transition to renewable energy

- "Water of Uzbekistan" national project (introduction of modern technologies in water supply and irrigation systems, including concreting of water channels, which allows water losses to be reduced by 30–40%)
- "Waste" national project (introduction of SHW processing complexes to recover heat or electricity with its subsequent export; introduction of "green" tariffs: at the moment the technical potential of Uzbekistan in the field of RES is underutilized by 40%)
- Taking comprehensive measures to ensure the localization, restoration, and improvement of the environmental condition in areas with a high level of environmental damage (Aral Sea region, Central Fergana region, Khorezm region) and taking restrictive state measures to eliminate the accumulated damage
- Involvement of state environmental agencies in the development of large projects with potential environmental consequences and risks
- "Greening" of the population's consciousness from preschool age





Key strategic initiatives

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2025

2030

2035

- Implementation of modern water supply and irrigation systems applicable in the conditions of the Republic of Uzbekistan
- Planning and construction of waste processing facilities to recover heat or electricity
- Taking measures to reduce waste and consumption of environmentally harmful materials
- Taking measures to ensure involvement of state environmental agencies in the development of large projects with potential environmental consequences and risks
- Formation of the budget to control climate change according to UN recommendations
- Analysis and implementation of the leading drip irrigation practices of Morocco, Israel, and Turkey
- Development of environmentally advantageous industry sectors
- Development of water desalinization technology
- Approval of the environmental training programs for educational institutions and fostering the environmentally responsible thinking of the population

- Development and implementation of systems for monitoring the quantity and quality of water consumed as well as quality of soils
- Development and implementation of comprehensive measures to ensure the localization, restoration, and improvement of the environment in an ecological disaster area
- Modernization of services for control and protection of the Republic of Uzbekistan from cross-border environmental pollution
- Taking measures to strengthen cooperation with the global community for the purpose of solving environmental problems
- Development and implementation of environmentally clean and resource-efficient technologies (alternative energy sources)

- Changing the approach to urban planning (creation of infrastructure for riding bicycles, creation of places for parking/charging electric vehicles)
- Changing the approach to building design (use of geothermal heat pumps to heat and cool buildings; design of buildings with regard for solar radiation and minimization of building heating with the sun)
- Development and implementation of a geoinformation system that provides data collection, storage, analysis, and graphic visualization

personnel

iel 🛑 f

finance





legislation and state regulation

infrastructure

4. Development of technology and innovations

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Development of technology and innovations



Current level of development



Key challenges

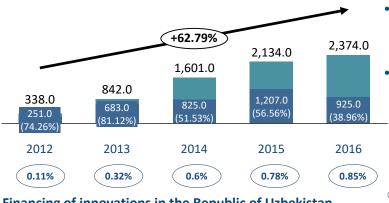
- Problems with the availability of highly educated personnel in the labor market, in particular, in the IT field
- Ineffective research financing system as well as reduced financing
- Problems with commercialization of inventions
- Low level of development of innovative infrastructure (in particular, free economic zones [FEZs], business incubators)
- Interference of the state in business
- Underdeveloped telecommunications infrastructure
- Problems with statistical data
- Basic science is fragmented and isolated from the global research community

Key findings

- Innovative development of the Republic of Uzbekistan is at the initial stage; according to most indicators of innovative development, Uzbekistan lags far behind the leading countries
- **Small share** of innovative enterprises¹ in the total number of companies (0.85% of the total number)
- Uzbekistan is a net importer of high-tech and scienceintensive products, but their share in total imports is only 6.2%
- The current state of government regulation does not help the development of innovation – Uzbekistan holds low positions in international ratings such as the Doing Business Index, Economic Freedom Index, and Corruption **Perceptions Index**
- The **poor development of basic science:** Uzbekistan performs 0.02% of world research with low citation rates
- Research scientists make up a small portion of the employed population (0.12%), and their absolute number is also small - 16,700 people
- Problems with intellectual property protection

Number of innovative companies

Number of innovative enterprises and share of new innovative enterprises, number and %

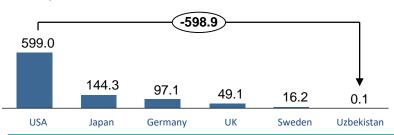


- In the last 5 years, there has been a significant increase in the number of companies providing innovative products and services (with an annual growth rate of 63%)
- The share of innovative enterprises in the total number of enterprises is increasing, but in 2016, it did not exceed 0.85% of the total number of companies (in Russia for the same period, about 9%)
- New innovative enterprises

Share of innovative companies in the total number of companies

Financing of innovations in the Republic of Uzbekistan

R&D expenditures, USD billion, 2015

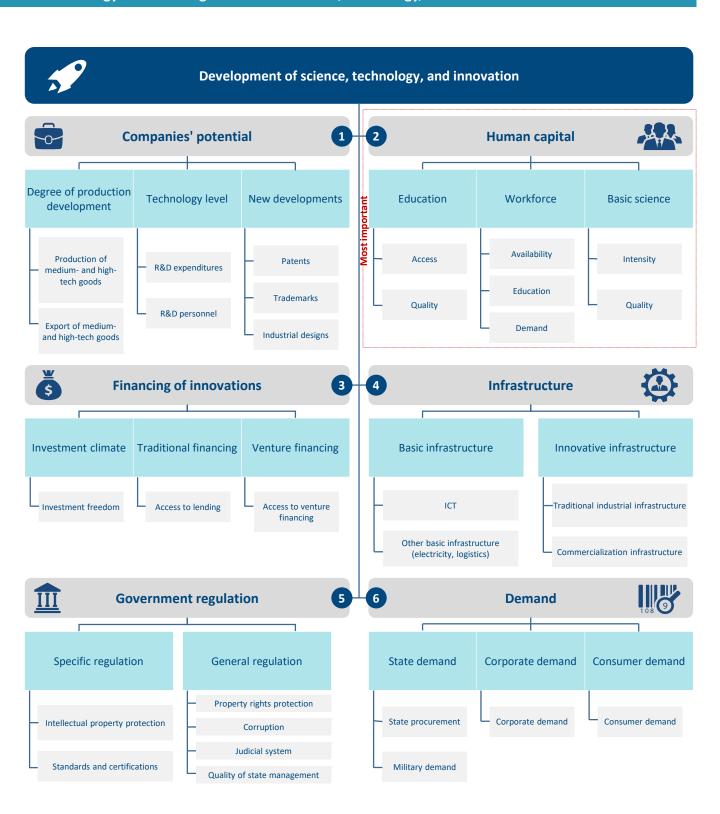


- R&D financing in Uzbekistan amounted to USD 133 million in 2015
- In developed countries, R&D funding is ten times greater: from USD 16.2 billion in Sweden to USD 599 billion in the United States

Sources: State Statistics Committee of the Republic of Uzbekistan, World Bank, National Science Foundation (US), World and National Economy journal, analysis of the working group
Note: 1 = innovative enterprise - a subject of innovation activity (infrastructure) founded for the purpose of development and implementation of new or improved products or services, technology, or production methods, and other kinds of innovation activity (Law of the Republic of Uzbekistan "On Innovation Activity")

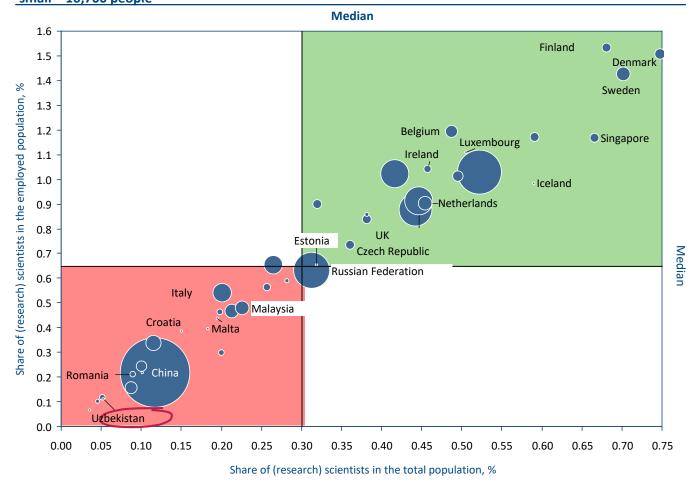
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Methodology for assessing the state of science, technology, and innovation



Share of research scientists in the economy, 2016*

Research scientists make up a small portion of the employed population, and their absolute number is also small – 16,700 people

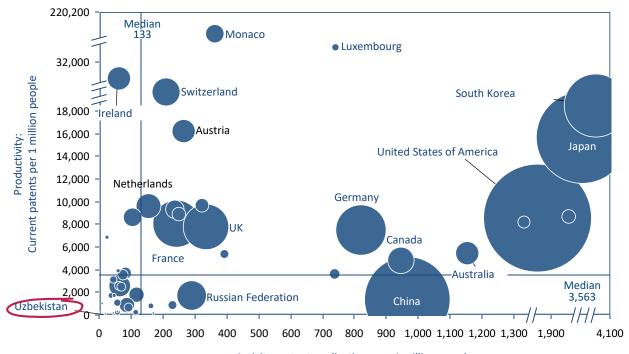


The size of the circle means the number of (research) scientists (this size = 250,000 people)

By the absolute indicator of the **total number of research scientists**, Uzbekistan is at a comparable level with **Ireland** (22,000) and **Hungary** (25,000) with its **16,700 people**. Yet, by the relative rate of the share in the employed population, Uzbekistan (at 0.12%) **lags behind the comparable countries:** in Ireland, the share is 1.04%, and in Hungary it is 0.56%

Share of research scientists in the economy, 2016*

Uzbekistan lags far behind the leading countries both in terms of share and patent activity, while the number of active patents is decreasing

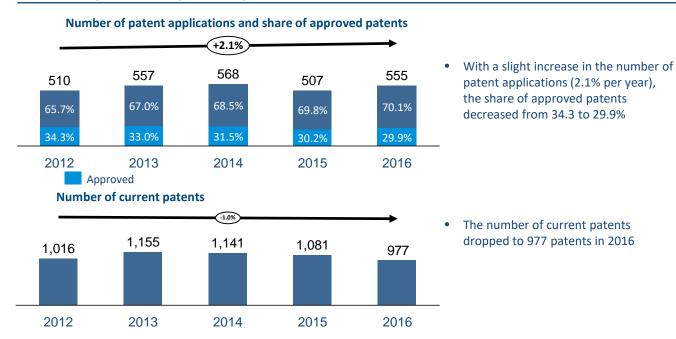


Activity: patent applications per 1 million people

Size = number of current patents (this size = 50,000 patents)

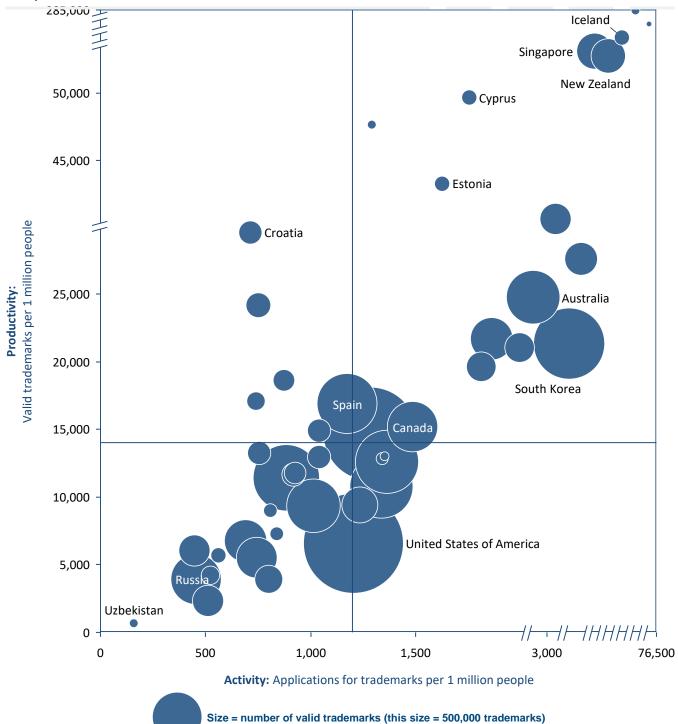
 In the Republic of Uzbekistan, there are 17.1 patent applications per 1 million people and 30.2 current patents per 1 million people

Indicators of patent activity in the Republic of Uzbekistan, 2012–2016



Indicators of trademark (TM) registration activity, 2016

Despite a positive trend in the number of applications and valid trademarks, Uzbekistan lags behind competitor countries



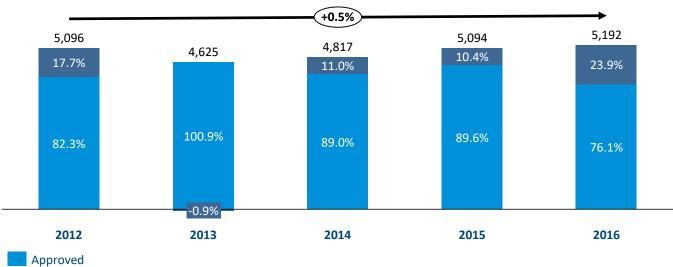
• In the Republic of Uzbekistan, there are 160.3 applications for trademark registration per 1 million people and 615.4 current trademarks per 1 million people

Indicators of trademark (TM) registration activity in the Republic of Uzbekistan, 2012–2016

Despite a positive trend in the number of applications and valid trademarks, Uzbekistan lags behind competitor countries

Number of applications for TM registration and share of approved applications





With a slight increase in the number of applications (0.5% per year), the share of approved applications decreased to 76.1%

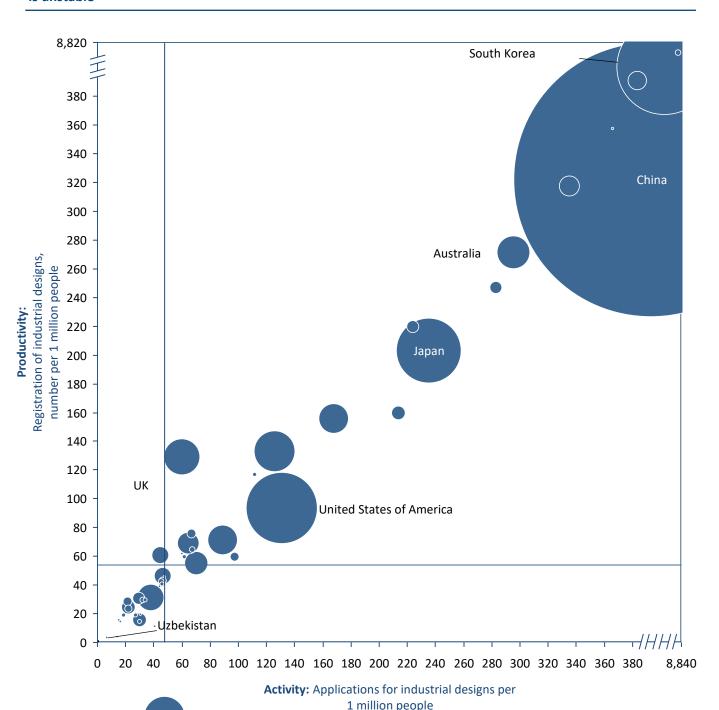
Number of existing TM

number +6.8% 19.930 18,852 17,967 16,421 15,302 2012 2013 2014 2015 2016

The number of valid trademarks is increasing by 6.8% per year

Indicators of industrial design registration activity, 2016

The number of applications for registration of industrial designs is growing, but the number of registrations is unstable



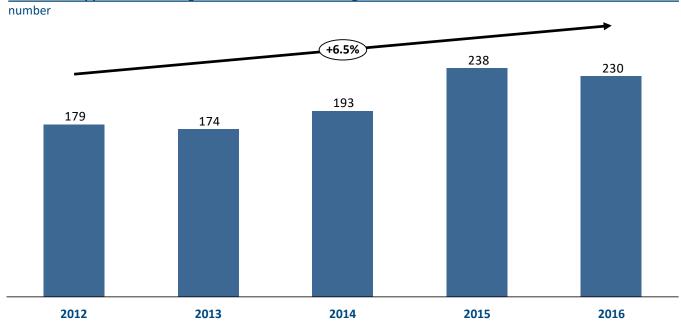
Size = number of registrations in 2016 (this size = 10,000 industrial designs)

In the Republic of Uzbekistan, there are 7.1 applications for registration of industrial designs per 1 million people and 2.8 registered industrial designs per 1 million people

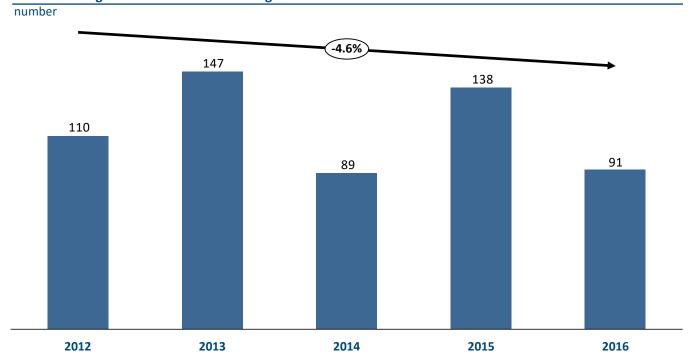
Indicators of industrial design registration activity in the Republic of Uzbekistan, 2012–2016

The number of applications for registration of industrial designs is growing, but the number of registrations is unstable

Number of applications for registration of industrial designs



Number of registrations of industrial designs

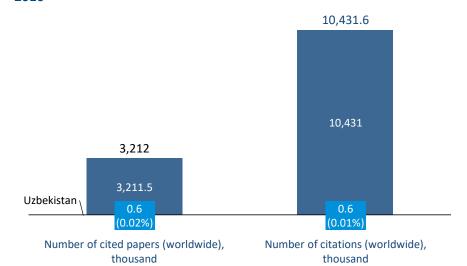


The number of registrations of industrial designs is unstable and varies from 90 to 150

Development of basic science

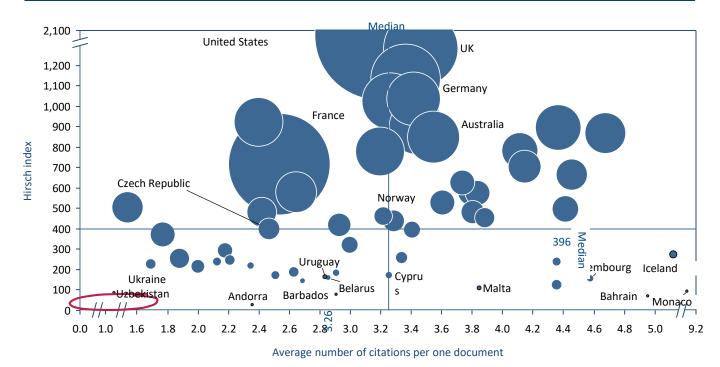
Poor development of basic science: Uzbekistan performs 0.02% of world research with low citation rates

Uzbekistan's share in the number of publications and citations of scientific papers, 2016



- Uzbekistan performs 0.02% of the world's scientific research
- The number of citations of Uzbek research is even lower – 0.01% of world citations

Scientific paper citation indices, 2016



Size = number of citations in 2016 (this size = 10,000 citations)

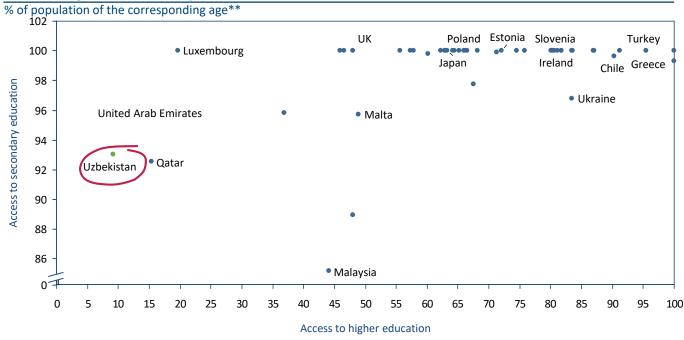
Citation indices of Uzbekistan: 1.06 citations per 1 paper, when the median for the reference group is 3.26 citations; Hirsch index* is 83, when the median is 396

Note: * Hirsch index is a quantitative measure of a country's productivity based on the number of publications and the number of citations of those publications (a higher value means higher productivity)

Access to education

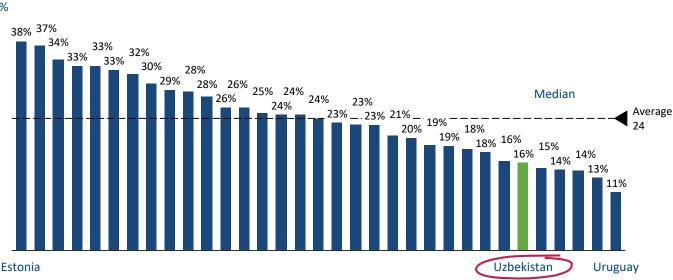
Access to education, especially higher education, is hindered. This leads to a lack of people with higher education and, as a result, to a lack of highly qualified personnel

Access to higher and secondary education*



- In most countries, the level of access to secondary education reaches 100% and above, while in Uzbekistan it is 9.3%
- The level of access to higher education in Uzbekistan is the lowest in the reference group: 9.2%

Share of the population over age 25 with higher education* in the group of reference countries



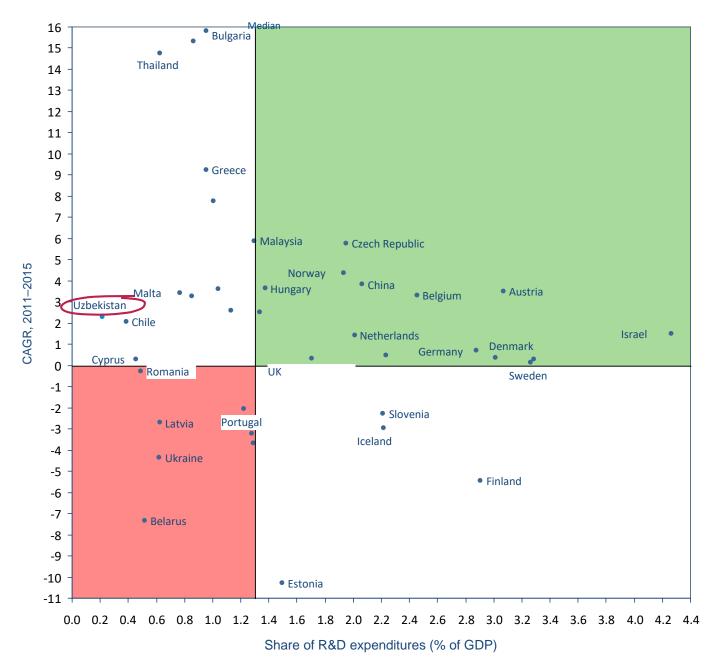
- In Uzbekistan, 15.8% of the population over 25 years old have higher education (bachelor's, master's, doctoral degree,
- According to this indicator, Uzbekistan is in the 4th quartile of the countries of the reference group

Note: * data for 2016; in the absence of data, data for previous years was used (up to 2014 inclusive) ** If the indicator value is above 100%, it is shown as 100% on the graph

R&D financing

In 2015, Uzbekistan had the lowest share of R&D expenditures among the leading countries in innovative development, though the dynamics were positive

Level of innovative development according to the share of R&D expenditures in GDP in 2015 and the average annual growth rate (2011–2015)

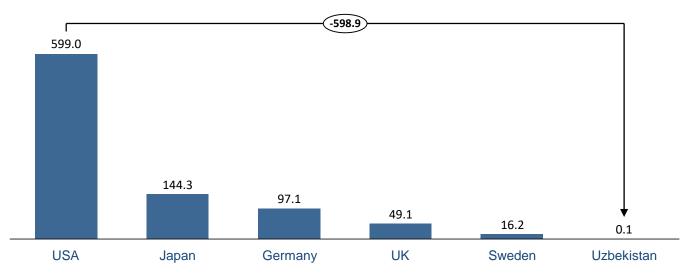


- The share of R&D expenditures in GDP in Uzbekistan was 0.2%; the annual growth rate was 2.3%
- The latest available data on the share of R&D expenditures in GDP is for 2015, number of countries with available data is 39

R&D financing

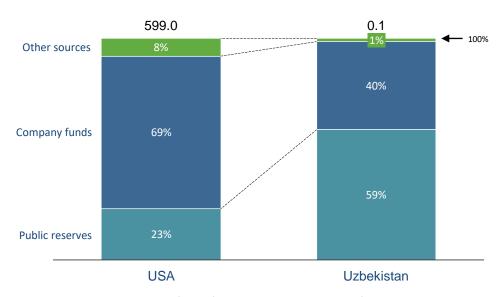
The volume and structure of R&D expenditures from traditional sources (government and business) differ significantly from developed countries

R&D expenditures, USD billion, 2015



- R&D financing in Uzbekistan amounted to USD 133 million in 2015
- In developed countries, R&D funding is ten times greater: from USD 16.2 billion in Sweden to USD 599 billion in the United States

Structure of R&D expenditures, USD million, 2015-2013*



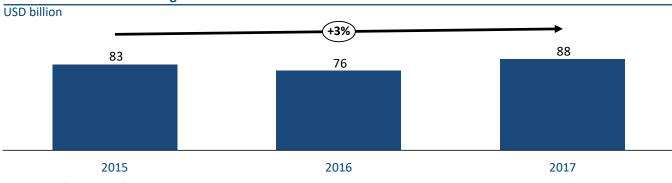
- In the USA, companies are the main source of R&D financing, and government funds make up only 23%
- At the initial stage of innovative development, R&D is stimulated through state funds like in the Republic of Uzbekistan (59%)

Note: * Data on the Republic of Uzbekistan for 2013, on the USA for 2015

Venture financing in international practice (2017)

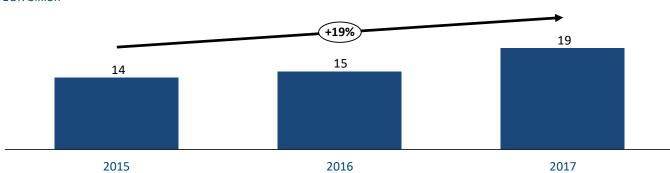
There is no venture financing in Uzbekistan, but the Fund for Support of Innovative Development and Ideas was established, and tax incentives were introduced for venture funds

Volume of venture financing in North and South America



Volume of venture financing in Europe





Venture financing in Uzbekistan

- There is no data on the presence of venture funds or venture investments in Uzbekistan
- According to the Ministry of Innovative Development, Uzbekistan ranks 92nd in the Global Innovation Index in terms of venture capital transactions
- In 2018, the Fund for Support of Innovative Development and Ideas was established under the auspices of the Ministry of Innovative Development of the Republic of Uzbekistan
- Information on the initial results of the fund's activities as well as the volume of planned investments is not available
- Measures are taken to stimulate venture activity: in Uzbekistan, venture funds created to cofinance high-tech entrepreneurial startups are exempt from all types of taxes and mandatory payments until January 1, 2023
- The investment climate is characterized as difficult, in particular, Uzbekistan has 0 points and occupies last place in the "Investment Freedom" section according to the Economic Freedom rating



Venture financing is at the initial stage of development in the Republic of Uzbekistan

Infrastructure development

Infrastructure is characterized by a low degree of development

Infrastructure for innovative development

Basic infrastructure

ICT

Other basic infrastructure

Innovative infrastructure

Traditional industrial infrastructure

Commercialization infrastructure

Components:

- Access to information and communication technologies (119th place in GII*)
- Use of ICT (90th place in GII*)

Components:

- Electricity generation (79th place in GII*)
- Logistics performance (116th place in GII*)

Components:

- Traditional industrial clusters
- Research institutes, research technological institutes, etc.

Components:

- Free economic zones (18 FEZs in 11 regions)
- Technology parks (1 active = Yashnabad technology park)
- Special small industrial zones (in 8 regions of Uzbekistan, 306 ha)
- Business incubators, etc.

Problems:

- Insufficient broadband internet coverage
- Low mobile internet geographic coverage

Problems:

- Shortage of electricity in some regions
- Low maneuvering capacity (approx. 6%) based on thermal energy
- High level of losses in the old distribution networks
- High cost of logistics

Problems:

- High degree of depreciation of fixed assets
- Outdated equipment
- Staff shortage

Problems:

- Small number of residents and, as a result, low rates of job creation
- Low interest from foreign investors

Level of development: Low



Level of development: Below average



Level of development: Medium



Level of development: Low



Note: * Positions in GII are given according to the data of the Ministry of Innovation Development presented at Uzbekistan 2035 Forum

Uzbekistan in international ratings

Index of Economic Freedom

2017

74

Current government regulation does not contribute to innovative development



2017

Corruption Perceptions Index

The Republic of Uzbekistan is not represented in important ratings: International Property Rights Index, ICT Development Index, Global Innovation Index, Ease of Doing Business Index, Bloomberg Innovation Index, Global Competitiveness Report

128

out of 180

Intellectual property protection and copyright

out of 180

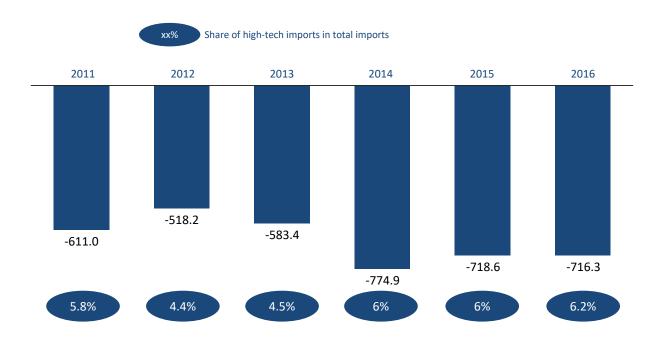
- Main regulatory documents: the Law on Trademarks, Service Marks and Appellations of Origin; the Law on Copyright
 and Related Rights; and the Law on Inventions, Utility Models, and Industrial Designs
- The Intellectual Property Agency is a member of WIPO
- The number of cases related to intellectual property is increasing (22 cases related to intellectual property items, and their rights were considered in 2011, and more than 80 cases in 2017)
- Open sources provide information that there is unfair competition in intellectual property in the country, in particular, foreign companies cannot enter the Uzbek market due to the illegal takeover of brands by national companies (for example, Turkish company Kalekim)
 - The Ministry of Innovation Development of the Republic of Uzbekistan was established in 2017 to establish state work in the field of innovation support
 - Active work on the introduction of E-Government is performed

Export and import of high-tech and science-based products

Uzbekistan is a net importer of high-tech and science-intensive products, but their share in total imports is only 6.2%

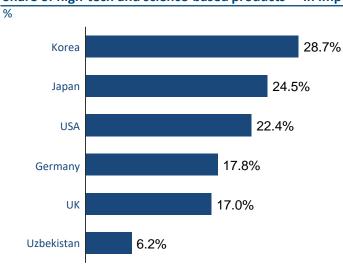
Trade balance* for high-tech and science-based products**

USD million



 Uzbekistan shows a negative trade balance for high-tech and science-intensive products, while the share of high-tech imports increased slightly

Share of high-tech and science-based products** in imports

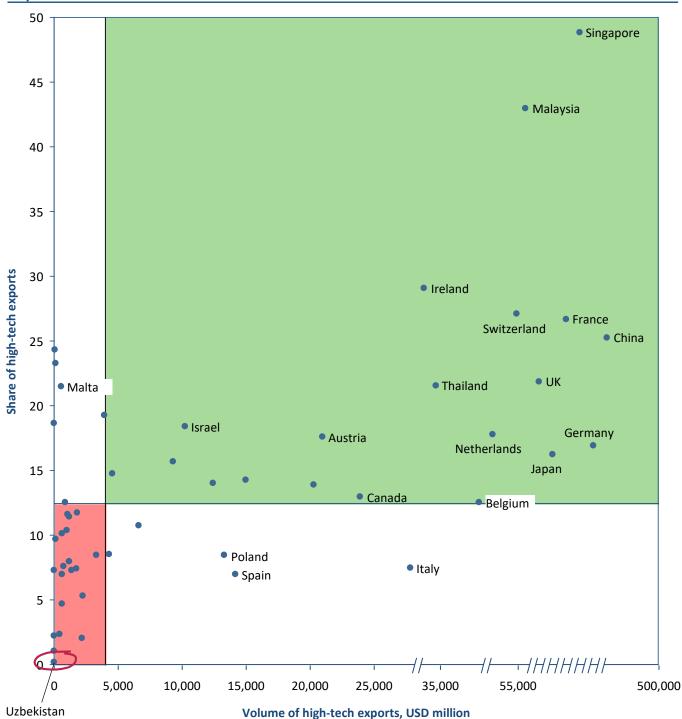


The share of high-tech and science-intensive products in developed countries is about 20% of imports

Note: * with the exception of natural uranium (code 525.11 according to SITC Rev. 4) ** According to Eurostat classification

Volume and share of high-tech exports, 2017*

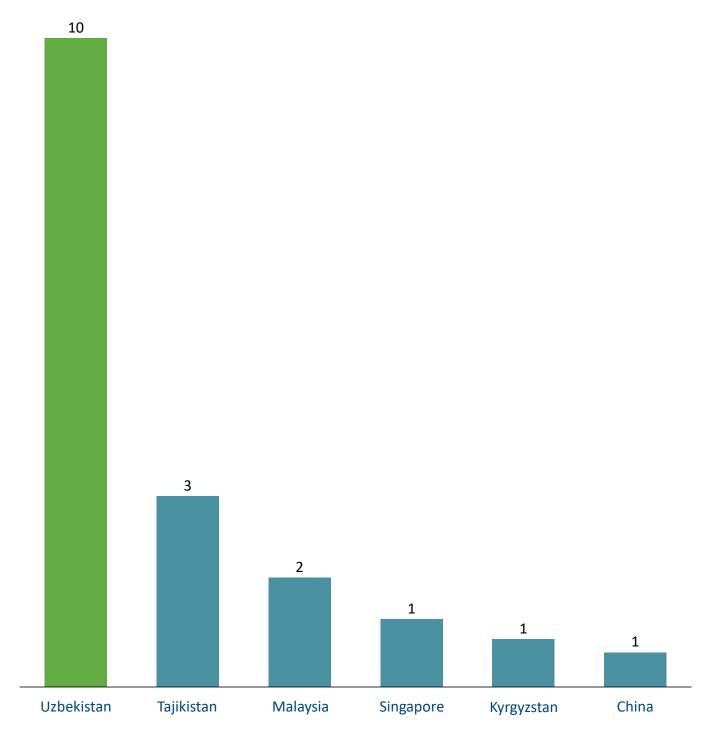
Companies of the Republic of Uzbekistan are not high-tech exporters: the volume and share of high-tech exports remain low



• The share of Uzbekistan's high-tech exports amounted to 0.2%, or USD 27 million

Proportion of the population living in extreme poverty(a)

Consumer demand for high-tech products is limited by low incomes of the population



• Uzbekistan ranks 125th in terms of GDP based on PPP per capita (of 185 countries) at the end of 2017

International experience: technology transfer model in Singapore

Singapore is one of the global leaders in the development of innovations and ranks 5th place in the Global Innovation Index 2018. A successful technology transfer model is one of the factors that made Singapore a leader in innovations



Technology Transfer Network offices

Description:

- Founded in 2008 as an initiative of 8 Singapore universities
- The key goals are:
 - support for filing and updating patents
 - training of professionals in the field of technology transfer
 - joint marketing
 - development of leading practices in technology transfer

Performance results:

 As of 2015, membership extended to 25 organizations, including those from other Asian countries, USA, Canada, Europe, and New Zealand

Online catalog in technology universities (technology offer database)

Description:

- Maintains accounting of technology developed in the universities
- The technology is sent selectively for assessment to different companies
- Then companies may request a business plan based on the technology they are interested in and may purchase a license

Performance results:

 The instrument allows annual provision of a number of exclusive licenses to companies that will be able to use the development in the best possible way

Corp Lab@University Scheme

Description:

- The program allows foreign and local companies to request university research studies
- Through the program, companies may also open their own laboratories in Singapore's higher educational institutions

Performance results:

- The first collaboration was the Rolls-Royce laboratory on the campus of Nanyang Technological University
- Plans are to finish 32 joint research projects within 5 years

Strategic options

Uzbekistan is an importer of new technologies

Uzbekistan increases its GDP at the expense of traditional industries. Implementation and development of technologies are carried out by foreign experts, which has no impact on the development of science and R&D in the country



Examples of countries:

Thailand



Possibility of using advanced technologies



- Lack of motivation to develop science
- Lack of long-term incentives for advanced training of staff
- Lack of incentives for innovative development

The current situation is maintained

-----Target development option --

Uzbekistan is a part of global innovation development

Most technologies are imported. Uzbekistan actively invests and creates new technologies in some industries (for example, traditional ones)





Increased labor productivity in key industries

- development of adjacent industries Investments of private companies in applied technology
- The current profile of industries will not fully match global growth trends

Brazil

Multiple sectors of the economy (services) will need imported technologies

Innovative leadership in expert areas

Uzbekistan is the world's innovation center

Innovation development in all sectors of the economy. Investments in the development of skills and search for specialists. Global R&D center





Ability to launch SMEs quickly, with long-term effect of support



- Need for significant investment in innovative development
- Lack of qualified personnel for rapid development of advanced technologies
- Lack of developed high-tech production facilities for testing innovations

Investments in the development of skills, including nonpriority ones

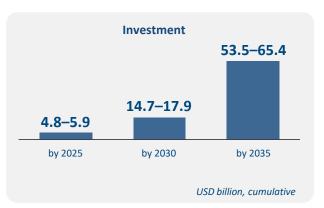


Target vision 2035

Uzbekistan is an innovation hub in industries that are locomotives of economic growth Most technologies are imported. In certain industries (e.g., traditional) Uzbekistan actively invests in the creation and development of new technologies

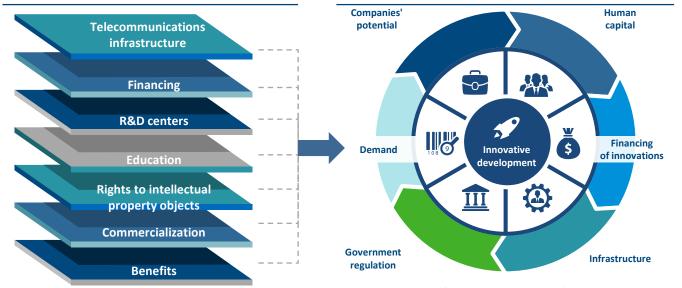
- Renovation and construction of telecommunications infrastructure, including broadband
- Creation of a system of development and support of basic research and reformation of the higher education system
- Stimulation of private financing of the educational institutions' funds, in particular targeted scholarship programs and endowment funds
- Increased R&D financing, including development of venture financing of startups with participation of international investment funds
- Involvement of foreign companies (South Korean, Japanese, German, etc.) in the creation of R&D centers to develop internal skills
- Development of private education (focus on universities) as well as recruitment of world renowned experts, in particular to develop technical higher education
- Protection of intellectual property rights: combating piracy and plagiarism, and copying of international trademarks
- Renovation and creation of innovative infrastructure for commercialization in each region of Uzbekistan (technology parks, business incubators, FEZs)
- Tax and customs benefits for innovation centers (10+ years for long-term investment)
- Creation of a technology transfer system





Main areas of development

Main areas that underwent changes



Target vision 2035



Key strategic initiatives



5. Appendix to the Breakdown

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Appendix to the Breakdown



Current level of development



Key challenges

- High tax burden
- Frequent changes in tax rates
- Complexity and instability of the tax legislation (The Tax Code is not a directly applicable law.)
- Significant difference in the level of tax burden between the simplified tax system and the common tax system
- Wide use of "tax schemes" to evade taxation
- Widespread practice of supporting business entities through tax and customs benefits
- Lack of taxation concepts recognized at the international level
- Imperfection of tax control and administration

Key findings

- Indirect taxes provide 54% of the budget. Their share in the tax revenue increases, and the share of direct taxes decreases. (VAT provides more than one-third of the budget.)
- The main taxpayer is industry that provides 65.7% of tax payments among large entities. In industry, more than 52% of taxes are provided by the food and fuel industries.
- Frequent changes in tax rates negatively affect the investment climate.
- The Tax Code is not a directly applicable law, which leads to a significant number of bylaws. Tax rates are annually established by decisions of the president of the Republic of Uzbekistan.
- The Republic of Uzbekistan has a high tax burden that hinders the development of the economy, in particular, the marginal rate on investments is 49% (23% in Georgia).
- The high tax rate on the wages fund leads to concealing the real number of employees and the wages fund by taxpayers (about 50% of the nominal salary level).
- The practice of supporting business entities through tax and customs benefits, including individual ones, which negatively affects fair competition due to the absence of an effective system of monitoring and control of the efficacy of such benefits (the total amount of targeted fiscal benefits in 2017 is more than UZS 48 trillion).
- Significant difference in the tax burden level between the business entities that pay taxes under the simplified and common tax systems
- The widespread use of "tax schemes" for tax evasion expressed primarily
 in the artificial splitting of a business into small companies that can apply
 a more favorable simplified tax system (confirmed by the ratio of the
 number of entities applying the "simplified tax system" to the number of
 entities applying the standard regime, 1 to 10)
- Significant share of the shadow economy as well as developed corrupt practices
- Uzbekistan ranks 64th among 190 countries in the Tax System Efficiency section of the Doing Business rating.
- Imperfect information exchange mechanisms between the government bodies and organizations, forms and methods of electronic tax administration and tax control

Main taxes

Taxes and other ma	andatory payments
National	Local
 Corporate income tax personal income tax Value-added tax Excise tax Taxes and special payments for subsoil users Extraction tax Excess profits tax Signature bonus Commercial discovery bonus Tax on use of water resources unified social tax Insurance contributions of citizens to the nonbudgetary Pension Fund mandatory contributions to state special-purpose funds Contributions to the Republican Road Fund State fee Customs payments unified tax payment Unified land tax 	 property tax Land tax Tax on gasoline, diesel, and gas consumption Fee for the right to the retail sale of certain types of goods and provide certain types of services Fixed tax on certain types of business activities

Tax rates

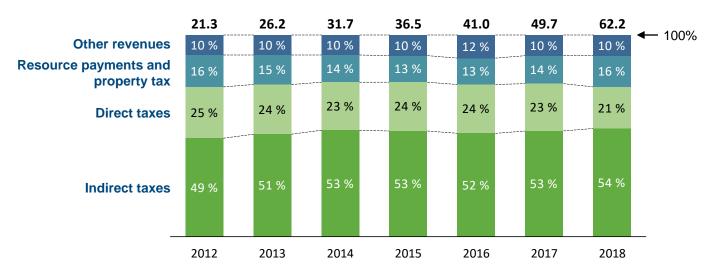
- Tax rates are annually established by decisions of the president of the Republic of Uzbekistan.
- Frequent changes in tax rates negatively affect the investment climate, as they make it impossible to calculate the investment attractiveness of projects due to the uncertainty of tax rates.

Indicators	2012	2013	2014	2015	2016	2017	2018	2019
Corporate income tax	9	9	8	7.5	7.5	7.5	14	12
Dividend tax	10	10	10	10	10	10	10	10
Personal income tax (maximum)	22	22	22	23	23	23	22.5	12
Value-added tax	20	20	20	20	20	20	20	20
Unified social tax	25	25	25	25**	25**	25**	25**	12
Unified tax payment for small and private businesses	6*	6*	6*	6*	5*	5*	5*	canceled
Turnover tax (turnover up to UZS 1 billion)	0	0	0	0	0	0	0	4
Corporate income tax	3.5	3.5	4	4	5	5	5	2
Tax on improvement and development of social infrastructure	8	8	8	8	8	8	canceled	0

 $[\]boldsymbol{^*}$ Since 2012, 5% for industry; since 2015, 5% for construction

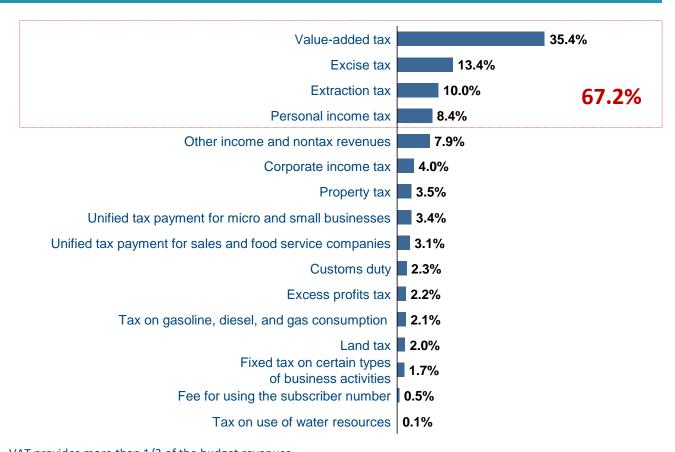
^{**} Since 2015, 15% for small and private businesses

Structure of tax revenues by type of taxes, UZS trillion



Indirect taxes provide 54% of the budget. Their share in the tax revenue increases, and the share of direct taxes
decreases.

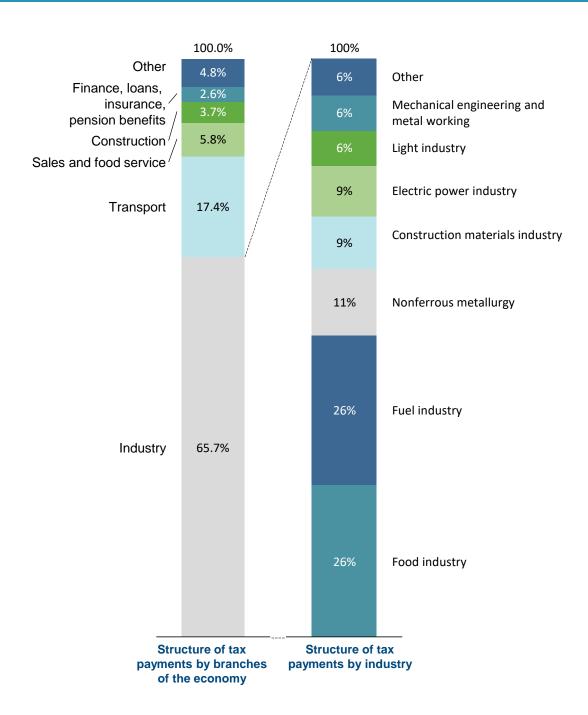
Structure of tax revenues to the budget by specific taxes, 2018



- VAT provides more than 1/3 of the budget revenues
- VAT, excise tax, subsoil use tax and personal income tax provide 67.2% of the budget.



Structure of tax payments by branches of the economy (large entities) in %, 2016

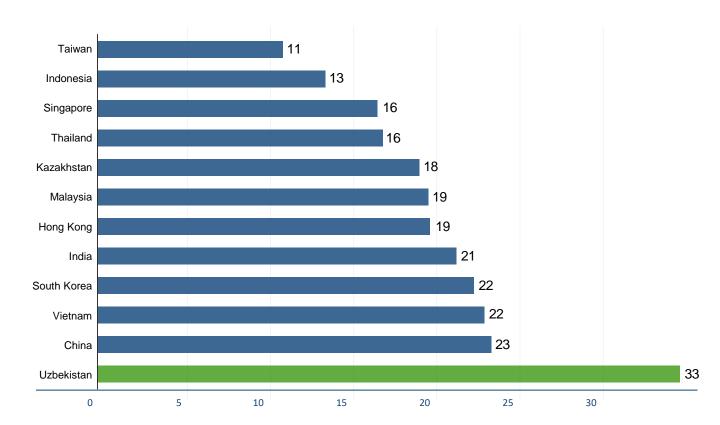


- The main taxpayer is industry that provides 65.7% of tax payments.
- The food and fuel industries provide more than 52% of tax payments.

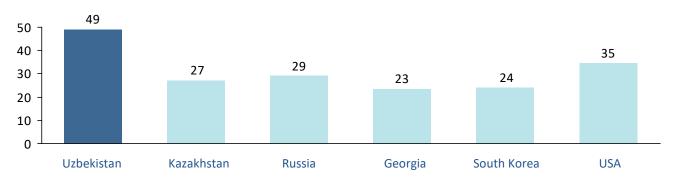
Tax burden

The Republic of Uzbekistan has a high tax burden that hinders the development of the economy.

Ratio of revenues of the state budget and extra-budgetary funds to GDP of individual Asian countries in 2015 (in %), data of the Asian Development Bank

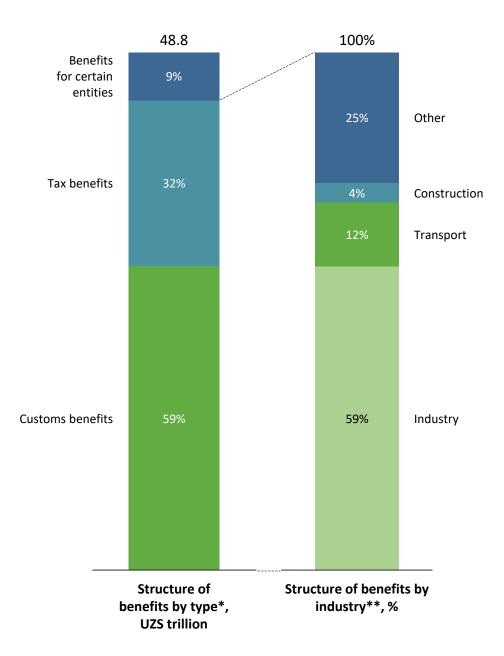


Comparison of marginal effective tax rates*



^{*} Shows the level of tax burden on investments

Tax and customs benefits



- The amount of benefits provided in 2017 amounted to UZS 48.8 trillion, while the main part of the benefits relates to customs benefits.
- Benefits on the main taxes and other obligatory payments are established by the Tax Code of the Republic of Uzbekistan and, in particular, by decisions of the president with respect to individual taxpayers or investment projects (according to the inventory of benefits, more than 230 such decisions).
- This situation leads to instability and unpredictability of the tax system, which can adversely affect both the investment climate and the economy as a whole.

Tax regimes in the Republic of Uzbekistan

Standard tax regime

Simplified tax regime

Brief description

The standard tax regime provides for the payment of a wide range of taxes and other obligatory payments, which is expressed in a significant tax burden on taxpayers. The simplified tax regime provides for the replacement of some generally established taxes with the following taxes:

- · Unified tax payment
- Unified land tax
- Fixed tax on certain types of business activities

The unified tax payment is made instead of the following taxes and payments:

- · Corporate income tax
- Property tax
- Mandatory contributions to state special-purpose funds

Legal entities that are payers of the unified tax payment may pay value-added tax on a voluntary basis.

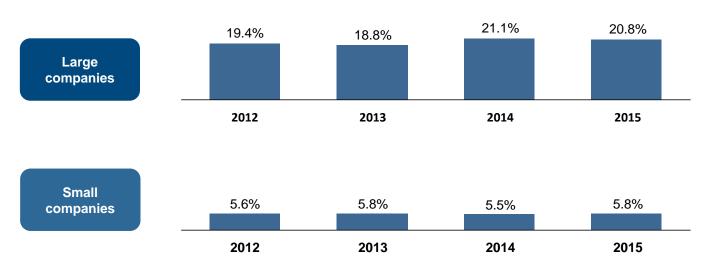
Criteria for application

- Large taxpayers
- Manufacturers of excisable products
- Entities that are engaged in the extraction of minerals and are payers of the extraction tax
- Parties to production sharing agreements
- Other taxpayers that do not meet the established criteria for small businesses

Small business entities (micro and small entities)

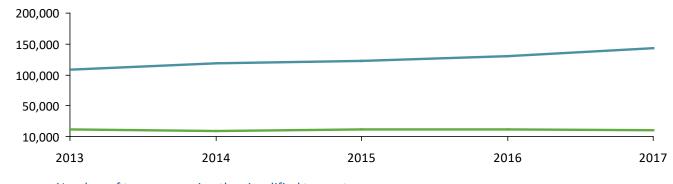
Application of the simplified tax regime is mandatory for certain categories of taxpayers (sales and food service companies, lotteries, etc.).

Comparison of tax burden on large and small companies



• The tax burden is distributed unevenly: the tax burden on large companies applying the common tax regime is 3.6 times higher than the tax burden on small companies that can apply the simplified tax regime.

Number of taxpayers using simplified and common tax systems

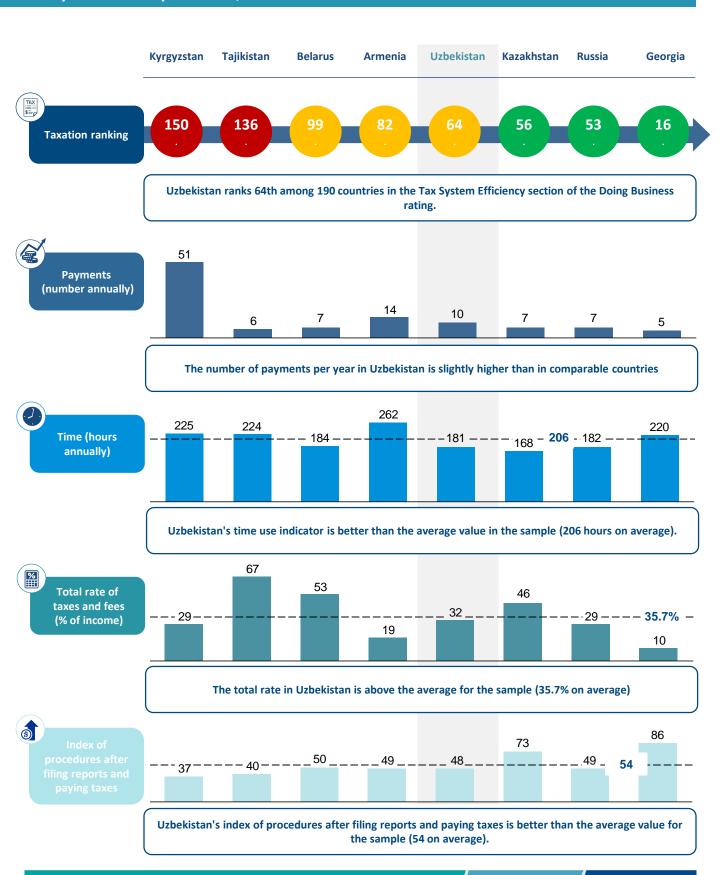


Number of taxpayers using the simplified tax system

Number of taxpayers using the common tax system

- Over the last five years, the total number of taxpayers grew by 26% to 153,000 tax paying companies.
- In 2017, the number of taxpayers using the common tax system decreased by 15% compared to 2013, to 10,000 companies.
- The number of taxpayers using the simplified tax system increased by 34,000 to 153,000 companies in 2017.
- There is the problem of artificially splitting companies to apply the simplified tax regime to reduce the tax burden.

Tax system efficiency indicators, 2017



Tax policy reform concept

On June 29, 2018, the president of the Republic of Uzbekistan with his Decree No. UP-5468 approved the Tax Policy Reformation Concept of the Republic of Uzbekistan.

According to the President's Decree, from January 1, 2019:

- Reduction of the tax burden on the labor remuneration fund through
- Improved taxation of the payers of common and simplified taxes with the optimization of turnover (revenue) taxes and improved criteria for starting application of the simplified tax system
- Implementation of measures to mitigate the adverse impact of tax policy improvement on the taxpayers of the simplified tax system
- Improvement of the calculation and payment procedure of value added tax and excise tax

The main areas of tax policy improvement according to the President's Decree are:

- Reduction of the tax burden on the economy
- Elimination of disproportions in the tax burden level between the business entities that pay taxes under the simplified and common tax systems
- Optimization of the number of taxes through their unification and consolidation
- Assurance of macroeconomic stability
- Simplification of tax laws, elimination of discrepancies and collisions
- Assurance of tax legislation stability and direct application of the Tax Code
- Retention of a favorable regime for foreign investors
- Improvement of tax control forms and mechanisms

- The concept does not affirm the principles of long-term tax administration. (Further changes in tax rates are possible.)
- There are no specific time frames and volumes for reduction of tax and customs benefits.
- The predominance of indirect taxes in the structure of tax revenues of the budget remains.
- There is no source of financing the off-budget funds after cancellation of payments to them.

Comparison of the current and suggested tax rates and other mandatory payments

Tax/mandatory payment	Current rates	Proposed rates	Difference
Income tax	14%	12%	-2%
Tax on income in the form of dividends and interest	10%	5%	-5%
Unified tax payment	5%	4%	-1%
Mandatory contributions to state special- purpose funds	3.2%	0%	-3.2%
VAT	20%	20%	0%
Property tax	5%	2%	-3%
Personal income tax	7.5%–22.5%	12%	
Unified social tax	25% / 15%	12%	-3%
Insurance contributions of citizens	8%	0%	-8%

Sources: data from open sources, analysis of the working group.



Impact on the budget (1/2)

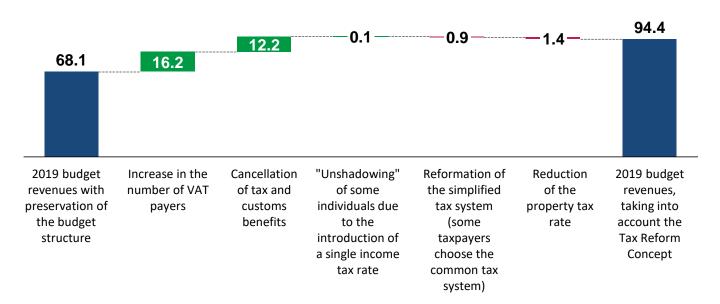
Provisions of the Tax Policy Reformation Concept of the Republic of Uzbekistan	Expected impact on the budget
Cancellation of a large number of targeted fiscal benefits	Increase in budget revenues due to cumulative tax receipts
Expansion of the circle of VAT payers (20%)	Increase in budget revenues due to the increase in VAT receipts (a group of indirect taxes)
Introduction of a single personal income tax rate of 12% for all citizens	Increase in the proceeds from income tax by expanding the database of taxpayers through their "unshadowing" (a group of direct taxes)
Cancellation of mandatory deductions to the state special-purpose funds, which are charged on the turnover (revenue) of legal entities (3.2% of net revenue of the payers of standard taxes)	The absence of direct receipt of funds to the nonbudgetary funds (Pension, Road, School Funds). Therefore, if the activity (demand for financing) of these funds remains unchanged, the burden on the budget increases
Cancellation of insurance fees of citizens to the nonbudgetary Pension Fund that are withheld from personal income in the form of labor remuneration (8% of wages)	The absence of direct receipt of funds to the nonbudgetary Pension Fund. Therefore, if the activity (demand for financing) of the fund remains unchanged, the burden on the budget increases
Reduction of the unified social tax rate for business entities from 25% (15%) to 12%	The absence of direct receipt of funds mostly to the nonbudgetary Pension Fund. Therefore, if the activity (demand for financing) of the fund remains unchanged, the burden on the budget increases
Reduction of the income tax rate for business entities from 14% to 12%, for commercial banks, from 22% to 20% Introduction of a 20% income tax for communications service providers and cancellation of the excess profit tax assessment for them, depending on their profitability	Reduction in budget revenues in the form of proceeds from income tax (a group of direct taxes) if income of business entities remains at the current level
Reduction of the corporate property tax rate from 5% to 2%	Reduction of budget revenues in the form of proceeds from property tax (a group of direct taxes) if the cumulative value of property remains at the current level
Reformation of the simplified tax system Establishment of the turnover (revenue) tax assessment and payment procedure with a basic rate of 4% for taxpayers with annual turnover (revenue) up to UZS 1 billion	Taking into account the above clauses and the fact that most taxpayers in Uzbekistan apply the simplified tax system, and that its cancellation will increase the number of taxpayers of national taxes, it is impossible to unequivocally measure the impact on the budget.



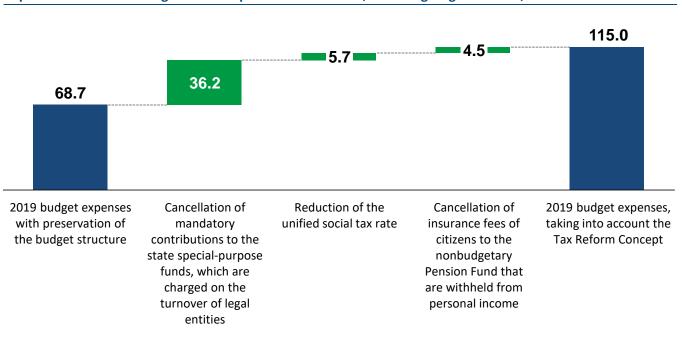
Impact on the budget (2/2)

Implementation of the Tax Reform Concept will increase budget revenues by UZS 26.3 trillion in 2019. However, it will require expenses to be increased by UZS 46.3 trillion in the same period.

Revenues of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



Expenses of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



Strategic options

1

Anglo-Saxon option

Characteristics: Prevalence of direct taxes





Relative stability and predictability



• Tax burden imposed on citizens

2

Mixed option

Characteristics:

Combines the features of various models

flexible tax and budget policy

Diversification of the revenue structure of the state budget

Independence of the budget revenues from

specific taxes or group of taxes and, as a result,





Target development option

Examples of countries:

Potentially high expenditures on tax administration

- The mixed model is optimal for economies in which budget revenues are highly dependent on the situation in foreign markets.
- The mixed model allows rapid adaptation to changes in external factors by manipulating interest rates, expanding the base of taxpayers, granting/canceling benefits, etc.

2

Continental option

Characteristics:

- Priority of indirect taxes
- High contributions to social insurance



- Relative stability and predictability
- High level of social protection of the population



High tax burden

0

The Netherlands

4

Latin American option

Characteristics:

- Typical of inflation economies
- High share of indirect taxes



Protection from inflation phenomena



Due to the specifics of indirect tax collection, savings on tax administration



Examples of countries:







Target vision of the tax system in 2035

Goal:

Creation of the modern soft tax system stimulating growth of investments and revenues of the budget of the Republic of Uzbekistan

Objectives:

- Further optimization of the tax burden by reducing the share of indirect taxes to 35%
- Compliance with a tax regime that ensures growth in tax revenues to the budget and allows competing in capital markets to attract foreign investments
- Transition to the principles of long-term tax administration
- Development of a special mechanism for investors with freezing of tax rates
- Development of an effective mechanism for granting benefits to taxpayers engaged in priority sectors of Uzbekistan's economy
- Further optimization and simplification of the tax legislation to ensure its stability and predictability for taxpayers

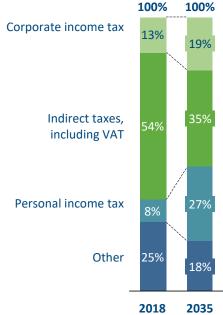
Figui	res	
	2017/2018	2035
Doing Business rating	74	Top 20
Taxation rating (Doing Business, DB)	64	Top 20
Index of procedures after filing reports and paying taxes (0 = the lowest, 100 = the highest)	48.17 points	> 80 points
Share of indirect taxes in tax revenues of the budget	54%	<35%

Tax structure,

% of tax revenues of the budget

Areas of tax system reformation:

- General tax system structure: transition to long-term tax administration; improvement of taxation principles and the legal regulation of the tax system
- Tax structure: reduction in the share of indirect taxes; increase in the share of personal income tax in the long term
- System of taxes and fees: identification of conceptual problems broken down by individual taxes, implementation of the best global practices and trends in the field of taxation (BEPS, automatic tax information exchange, MLI, CbCr, CFC, TP, etc.)*
- Tax and customs benefits: cancellation of targeted benefits; introduction of industry benefits to stimulate certain industries
- Special mechanisms for investors: development of special mechanisms (similar to SPIC)** with freezing of tax rates for investors to attract long-term investments
- Tax control and administration: improvement of tax control procedures and settlement of tax disputes through the introduction of ICT and automation tools as well as advanced training of employees of tax authorities
- System of legal liability: improvement in the system of legal liability for the violation of tax legislation



Changes in the tax structure:

- The target state is calculated based on the benchmark of Japan and South Korea
- Increased personal income tax is associated with a 1.4-fold increase in the number of employed people by 2035, the legalization of incomes, and the increased level of wages. (An increase in personal income tax is the practice of developed countries.)

Appendices

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Appendix 1: Glossary

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



Glossary (1/11)

Term	Definition
AISP (Account Information Service Providers)	Companies providing information on financial service accounts
ANZSOG (The Australia and New Zealand School of Government)	An educational institution located in Carlton, Australia, which specializes in strategic management and policy
API (Application Programming Interface)	A set of procedures, protocols, and functions used to create software applications with the help of which various software components may interact with each other
ASPSP (Account Servicing Payment Service Provider)	A special service provider used to maintain a payer's account in the context of the banking ecosystem, which allows payments initiated by other parties to the transaction subject to its approval by the client
B2B ("Business to Business")	Informational and economic interaction between corporate entities
Basel 2/3	Documents of the Basel Committee on Banking Supervision on the requirements for capital adequacy ratio of banks
BASF (Badische Anilin- & Soda- Fabrik)	A German company operating in the agricultural industry, which is the world's largest chemical producer. The company has implemented a number of training programs for farmers
Big Data	A term used to denote operations related to processing of big arrays (over 2.5 PB) of structured and unstructured data
Broadband	Broadband transfer: data transfer technology via network, where data are transferred in the form of modulated radio frequency signals
CAGR	Compound annual growth rate
СарЕх	Company expenses used to purchase, upgrade, and maintain various assets, e.g., such as equipment, property, and industrial capacities
CIR (Cost-to-Income Ratio)	Financial indicator that shows the ratio of company expenses to its revenue for a certain period
Civil Service College (CSC), Singapore	A state institution (college) in Singapore that specializes in staff training for civil service and in providing consultancy services to government agencies
Corruption Perceptions Index	An index calculated on the methodology of the international non-governmental organization Transparency International to evaluate the prevalence of corruption in the public sector of a certain country
D/E (Debt-to-Equity)	Financial indicator that shows the ratio of interest holders' (shareholders') equity and borrowed funds used to finance current assets of the company
Elder Shield	An insurance program for the citizens of Singapore older than 40 years old

Glossary (2/11)

Term	Definition
EPC SDD (European Payments Council SEPA Direct Debit)	A direct debiting system introduced by the European Payments Council (EPC), which enables secure and efficient payments by clients for goods and services in SEPA nations (EU, Norway, Iceland, Lichtenstein, and Switzerland)
ETF (Exchange Traded Funds)	Index funds whose shares are traded on the exchange market
FATF (Financial Action Task Force)	An intergovernmental organization founded in 1989 to develop financial measures to counter money laundering
Federal Employee Education and Assistance Fund Scholarship Program	A program launched by the noncommercial public organization in the US, which provides financial support in the form of educational grants and subsidies to low-income citizens
FinCEN	The bureau for countering financial crimes in the US, which collects and analyzes information on financial operations in order to counter money laundering and financing of terrorism in the country and abroad, as well as other financial crimes
GCP	Good clinical practice. The term means an international standard of ethical rules and research quality, which sets out the principles of development, conduct, documentation, and reporting of the research that requires human involvement in clinical studies
GDPR	The General Data Protection Regulation in European Union member states
GII (Global Innovation Index)	An index that evaluates the innovation development level in a country. It is prepared annually by the consortium of Cornell University (USA), INSEAD School of Business (France), and the World Intellectual Property Organization
IIOC (Industrial Internet of Customers)	The system automating the purchase/sale process based on new technologies
IIOM (Industrial Internet of Machines)	The system of machine interaction based on special sensors and controllers in the industrial sphere
Indigo Index	An index that evaluates the economy's ability to adapt and develop when transitioning from the use of raw materials and natural resources to the use of innovations and technologies. The index is prepared by the Global Perspectives international organization
IPO (Initial Public Offering)	The initial (first) public offering of company shares in the market
Just-in-Time	A logical concept based on the idea of making deliveries just in time. It is one of the main principles of lean production in a company
KYC (Know Your Customer)	A term on banking regulation for financial institutions and for other companies working with private individuals' money, which means that they should identify and establish the identity of the counterparty before performing a financial transaction
Mayor's Graduate Scholarship Program (New York City)	A program of post-graduate studies for full-time employees of local government agencies in New York
MediFund	State-funded medical support for the citizens of Singapore who cannot afford treatment and cannot use the Medisave and MediShield programs

Glossary (3/11)

Term	Definition
MediSave	The system of compulsory healthcare deductions in Singapore, under which an employee makes contributions from their salary (since 2016, 8 to 10.5% depending on age) to a personal account, and the employer makes contributions in an equal amount
MediShield	Health insurance system for the citizens of Singapore in cases where the limit of the available amount under MediSave is exceeded (usually used in case of serious illness). Citizens predisposed to illness make larger deductions from their income for 10 years under MediShield Life
Middle Office / Back Office	Groups of business units or processes responsible for verification and actual processing of a client's operations / an operational and accounting business unit supporting operation of the business units engaged in management of assets and liabilities of the company carrying out the core activity of a financial institution
MIFID (Markets in Financial Investment Derivatives)	A trade market for derivative financial instruments
National Health Insurance Program	A special program in South Korea that offers health insurance to working citizens and their relatives, provides healthcare services to pensioners, and covers medical expenses of poor and low-income families
ОрЕх	Operational expenditures, i.e. expenses borne by a company in the course of its daily activities (e.g., net cost of products, rent, etc.)
P2P	A type of financial relationship between individuals, which involves money transfer without a financial intermediary, where the parties involved do not use any third-party services
PISP (Payment Initiation Service Providers)	Companies that allow users to pay directly from their bank accounts, without using their debit or credit cards, via a third-party company like Visa or MasterCard
PR (Public Relations)	The technology for creating and implementing an object image, under the socioeconomic and political systems of competition, into the value-based range of a social group in order to establish this image as important in life
PSD2 (Payment Services Directives)	The European Union Directive that controls competition and legislation in the payment services market
Public Service Agreement (UK Program)	The document describing strategic goals and tasks of the UK governmental departments for a three-year period. PSA were abolished in June 2010 by the Coalition government.
Regulatory Impact Analysis (RIA)	The document reflecting socioeconomic consequences of a certain state regulation. RIA are conducted in many countries, though their scope, contents, role, and impact on policy formation differ
ROA (Return on Assets)	The indicator that shows a company's business profitability against the company assets. It is calculated as the ratio of the company's net profit to total assets
ROE (Return on Equity)	The indicator of equity profitability, which shows the ratio of net profit to equity of a company

Glossary (4/11)

Term	Definition
SCA	Strong Customer Authentication (SCA) is a new compulsory method of online payment authentication (or customer verification before accepting an online payment), which will be introduced in Europe in 2019 and will ensure greater data safety compared to the previous methods
Solvency 2	The European Union regulatory act that establishes requirements for the processes of regulating the activities of insurance business representatives. The directive outlines the key structural components of regulation and supervision of insurance companies' activity
Study Leave Program for Abu Dhabi Government Employees	A program of incentives for UAE citizens working in the government of Abu Dhabi in certain areas of priority significance for the country. It provides them with the possibility to complete their undergraduate studies or postgraduate studies in the leading universities of the UAE and abroad
SDG Index (Sustainable Development Goals Index)	A UN index that evaluates the progress of a certain country in terms of international cooperation based on a set of goals in the field of social, legal, economic, and environmental development
Technology Transfer Network	Technology transfer using any information channels from one individual or collective carrier to another
Technology Transfer Office	A hub in the technology transfer structure
TEU (Twenty-Foot Equivalent Unit)	A twenty-foot equivalent is a reference unit of measure of truck capacity. It is widely used in the carriage of containers
EPI (Environmental Performance Index)	A composite indicator for a certain country, which is determined by the Yale Center for Environmental Law and Policy, and shows the country's progress in the field of natural resource management and the environment
TPP (Third-Party Providers)	External providers offering payment solutions and services for clients
WPFI (World Press Freedom Index)	The index that shows the state of the freedom of media in a certain country, which is determined by the international nongovernmental organization Reporters Without Borders.
Equity Value and its Components	A financial term that indicates the minimum one-year level of return that a company should ensure for its ordinary shareholders for profit expectations and risk. ERP is equity risk premium Ke is cost of equity CRP is country risk premium RfR is risk-free rate
APA (Architectural Planning Assignments)	A set of requirements for the intended use, main parameters, and location of an architectural object on a certain territory, and binding environmental, technical, organizational, and other conditions of design engineering and construction of an object, as provided for by government legislation
AIC (Agro-Industrial Complex)	An assemblage of economic sectors engaged in the production and processing of raw agricultural materials and in making finished products to be sold to customers
ATS (Automatic Telephone Station)	A system of mechanisms that enables automatic connection and maintenance of telephone communications between subscribers using special devices

Glossary (5/11)

Term	Definition
Business Incubator	A company supporting small businesses. The purpose of a business incubator is to create favorable conditions for the appearance and development of start-ups and young innovative enterprises in order to strengthen and enhance their competitiveness and adjust to the external economic environment
Blockchain	Distributed data storage technology
UAV (Unmanned Aerial Vehicle)	An aircraft without a crew on board
GDP (Gross Domestic Product)	A macroeconomic indicator that shows the market value of all final goods and services manufactured within a certain period of time in a particular country
GAV (Gross Added Value)	The indicator that shows the difference between the value of goods and services produced (output) and the value of goods and services fully consumed in the production process
WHO (World Health Organization)	A special institution of the United Nations (UN) whose main task is to solve international healthcare problems of the world's population
Renewable Energy Sources (RES)	Energy generated from inexhaustible sources
GRP (Gross Regional Product)	The economic indicator that shows the market value of all goods manufactured within a certain period of time in a particular region (particular open economic system)
WTO (World Trade Organization)	An international trade organization whose main tasks are to carry out trade negotiations between the member states, carry out consultations between the stakeholders, and settle trade disputes
FEA (Foreign Economic Activity)	An area of economic activity of the state and business, which is associated with the system of economic, production, and commercial relations of enterprises with a focus on the global market
HEI (Higher Educational Institution)	An educational institution of higher professional education
SC (State Committee)	A federal executive authority in charge of intersectoral coordination on the issues falling within its competence, and functional regulation in a certain area of activity
Guarantee Fund	The institutions founded by governmental authorities to support small and medium businesses; they are usually funded from the state budget and provide sureties in the country
Global Indicators of Regulatory Governance (World Bank, Scores)	The indicators reflect the quality of the legislative process, the quality and accessibility of the legislative framework for the population in the country. A corresponding rating is prepared based on this indicator
MMP (Mining and Metallurgical Plant)	An industrial enterprise specializing in fabrication of metallurgical products

Glossary (6/11)

Term	Definition
MMI (Mining and Metallurgical Industry)	The assemblage of mining and metallurgical industry sectors in a certain country
Public-Private Partnership (PPP)	A system of relations between private business representatives, on the one part, and the public sector, on the other part, maintained on the basis of a cooperation agreement in order to attract investments and consolidate resources
GPP (Gas Processing Plant)	An industrial enterprise processing natural and associated gas
HPP (Hydropower Plant)	A power plant using the force of water flows as the energy source
CCP (Cash and Credit Policy)	Actions of specialized government institutions in the monetary and currency market intended to control the exchange rate, inflation rate, employment, and economic growth stability. As a rule, central banks are responsible for the implementation of a cash and credit policy
HUS (Housing and Utility Services)	The assemblage of economic sectors aimed at supporting the functioning of residential buildings
AI (Artificial Intelligence)	The term used to denote the intelligence of machines and computers and their ability to perform creative and technologically sophisticated tasks
IIA (Individual Investment Account)	A trust management account of an individual, which has certain tax benefits established by the state. Such account involves an investment diversification method
ICT (Information and Communications Technology)	Methods, software, and hardware, the main task of which consists of receiving, processing, and transferring information
The World Justice Project: Rule of Law Index	An indicator that shows the adequacy of the legal framework that is based on universal principles of the rule of law in a certain country. The rating is prepared by the international organization World Justice Project
Food Security Index	An index that shows the accessibility and quality of food resources in a country in terms of affordability and availability of healthy food. The index is prepared by the analytical agency Economist Intelligence Unit
Democracy Index (The Economist)	An indicator that shows the level democracy in a country, determined using the methodology of the research organization The Economist Intelligence Unit
Web Index	An indicator characterizing the level of influence of the Internet on society in a certain country. The index is determined by the World Wide Web Foundation
E-Government Development Index (EGDI), 2018	A composite indicator characterizing the preparedness and opportunities of national government agencies to use information and communications technology for interaction with citizens. The rating is compiled by the UN
Index of Economic Freedom	An index that shows the lack of government intervention or obstruction in the production, distribution, and consumption of goods and services, except for the protection required for citizens and the support of freedom. It is calculated by Wall Street Journal and the Heritage Foundation research center
IE (Individual Entrepreneur)	A person conducting business activity without founding an organization

Glossary (7/11)

Term	Definition		
DI (Development Institutes)	Organizations stimulating innovative processes and infrastructure development, mainly through the use of public-private partnership mechanisms		
Gini Index	An economic term reflecting the degree of inequality in income distribution within different groups of the population		
KPI (Key Performance Indicators)	The metrics of success achieved by a business, the government, and representatives of other sectors in a certain area		
CSR (Corporate Social Responsibility)	The concept according to which business representatives must carry out an array of social activities according to the laws of a certain country		
Small and Medium Enterprises (SME)	The economic sector that includes medium, small, and micro enterprises		
Mbps	Mbit per second. The transfer speed of a certain volume of data		
SB&PE (Small Business and Private Entrepreneurship)	The economic sector that includes small and micro companies and private entrepreneurs		
MHSSE (Ministry of Higher and Specialized Secondary Education)	The government body in charge of control and development of a certain educational level in the country		
IPCC (Intergovernmental Panel on Climate Change)	An organization whose purpose is to evaluate the risks of global climate change caused by man-made factors		
MPrE (Ministry of Preschool Education)	The government body in charge of control and development of a certain (preschool) educational level in the country		
Doing Business Index	The indicator that shows the level of ease of doing business in a certain country. The higher the country position in this rating, the more favorable the business environment for opening and running a business. The rating is compiled by the World Bank		
MPE (Ministry of Public Education)	The government body in charge of control and development of a certain educational level in the country		
Top-Down (Model based on top- down implementation of initiatives)	An approach according to which analysis should be started from the top levels of a certain hierarchy		
Bottom-Up (Model based on bottom-up implementation of initiatives)	An approach according to which analysis should be started from the bottom levels of a certain hierarchy		
SMB (Small and Medium Business)	The economic sector that includes small and medium businesses and micro enterprises This term is identical to the term SME, and is mostly used in the banking sector		

Glossary (8/11)

Term	Definition		
IFRS (International Financial Reporting Standards)	A set of documents (principles, explanations, standards) that establish the rules for generating the financial reports of a company. This accounting system is used in more than 100 countries		
IFAS (International Fund for Saving the Aral Sea)	The fund established to overcome the environmental crisis and improve the socioeconomic position in the Aral Sea basin. The fund was established in 1993 according to the decision of the heads of the Central Asian countries		
RDI (Research and Development Institute)	A state institution established to conduct research and development work		
R&D (Research and Development)	The scope of works aimed at obtaining new knowledge and its practical application in creating a new thing or technology		
RDTI (Research and Development Technical Institute)	A state institution established to conduct research work and comprehensive testing		
RLA (Regulatory Legal Act)	An official document published and approved in a certain form by the legal body within its competence and aimed at establishing, amending, and/or abolishing certain rules in the state or an association		
ORP (Oil Refinery Plant)	An industrial enterprise established to process crude oil into fuel and other oil products		
CHI (Compulsory Health Insurance)	The form of compulsory insurance of human health established by the state, which covers part of the cost of treatment		
UN (United Nations)	An international organization founded in 1945 to support and build international peace and security and to develop partnership between countries		
CCPU (Combined-Cycle Power Unit)	A power generating plant running on two engines: steam-power and gas-turbine		
ID (Industrial Designs)	An object of intellectual rights related to the outward appearance of a product of industrial production		
CML	Measures to prevent illegal receipt of money (money laundering)		
One-In-One-Out Principle	An approach according to which a newly adopted legislative act will supersede the previous legislative act controlling the same subject		
Regulatory Guillotine	An approach that involves the process of counting, verification, analysis, and exclusion from the legislative framework of laws that are no longer mandatory		
Sunset Clause	A principle in the governmental policy according to which a certain law will become null and void after a certain date, unless further legislative measures are taken to extend its validity period		

Glossary (9/11)

The program implemented by the Government of Malaysia in seven key areas to improve the lives of the population. The program was launched in 2010 and is part of the country's vision, "Vision 2020" An agreement whose terms require one party to deliver to the other party to the transaction the underlying assets at a fixed price and within the agreed-upon time frame Indicator showing the measure of human impact on the habitat in a particular country. The rating is compiled by the World Wildlife Fund (WWF) An indicator that demonstrates the relative efficiency of logistics and the development of the transport complex in a country. A rating of countries is compiled based on this indicator by the World Bank Ranking of countries based on an indicator that measures the citizens of how many countries a particular country can allow to enter without a visa, issue them a visa upon arrival, or issue an electronic entry permit. The rating is compiled by the World Economic Forum nongovernmental organization
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Economic Forum nongovernmental organization
Ranking of countries by volume of banking assets from larger to smaller. The rating is compiled by the International Monetary Fund
Ranking of countries based on a composite index that includes the following parts: the
number of internet users per 100 residents; the number of landline phone users per
100 residents; the number of mobile subscribers per 100 residents; the number of
wireless broadband access users per 100 residents; the number of fixed broadband
access users per 100 residents. The rating is compiled by the UN Ranking of countries in terms of GDP, the calculation methodology of which is
determined by the International Monetary Fund (IMF)
Rating based on an indicator showing the dependence of the national economy of a particular country on the tourism sector. The rating is compiled by experts of the World Travel and Tourism Council (WTTC)
Ranking of countries in accordance with a complex indicator that assesses the quality of tourist reception in a particular country (components of the indicator are estimates for the country's historical and cultural heritage, development of the economy, transport, mobile communications, healthcare, people's openness, etc.)
Ranking of countries in order from larger to smaller according to the number of visits by foreign tourists. The rating is compiled by the World Tourism Organization (UNWTO)
Ranking of countries in order from larger to smaller according to the amount of money
invested by the state in the development of the tourism sector. The rating is prepared
by the World Travel and Tourism Council (WTTC)
Ranking of countries in accordance with a comprehensive indicator assessing the government's influence in art, fashion, and other cultural attributes calculated by Y&R's BAV Group and The Wharton School of the University of Pennsylvania
Rating of countries in terms of quality and efficiency of government management. It is calculated according to the methodology and global research of the World Bank
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Glossary (10/11)

Term	Definition			
Republic of Karakalpakstan	Republic of Karakalpakstan			
Republic of Uzbekistan	Republic of Uzbekistan			
"Up-or-out" system for civil servants	A system of employee development in organizations, according to which employees within an organization have only one choice: professional growth or leave the organization.			
CIS (Commonwealth of Independent States)	An international organization regulating cooperation relations between countries formerly part of the USSR			
JV (joint venture)	A form of joint activity that involves the use of resources by both parties to the transaction, sharing of risks, the granting of rights to the parties to the project to the net assets of the joint activity			
FEZ (Free economic zone)	A limited part of the country's territory within which a special business scheme is established, granted to commercial organizations and representative offices of foreign companies registered in this zone			
T.O.E. (Tonne of oil equivalent)	An energy unit used in the international energy industry			
MSW (Municipal solid waste)	Products that have lost consumer properties			
IIOT Technologies (Industrial Internet of Things)	A multilevel system of interaction of various objects, including sensors and controllers installed on the nodes and aggregates of an industrial facility, means of transmitting the collected data and their visualization, powerful analytical tools to interpret the information received			
Technopark	An organization managed by specialists whose main goal is to increase the well-being of the local community by promoting an innovative culture, competitiveness of innovative business and scientific organizations			
TM (Trademark)	A term used to refer to the individualization of products of a particular legal entity or individual entrepreneur			
Fuel and energy complex (FEC)	A sector of the economy that refers to the totality of production, processes, and material devices for the extraction of fuel and energy resources, their transformation, transportation, distribution, and consumption of both primary and transformed types of energy carriers			
CCI	Chamber of Commerce and Industry			
TRACECA	A program of international cooperation between the European Union and the partner countries on the organization of the transport corridor "Europe – Caucasus – Asia"			
TSE	Trade and service enterprises			
СНРР	Thermal power plant			
UzCHHM	Uzbek Combine of High-Melting and Heat-Resistant Metals			
Urbanization	The process of increasing the role of cities, urban culture, and "urban relations" in the development of society, an increase in the urban population compared to rural			
 STS	Simplified tax system			

Glossary (11/11)

Term	Definition				
FT	Financial terrorism				
CA (Central Asia)	Central Asia Region				
CAREC	Central Asian Regional Economic Cooperation				
Fixed income securities					
Business support center					
ESC (Export support center)	An organization usually representing a state institution that serves to develop a country's exports and provides various support measures to exporting companies				
Extreme poverty	Acute shortage of food, drinking water, access to health services, and lack of housing and access to education				
LE (Legal entity)	An officially registered company conducting operational and economic activities				
UNESCO	Specialized institute of the United Nations Educational, Scientific and Cultural Organization.				
Argentina Top Wines	An organization uniting more than a dozen wine cellars focused on the export of products				
"Design-to-cost"	Design in accordance with a given cost				
"Golden share"	Conditional name of a corporate law belonging to a state or municipality that is a shareholder of a certain company. Serves as a measure of state control over the enterprise being privatized				
Camelina	A dual-purpose product: - For production of aviation biofuel and biodiesel - For feeding cattle				
5G	The fifth generation of mobile communication operating on the standards of telecommunications, following the existing 4G standards				

Appendix 2: Forecast of the Target Development Indicators of Uzbekistan until 2035

Concept of the Development Strategy of the Republic of Uzbekistan until 2035



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2.1. Purpose of the forecast model

The purpose of the forecast model is to determine the values of the target macroeconomic indicators of development of the Republic of Uzbekistan by 2035.

The calculation is based on both quantitative data obtained from open sources of Uzbekistan and databases of international organizations as well as qualitative assessments and scenarios formed as a result of interviews of the working group with industry experts.

Goals Forecast model Input data

- Calculate the main macroeconomic indicators characterizing the level of economic development
- Determine the economy's structure, the main sources of income and expenditures

Determine the structure of GDP components and their target values

- Statistical data
- Forecasts
- Scenarios
- Main parameters
- Expert evaluations
- Global trends

2.2. Principles of building the forecasting model

International benchmarks of the fastest developing countries in Asia were used for the forecast of key indicators of Uzbekistan for 2035.



Calculations are based on international data on 34 indicators characterizing the current situation of the Republic of Uzbekistan using the following approaches:



Benchmarking

Selection of target indicator values based on indicators of countries that are used as development benchmarks

Selection of benchmarks for forecasting based on comparison of the previous dynamics of the selected economic systems and the country itself



Evaluation based on trends

Evaluation of growth rates based on internal and external dynamics having a direct impact on an indicator

Evaluation of growth rates based on historical trends for comparable countries over a long period of time



Evaluation based on drivers

Key factors and their current values are determined for key forecast indicators.

Based on analysis of a set of factors, a conclusion is made about the growth rate of a calculated indicator.

Advantages and limitations:

- Provides a target vision
- Possible error in the choice of benchmarks
- Does not take into account differences in external conditions (e.g., world market conditions)
- The forecast is simple.
- Does not take into account factors influencing the achievement of certain results
- Does not take into account changes in external conditions (e.g., world market conditions)
- Reflects cause-and-effect relationships
- There may be an error in determining the nature of the relationship between a factor and a calculated indicator.
- There may be an error in determining the dynamics of factors.

34 key indicators:

GDP (nominal)

GDP per capita

GAV (gross added value)

Tax revenues

Contribution of AIC to GAV

Contribution of industry to GAV

Contribution of service sector to GAV

Share of AIC in GAV

Share of industry in GAV

AIC output

Industrial output

Employed population

Employment in AIC

Industrial employment

Employment in service sector

Registered unemployment rate

Level of real wages

Public debt amount

Inflation

Number of SME

Added value per 1 SME

Annual volume of investments in Uzbekistan

Volume of export of goods and services

Volume of import of goods and services

Weighted average exchange rate of UZS/USD

Amount of VAT

Service sector output

Working-age population

Population

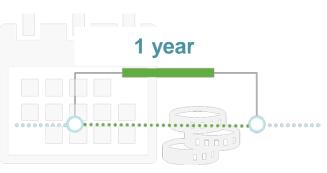
2.3. Main parameters of the forecasting model

Indicators were calculated for the period from 2017 to 2035 with a step of 1 year. The US dollar was chosen as the calculation currency to smooth the effect of volatility.

Horizon for calculations is 18 years (2017–2035) and includes the vision until 2035.

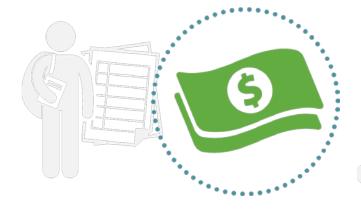
Minimum calculation step is equal to one year.

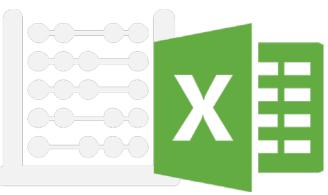




Payment currency: US dollars

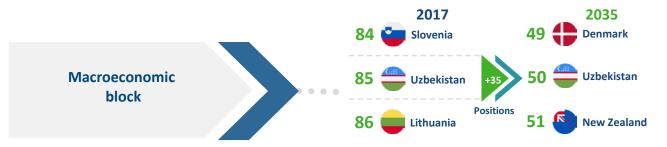
Calculations were made using Microsoft Excel.





2.4. Main blocks of the forecasting model

The main block of the forecast model is the calculation of macroeconomic indicators on the basis of benchmarks of the fastest growing countries in Asia.



Key prerequisites

- Starting point of the calculation: values of the key macroeconomic indicators of the Republic of Uzbekistan for 2017
- The dynamics of growth of gross indicators corresponds to the GDP growth.
- The structure of the economy—the ratio of AIC, industry, and services—is gradually changing on the way to the values of the benchmarks: Malaysia, Turkey, South Korea.
- The dynamics of certain industry indicators are based on historical dynamics of the countries taken as a role model of development laid down in the Concept of Development Strategy of Uzbekistan.

Nominal GDP, USD billion



Agroindustrial complex output, USD thousand per employed person



Registered unemployment, % of able-bodied population



GDP per capita, USD per capita



Industrial output,USD thousand per employed person



Share of the population below the poverty line (\$1.95/day), %



Rank in the Doing Business international rating



Service sector output, USD thousand per employed person



Life expectancy at birth, years



Limitations of the model include:

- The impact of inflation and purchasing power of the national currency was not calculated.
- Different scenarios of population growth were not calculated.

Evolutionary scenario

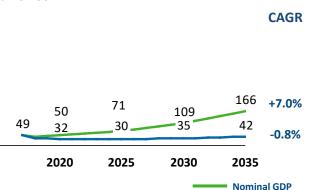
- Continuation of the current course of development of the country with minimal institutional changes
- The initial period of interest from global public and transnational investors (2019–2025) is followed by a gradual decline in investments as interest in the Eastern region and emerging markets declines.
- The target GDP level will not be reached by 2035 due to the lack of sufficient investments.

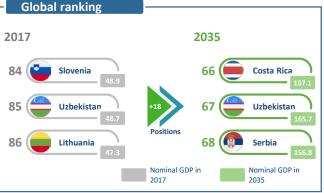
Dynamic scenario

- Gradual transition to the market system
- Private funds are the main source of investment, including public-private partnership programs in infrastructure projects, private investments in the fuel and energy complex, as well as projects of international corporations in Uzbekistan, which will bring investments into industry and agriculture.
- The target GDP level will be reached by 2035 thanks to the faster growth of investments, both public and private, in the amount of USD 993 billion–USD 1.213 trillion.

Dynamics of the nominal and real GDP

billion USD

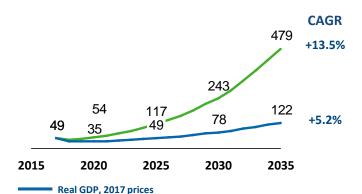


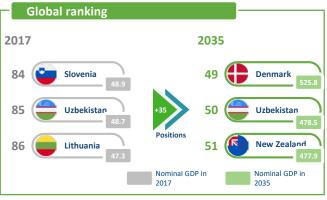


The forecast under the evolutionary scenario is based on the consensus:

• Forecast of the Ministry of Economy of the Republic of Uzbekistan

- Euromonitor forecast
- IMF forecast
- Forecast of historical growth rates of countries of the "Early-demographic dividend" category according to the World Bank, including India, Mexico, Argentina, Turkey, etc.





Nominal GDP:

- The forecast under the dynamic scenario takes into account the goal of achieving a Top 50 rank.
- The EIU and Euromonitor forecasts are used as a foundation.
- Growth rates are correlated with similar historical cases (including Brazil, China, Indonesia, South Korea, Malaysia, Singapore, Thailand, China, Kazakhstan).

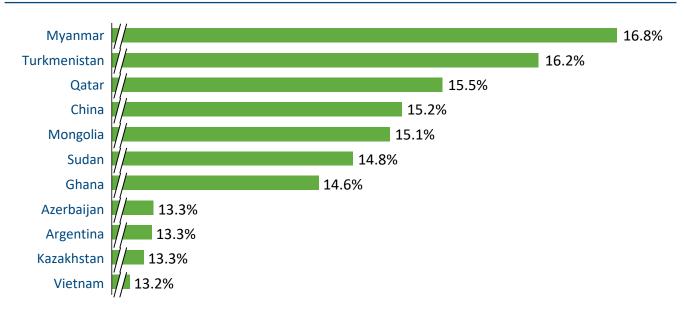
Real GDP:

 Calculated using the same assumptions as the evolutionary scenario: reduction of inflation from 14% to 5%, a slight strengthening of the Uzbek sum from 8,130 sums per 1 dollar in 2017 to 7,000 sums per 1 dollar in 2035.

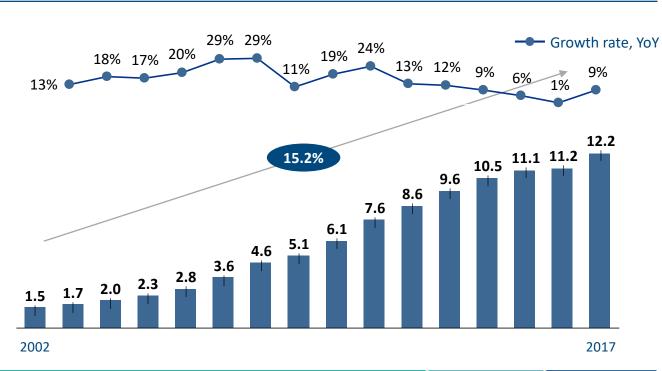
International experience

Historical analysis shows the possibility of growth inherent in the dynamic scenario

Average CAGR of nominal GDP growth by country, 2002–2017



Nominal GDP of China, USD trillion, 2002–2017



GDP under the dynamic scenario

	2017	2035
Nominal GDP, USD billion	48.7	479
Nominal GDP per capita,	1,485	11,362
GDP based on PPP, USD billion	223	2,193¹
GDP based on PPP per capita,	6,940	53,099 ¹

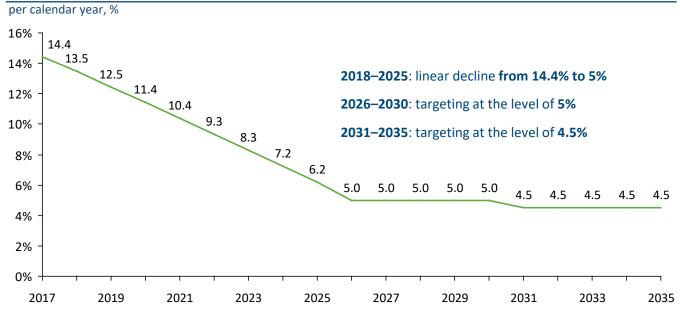


GDP based on PPP is not a reliable indicator for long-term forecasting:

- GDP based on purchasing power parity is higher for low-income countries due to low prices.
- Raising the standard of living of the population will lead to a downward change in the PPP ratio.
- Comparison of GDP based on purchasing power parity in the current and forecast periods may lead to a distortion of the real situation.

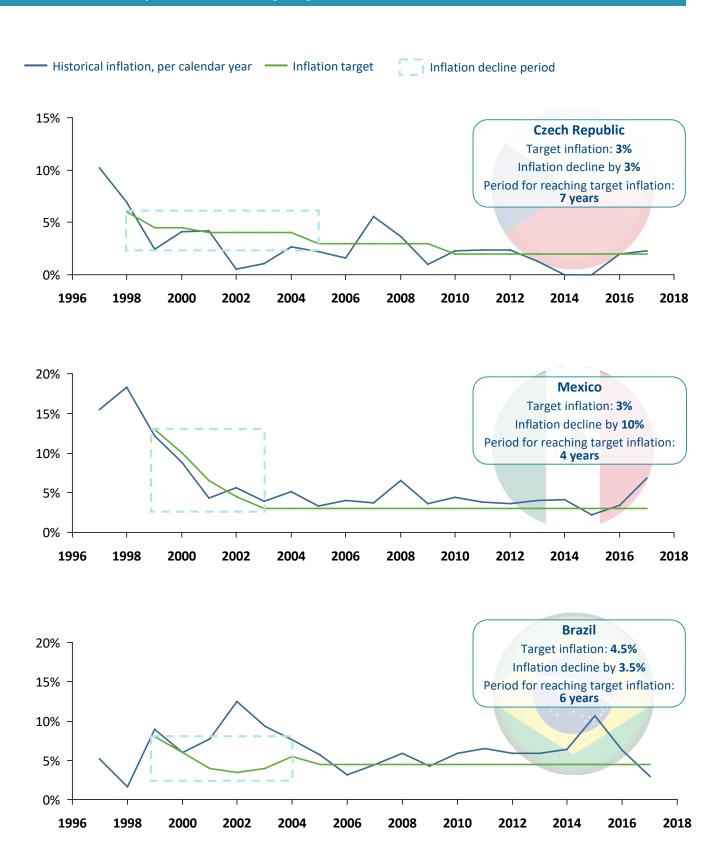
Target inflation levels under the targeting policy (dynamic scenario)

Target inflation levels in Uzbekistan



- Rising prices for key imports. Target inflation will be 4.5% by 2035. This indicator was calculated based on international benchmarks, including Singapore and Brazil
- In the longer term, the target inflation indicator may be 2%-3%, which is an optimal value amid a stable economy.
- The period for reaching the target inflation rate in the Republic of Uzbekistan will be about seven years after the start of the targeting policy. A similar period of inflation decline was observed in the Czech Republic and in Brazil.
- The suggested scenario for reaching the target inflation is more conservative compared to Mexico where target inflation was reached within three years.
- The interest rate of the central bank on short-term loans remains the main tool of inflation targeting. The increase in this rate will reduce lending to the real sector of the economy. As a result, the population and business reduce their expenses, and the demand for goods and services declines, which contributes to the slowdown of price growth.
- The preservation of a high interest rate may have an adverse effect on the national economy. Based on the example of Brazil, inflation targeting by the high key rate instruments caused a decline in economic growth and the deterioration of a number of macroeconomic indicators, including those of the state debt.
- Additional inflation targeting instruments facilitating the reduction in lending to the real sector may include an increase
 in required reserves and withdrawal of funds from the financial market through the sale of government securities.
- Successful targeting requires a number of external factors affecting inflation to be considered:
 - Growth of prices for agricultural goods caused by a bad harvest
 - State regulation of prices for certain goods
 - Increase in government expenditures
 - Existence of monopolies in some industries

International examples of inflation targeting



There are different scenarios of macroeconomic indicators growth. The model is based on the target scenario (dynamic). **Dynamic Kev indicators** Unit of **Evolutionary scenario** scenario of Uzbekistan, 2035 measure 2017 2035 2035 19% 16% 8% **Share of AIC in GAV** % of GAV Armenia Georgia 35% 33% 33% Share of industry % of GAV in GAV **Belarus** South Korea 58% 51% 48% 7 Share of service sector % of GAV in GAV Armenia Georgia 18.8 13.9 12.8 Million **Employed population** people calculation calculation 29% 24% % of able-12% **Employment in AIC** bodied population Malaysia Egypt 24% 24% % of able-12% **Industrial employment** bodied population Ukraine Bulgaria 59% 51% 47% % of able-**Employment in service** bodied sector population Kyrgyzstan **South Korea** 9% 8% 6% Registered % of unemployment population Malaysia Slovakia 370.5 212.8 182.0 USD per **Real wages** capita calculation calculation 14% 11% % compared to Inflation previous year **Belarus** South Korea 55,124.0 **Amount of investment** 16,292.0 **USD** billion 910.0 calculation calculation

The nominal GDP of Uzbekistan will grow from USD 48.7 billion to USD 479 billion by 2035. An annual increase by 13.5% on the horizon of 2017–2035 will occur due to change in the economic structure and a threefold increase in its output.



The presented values are the result of calculations based on the dynamic development scenario, as it is the target scenario within the Concept of the Development Strategy of Uzbekistan until 2035.

Agroindustrial complex:	2017		2035	Comments
Share of AIC in GAV, % of total GAV	19.2	>	8.4	Benchmark: Turkey, Malaysia
Contribution of AIC to GAV, USD billion	8.3	>	35.7	Benchmark: Turkey, Malaysia
Share of employed people in AIC, % of total number of employed people	29	>	12.2	Benchmark: Turkey, Malaysia
AIC output, USD thousand per 1 person employed in AIC	2.2	>	15.6	Calculation by the working group
Industry:				
Share of industry in GAV, % of total GAV	32.9	>	34.7	Benchmark: South Korea, Malaysia
Contribution of industry to GAV in real terms, USD billion	14.2	>	147.9	Benchmark: South Korea, Malaysia
Share of employed people in industry, % of total number of employed people	23.9	>	29.1	Benchmark: Turkey, Malaysia
Industrial output, USD thousand per 1 person employed in industry	4.6	>	27.0	Calculation by the working group
Service sector:				
Share of service sector in GAV, % of total GAV	47.9	>	56.9	Benchmark: South Korea, Malaysia
Contribution of service sector to GAV in real terms, USD billion	20.7	>	242.3	Benchmark: South Korea, Malaysia
Share of employed people in service sector, % of total number of employed people	47.1	>	58.7	Benchmark: Turkey, Malaysia
Output of service sector, USD thousand per 1 person employed in service sector	3.4	>	22.0	Calculation by the working group
General indicators				
Population size, million people	32.8	>	42.1	Forecast: World Bank data
GDP per capita, USD thousand	1.5	>	11.4	Calculation by the working group
Registered unemployment rate, % of working-age population	8.9	>	6.2	Benchmark: South Korea, Malaysia Singapore
Value added per 1 SME, USD thousand	113	>	272.7	Benchmark: Median level of developed countries
Annual volume of investments, USD billion	0.9	>	129.2	Calculation by the working group
Debt burden of the state budget, % of GDP	16	>	38.7	Benchmark: Taiwan
Inflation rate, change in consumer prices, % compared to the previous year	14.4	>	4.5	Benchmark: Singapore

Additional calculations

Forecast of the Target Development Indicators of Uzbekistan until 2035

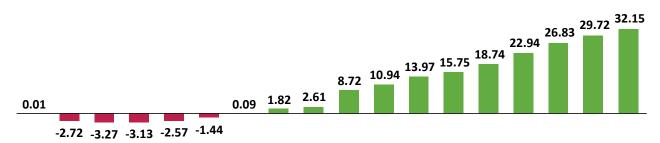


Additional calculations



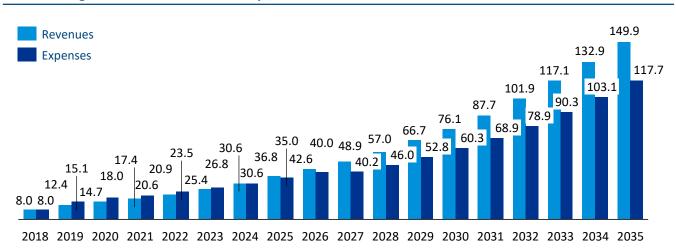
Forecast of the state budget of the Republic of Uzbekistan

Forecast of the surplus/shortage of the state budget with retention of the budget structure* and with due regard for the tax reform concept, billion USD



2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

Forecast of the surplus/shortage of the state budget with retention of the budget structure* and with due regard for the tax reform concept, billion USD

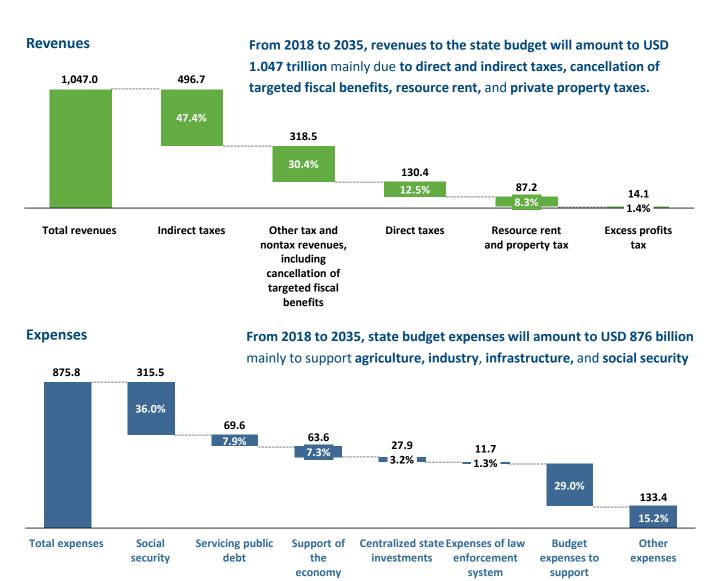


- A budget shortage will be observed until 2024
- Implementation of tax reform leads to a significant increase in budget expenditures in 2019
- To reach a budget surplus within 6 years, starting from 2025, it will be necessary to limit the growth rate of budget expenditures to 13.5% annually.
- The tax reform concept provides for a **significant increase in the burden on the state budget**, in particular, due to the cancellation of mandatory contributions to state special-purpose funds, which are charged on the turnover (revenue) of legal entities; cancellation of insurance fees of citizens to the nonbudgetary Pension Fund; reduction of the unified social tax rate for business entities from 25% (15%) to 12%, which will require UZS 46.3 trillion (USD 6 billion) to be allocated from the budget to cover the expenses that were previously covered from nonbudgetary funds.
- The main increase in budget revenues is provided through the expansion of the circle of VAT payers (UZS +16.2 trillion in 2019, or USD 2.1 billion) and cancellation of targeted fiscal benefits. (Upon cancellation of 25% benefits, the cumulative increase in budget revenues will make UZS +12.2 trillion or USD +1.6 billion.)

The forecasting model of the state budget is based on the growth of income and expense items in proportion to the growth of Uzbekistan's economy and maintains a conservative structure.

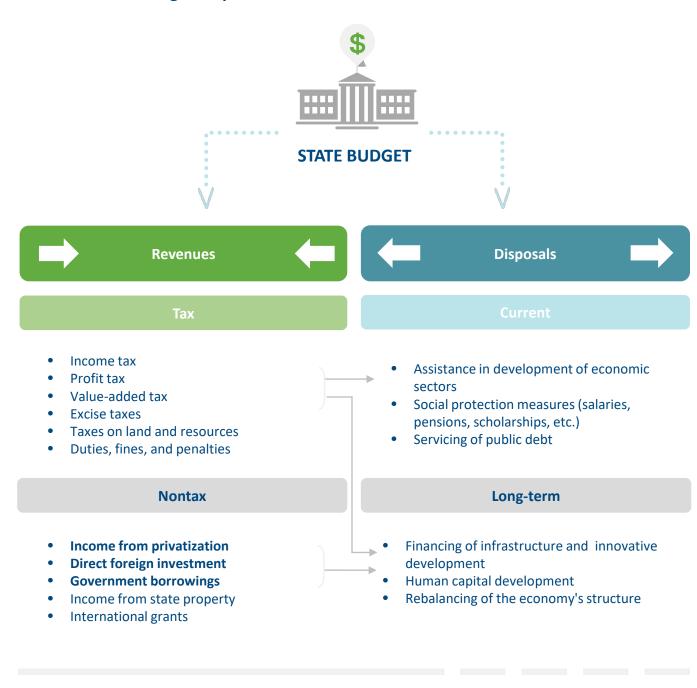
Key prerequisites

- The starting point of the calculation is the current structure and size of Uzbekistan's budget
- The structure of the budget is held conditionally constant due to the conservatism of incoming assumptions.
- In 2019, the budget was adjusted according to the Tax Reform Concept.
- Growth of income items is calculated in proportion to the GDP growth rate. The key prerequisites are growth of the tax base due to development of the economy.
- Growth of public expenses is limited to 13.5% per year—the average rate of economic growth due to growth of the population and inflation and rising living standards in Uzbekistan.



targeted funds

Strategic initiatives will be implemented mainly at the expense of nontax revenues and the state budget surplus.





Part of social problems can be solved with the help of targeted international programs and grants. The released funds can be directed to the development of priority areas of the economy.

Tax system

Tax policy reform concept

On June 29, 2018, the president of the Republic of Uzbekistan with his Decree No. UP-5468 approved the Tax Policy Reformation Concept of the Republic of Uzbekistan.

According to the President's Decree, from January 1, 2019:

- Reduction of the tax burden on the labor remuneration fund through
- Improved taxation of the payers of common and simplified taxes with the optimization of turnover (revenue) taxes and improved criteria for starting application of the simplified tax system
- Implementation of measures to mitigate the adverse impact of tax policy improvement on the taxpayers of the simplified tax system
- Improvement of the calculation and payment procedure of value added tax and excise tax

The main areas of tax policy improvement according to the President's Decree are:

- Reduction of the tax burden on the economy
- Elimination of disproportions in the tax burden level between the business entities that pay taxes under the simplified and common tax systems
- Optimization of the number of taxes through their unification and consolidation
- Assurance of macroeconomic stability
- Simplification of tax laws, elimination of discrepancies and collisions
- Assurance of tax legislation stability and direct application of the Tax Code
- Retention of a favorable regime for foreign investors
- Improvement of tax control forms and mechanisms



- The concept does not affirm the principles of long-term tax administration. (Further changes in tax rates are possible.)
- There are no specific time frames and volumes for reduction of tax and customs benefits.
- The predominance of indirect taxes in the structure of tax revenues of the budget remains.
- There is no source of financing the off-budget funds after cancellation of payments to them.

Comparison of the current and suggested tax rates and other mandatory payments

Tax/mandatory payment	Current rates	Proposed rates	Difference
Income tax	14%	12%	-2%
Tax on income in the form of dividends and interest	10%	5%	-5%
Unified tax payment	5%	4%	-1%
Mandatory contributions to state special- purpose funds	3.2%	0%	-3.2%
VAT	20%	20%	0%
Property tax	5%	2%	-3%
Personal income tax	7.5%–22.5%	12%	
Unified social tax	25% / 15%	12%	-3%
Insurance contributions of citizens	8%	0%	-8%

Sources: data from open sources, analysis of the working group.



Impact on the budget (1/2)

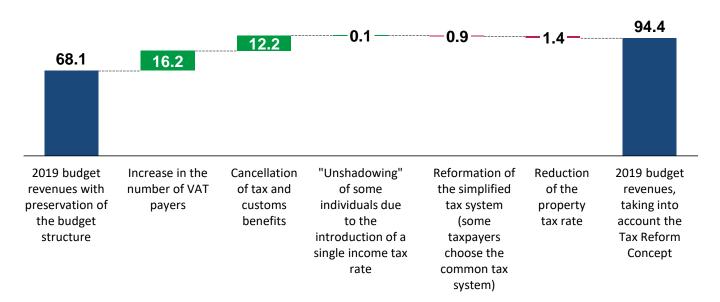
Provisions of the Tax Policy Reformation Concept of the Republic of Uzbekistan	Expected impact on the budget
Cancellation of a large number of targeted fiscal benefits	Increase in budget revenues due to cumulative tax receipts
Expansion of the circle of VAT payers (20%)	Increase in budget revenues due to the increase in VAT receipts (a group of indirect taxes)
Introduction of a single personal income tax rate of 12% for all citizens	Increase in the proceeds from income tax by expanding the database of taxpayers through their "unshadowing" (a group of direct taxes)
Cancellation of mandatory deductions to the state special-purpose funds, which are charged on the turnover (revenue) of legal entities (3.2% of net revenue of the payers of standard taxes)	The absence of direct receipt of funds to the nonbudgetary funds (Pension, Road, School Funds). Therefore, if the activity (demand for financing) of these funds remains unchanged, the burden on the budget increases
Cancellation of insurance fees of citizens to the nonbudgetary Pension Fund that are withheld from personal income in the form of labor remuneration (8% of wages)	The absence of direct receipt of funds to the nonbudgetary Pension Fund. Therefore, if the activity (demand for financing) of the fund remains unchanged, the burden on the budget increases
Reduction of the unified social tax rate for business entities from 25% (15%) to 12%	The absence of direct receipt of funds mostly to the nonbudgetary Pension Fund. Therefore, if the activity (demand for financing) of the fund remains unchanged, the burden on the budget increases
Reduction of the income tax rate for business entities from 14% to 12%, for commercial banks, from 22% to 20% Introduction of a 20% income tax for communications service providers and cancellation of the excess profit tax assessment for them, depending on their profitability	Reduction in budget revenues in the form of proceeds from income tax (a group of direct taxes) if income of business entities remains at the current level
Reduction of the corporate property tax rate from 5% to 2%	Reduction of budget revenues in the form of proceeds from property tax (a group of direct taxes) if the cumulative value of property remains at the current level
Reformation of the simplified tax system Establishment of the turnover (revenue) tax assessment and payment procedure with a basic rate of 4% for taxpayers with annual turnover (revenue) up to UZS 1 billion	Taking into account the above clauses and the fact that most taxpayers in Uzbekistan apply the simplified tax system, and that its cancellation will increase the number of taxpayers of national taxes, it is impossible to unequivocally measure the impact on the budget.



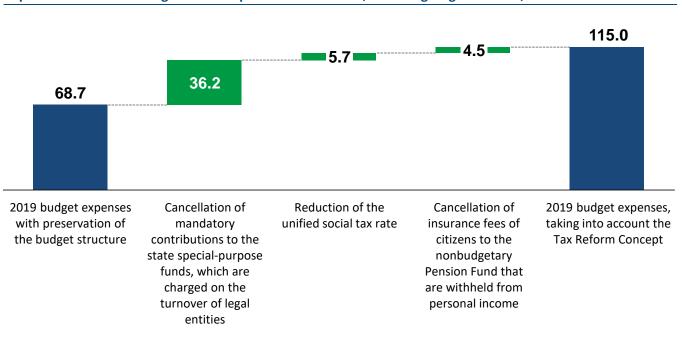
Impact on the budget (2/2)

Implementation of the Tax Reform Concept will increase budget revenues by UZS 26.3 trillion in 2019. However, it will require expenses to be increased by UZS 46.3 trillion in the same period.

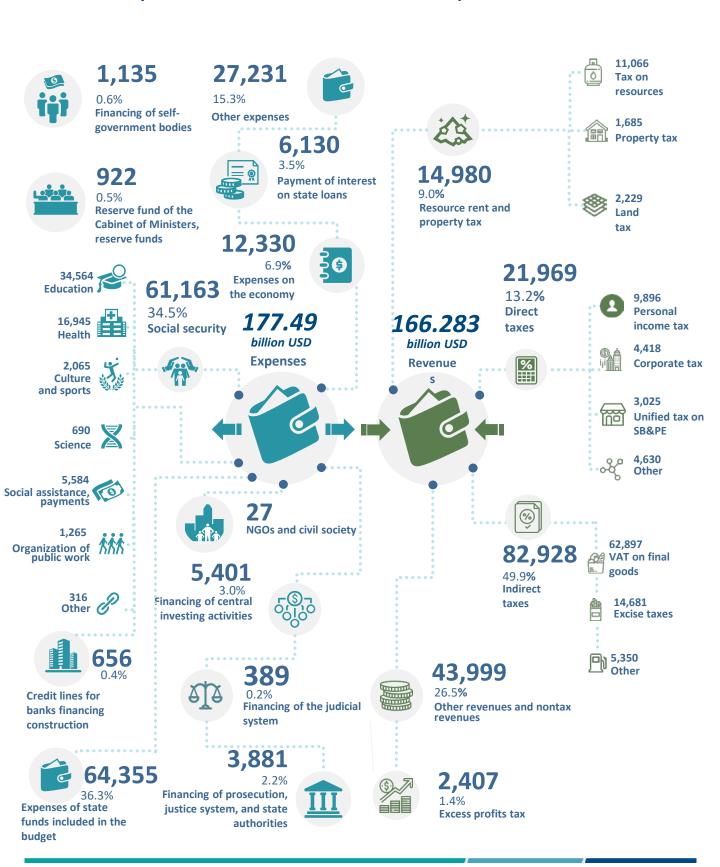
Revenues of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



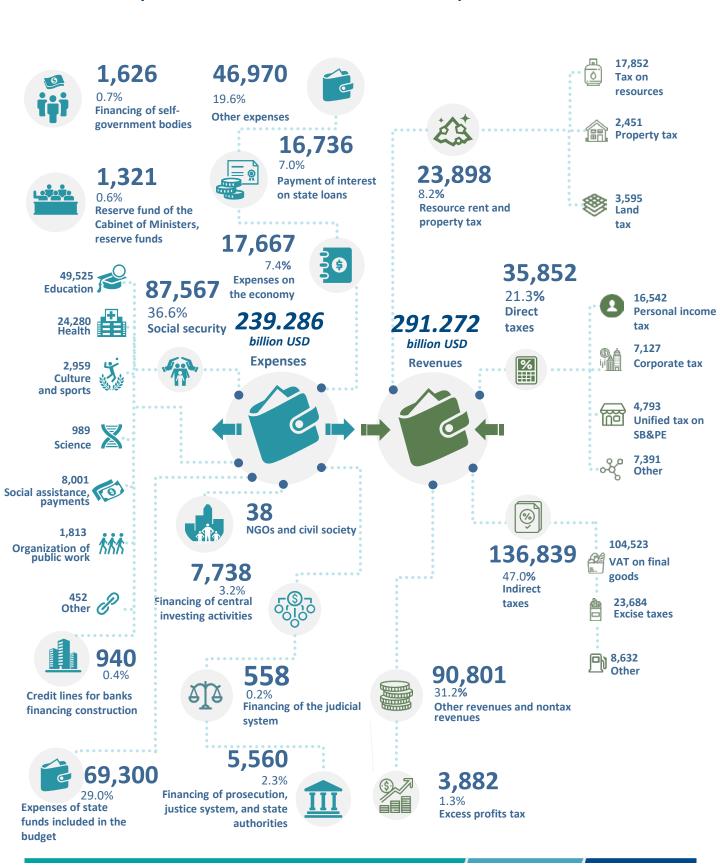
Expenses of the state budget of the Republic of Uzbekistan, excluding targeted funds, UZS trillion



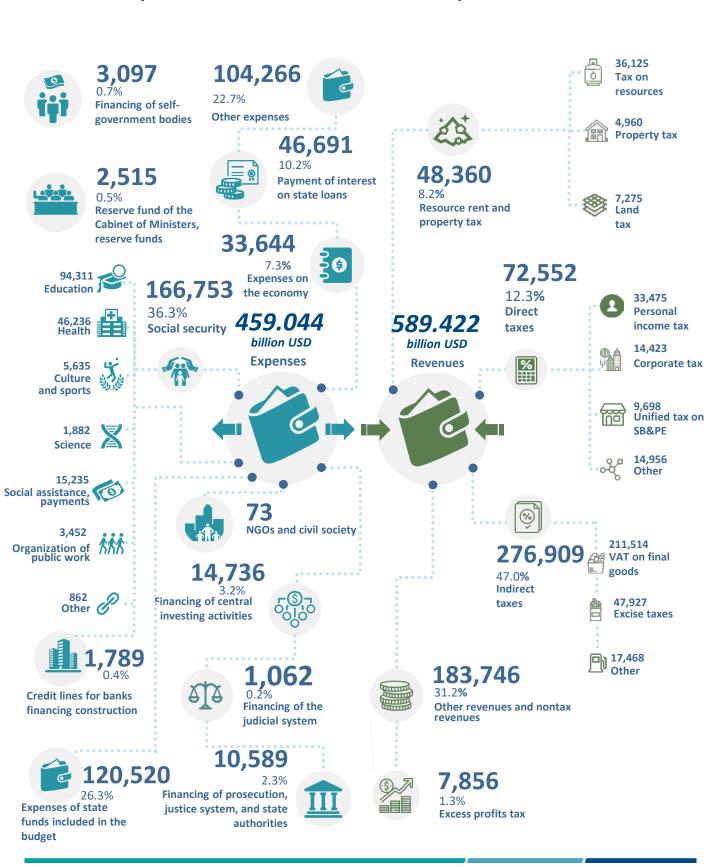
Total expenses and revenues of the state budget of the Republic of Uzbekistan for 2018–2025 by sources of income and main items of expenses



Total expenses and revenues of the state budget of the Republic of Uzbekistan for 2026–2030 by sources of income and main items of expenses



Total expenses and revenues of the state budget of the Republic of Uzbekistan 2031–2035 by sources of income and main items of expenses



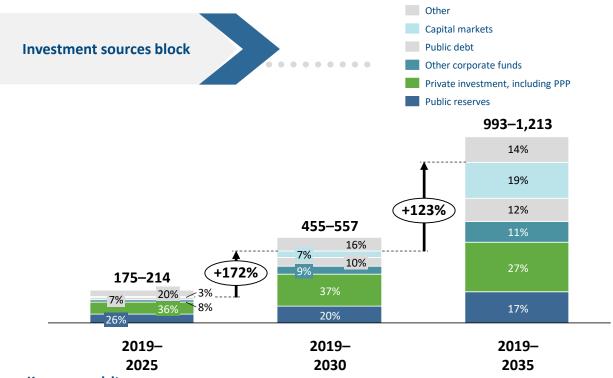
Investment: Areas and sources

Additional calculations



Investment: Forecasting approach

The forecasting model for calculating the volume of investments allows determining the most important sources and reflects the most critical prerequisites for maximizing revenues.



Key prerequisites

- Investments are shown in the context of the most important sources of investments for developing economies using the example of the historical dynamics of such countries as Malaysia, South Korea, Turkey, and, to a lesser extent, Georgia, Azerbaijan, and Kazakhstan to adjust to regional specifics.
- The starting point of the calculation is the current structure and size of funds, sources of investments, and the volume of liabilities of the banking system of the Republic of Uzbekistan.
- For each source of investment, a unique set of parameters is collected depending on its specifics, and different growth rates are used on the basis of qualitative assessments and development scenarios.

2019-2025

- Significant flow of investments, both under the public-private partnership scheme and due to international companies entering the market
- Main areas of investment are industry, energy, and agriculture.
- High economic growth (8.3%) makes it possible to carry out public borrowings at a relatively low cost and increase their volume.

2025-2030

• The dynamics of the first five years will continue, but thanks to the active development of market mechanisms and the formation of the banking system a more important role is played by bank project financing.

2030-2035

- The state maintains a significant role—more than 20% of investments.
- Private direct investment, investment through capital markets and private banks are coming to the fore.

Limitations of the model include:

- The impact of inflation and purchasing power of the national currency was not calculated.
- The effect of the introduction of additional taxes, the cancellation of existing taxes, or changes in the tax rate was not calculated.
- Different scenarios of population growth were not calculated.

Investment: Main areas

Source	s of expenditures	2019–2035 billion USD
1	Executive authority	0.7–0.8
2	Legislative authority	0.5-0.6
3	Judicial authority	_
4	Agriculture	67.6–82.7
5	Textile industry	21.5–26.2
6	Fuel and energy complex	73.8–90.2
7	Mining and metallurgical industry	45.0–55.1
8	Automotive industry	41.6–50.9
9	Chemical industry	40.5–49.5
10	Transport	40.6–49.7
11	Construction industry and infrastructure	128.64–156.9
12	Tourism	37.8–46.2
13	Small business and private entrepreneurs	30.1–36.8
14	Banks and compliance	17.2–21.0
15	Insurance system	1.8-2.2
16	Pension system	3.8–4.6
17	Capital markets	12.2–14.9
18	Health care	172.6–210.9
19	Social policy	42.2–51.6
20	Human capital	144.0–176.0
21	Culture	10.8–13.2
22	Environment	6.4–7.8
23	Science, technology, and innovations	53.5-65.4

Sources: World Bank data, open data of the UN, the Central Bank of Uzbekistan, analysis of the working group

Total expenses: (billion USD)

993-1,213

Investment: Main sources

			Dynamic scenario
So	urces of financing	2019	2019-2035
		billion USD	billion USD
1	Private investment, including public-private partnerships (direct foreign, corporate and private investment, investment of public private-partnerships)	4.0 Including PPP	263–322
2	Public reserves	4.8	166–202
3	Capital markets (investment in corporate securities)	0.082	192–234
4	Other corporate funds (investment of insurance funds and deposits of legal entities)	1.1	112–137
5	Other funds of individuals (deposits of individuals and international money transfers)	1.7	113–138
6	Public debt (borrowings in the foreign market)	0.9	122–149
7	Funds from privatization (proceeds from the sale of state property)	5.4	25–31
8	Funds under the programs of international organizations (transfers and grants under the programs of international organizations)	0.004	0.05-0.06
	Average GDP growth rate: Total investment received:		13.5%

993-1,213

Sources of investment: detailing (1/4)

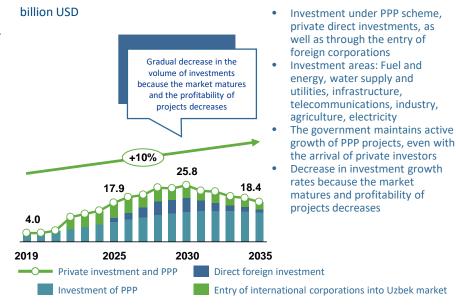
Private investment, including public-private partnership (direct foreign, corporate and private investment, investment of public-private partnerships)

The maximum volume of private investment in Uzbekistan is achieved while maintaining public-private partnership mechanisms even after private investors enter the market.

(\$263-\$322) billion (1)

Investments are carried out both under the public-private partnership scheme and without state participation. Thanks to an improved investment climate, the rate of investment growth is high. The investment volume will begin to decline after 2030 as the economy becomes saturated with investments.

Revenues from private direct and corporate investments, investments of individuals under the public-private partnership scheme



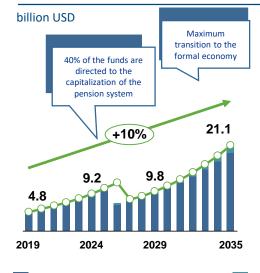
Public reserves

The main driver of investments is the growth of business activity in the country and the increased tax base.

(\$166-\$202) billion (1)

Investments are made at the expense of off-budget state targeted funds (or directly from the budget in case of termination of financing of targeted funds). There is a significant increase in the tax base due to the maximum possible transition to the formal economy, transparent taxation, and the cashless payment system.

Receipt of public funds



private pension system.
An amount not exceeding the income of funds of the previous

to the capitalization of the

High growth rate of the tax

The tax base grows faster than

GDP due to the growth of tax

the informal economy to 0%.

Starting in 2026, 40% of the

collection and the reduction of

collected funds will be directed

base-13.1%

year is spent annually.

 Interest is charged on the difference between income and expenses.

-

Government investment

Income of off-budget state funds

Interest income of funds

Sources of investment: detailing (2/4)

3

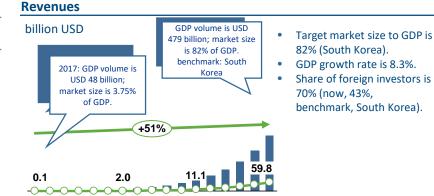
Capital markets

(investment in corporate securities)

The maximum amount of funds received through capital markets is achieved with a high rate of economic growth and a high share of foreign investors.

(\$192-\$234) billion (1)

Complete reformation of capital markets, ensuring transparency and stability of the system, together with a significant inflow of private investment and high GDP growth will ensure high growth of market capitalization, 70% of which are secured by foreign investment.



2030

2035

- \bigcirc -

Available funds

2019

Total market capitalization

The revenues through capital markets depend on the GDP growth rate, the relative size of capital markets to GDP, and the share of foreign investors. The relative size of the capital market depends on the level of development of the system, including exchanges, information and analytical services, the share of public companies, the quality of reporting and communication of companies. The share of foreign investors depends on the GDP growth rate, as it directly affects the ROE of companies, and on investment opportunities that also depend on the rate of economic development.

2025

4

Other corporate funds

(investment of insurance funds and deposits of legal entities)

The maximum growth of funds of legal entities requires increased confidence from local and international companies toward the banking system.

(\$112-\$ 137) billion (1)

The volume of liabilities of legal entities doubles on average every five years thanks to increased confidence of local and international companies and active business growth.

Significant growth in the volume of insurance assets due to the introduction of compulsory health insurance

Revenues
billion USD

Significant growth in volume of insurance assets due to compulsory health insurance

20.8

20.8

20.9
2019
2025
2030
2035

- The banking sector is actively developed by the government and by private players.
- The volume of liabilities of legal entities grows by 20% per year.
- GDP growth on average is 8.3%.
- Significant growth of the insurance system to 2.8% of GDP (2017: 0.4%). Growth rate is over 20%, including due to compulsory health insurance (benchmark: Brazil).

Liabilities of legal entities

Total funds of legal entities Funds of insurance companies

Attracting liabilities of legal entities mainly depends on two factors: the rates of economic development and business activity as well as the level of development of the banking system. Therefore, the scenarios of revenue growth depend on the GDP growth rate, the reduction of the state's share in the banking system, and the growth of business entities' confidence in the banking system.

Growth of insurance system revenues depends on an increase in the number of compulsory insurance types, which will ensure the growth of insurance premiums and, as a result, the amount of funds placed in securities of the state and corporations of Uzbekistan. The significant inflow of funds is due to compulsory health insurance introduced only in the dynamic scenario.

Note: (1) Total amount of funds received from the source for the period from 2019 to 2035
Sources: World Bank data, UN Open data, Central Bank of the Republic of Uzbekistan, Ministry of Finance of the Republic of Uzbekistan

Sources of investment: detailing (3/4)

5

Other funds of individuals

(deposits of individuals and international money transfers)

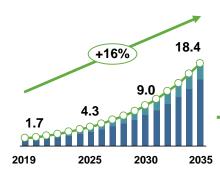
The growth of revenues from individuals depends on the development of the banking sector, financial literacy of the population, and the social security level.

(\$113-\$138) billion (1)

The banking system is becoming reliable and transparent. Banks offer a wide range of savings products. Penetration of banking services reaches 100%. Due to the development of social security, 30% of money transfers from abroad will be directed into savings.

Revenues

billion USD



- The volume of deposits of individuals will be USD 3 billion for 2019.
- International transfers to Uzbekistan will amount to USD 2.2 billion for 2019.
- Savings from transfers: 30%
- Total funds of individuals

 Receipt of liabilities through funds of individuals
 - Savings from international transfers

Attracting liabilities of legal entities depends mainly on the growth of real disposable income of the population and increased confidence of the population in the banking system. Penetration of banking services also plays an important role: the target level for 2035 is 100% (60% in 2017). As the penetration of banking products grows, the volume of liabilities of individuals will increase.

Savings from international transfers depend on the quality of life of the population. The higher the volume of services provided by the state, the higher the amount of savings. As of 2018, the volume of transfers from abroad amounted to USD 5 billion. Due to the low standard of living, less than 10% is directed into savings.

6

Public debt

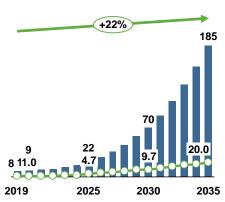
(borrowings in the foreign market)

The increase in public debt should be coordinated with GDP growth to avoid exceeding the debt burden and increasing the risk of default.

(\$122-\$149) billion (1)

The increased growth rate of public debt in 2025 is associated with increased GDP and greater potential for growth of the debt burden without reducing the sovereign credit rating. Significant increase in debt burden after 2025

Revenues billion USD



- Growth of the debt burden from 16.1% to 17% by 2025 followed by a gradual increase in the debt burden by 2% annually (up to 38.7%)
- GDP growth is 8.3%.
- The body of debt is repaid starting in
- The target level of public debt is at Taiwan's level.



The debt amount for a particular year is calculated as a percentage of the debt burden in GDP. The proceeds are calculated as the difference between the debt amount of the current year and the debt amount of the previous year minus the repayment of the debt body, if repayment occurs in that year.

Sources of investment: detailing (4/4)

Funds from privatization

(proceeds from the sale of state property)

The maximum effect of privatization is achieved through the gradual entry of private investors into the capital of state-owned companies.

Revenues

(\$25-\$31) billion (1)

The state's share in the economy gradually declines. The state sells shares of strategic assets to active investors. Also, inefficient assets are gradually sold.



- The initial cost of property for sale is USD 21.7 billion.
- Increase in revenues by 30% is achieved through sale at auction.
 - Up to 25% of a company's assets and shares are sold annually.
 - Unsold property increases in price by 8% per year.

The scenario of "slow" privatization when no more than 10% of state assets are sold annually as the unsold part grows in value is the most effective in terms of revenues. However, one of the essential problems of Uzbekistan's economy is the high share of the state, which can prevent investors from entering the local market. Insufficiently active privatization can send the signal to investors that the state is not ready to distance itself from management of the economy. Also, due to the low liquidity of the market, some investors may not be ready to enter into capital by less than 25%.

Funds under the programs of international organizations

(transfers and grants under the programs of international organizations)

Nonrepayable transfers from international organizations decrease with the growth of the country's economy and the reduction in the number of social projects that require investment.

(\$88-\$108) billion (1)

International organizations will contribute a smaller amount to the budget each year due to a significant increase in the quality of life. Also, the Republic of Uzbekistan will have its own resources to solve social problems.

Revenues billion USD

0.004 0.003 0.003 0.002 2025 2021 2030 2035

- A small number of domestic projects fall within the scope of transfers.
- Reduction of transfers due to the sufficiency of one's own funds
- Rapid economic growth
- Ability to independently control external cash receipts

Expenses on investment programs International Fund for Agricultural Development United Nations Development Program UNICEF Other

Analytical summary on privatization of state assets

Additional calculations



Privatization scenarios

Only stage-by-stage privatization will make it possible to achieve a growth rate of 8.3% per year, as it will send the "right" signal to the market: Uzbekistan is ready for liberalization, but only with strategic investors.

"Wholesale privatization"

- Wholesale privatization will not provide for the maximum cost of assets being sold.
- Will allow property transfer to potentially undesirable investors.
- Will lead to shock phenomena in the key economic areas

Retention of state property

- Will hinder access to additional sources of investment at the beginning of development.
- Impedes private international investment.
- Requires additional financing for ineffective entities.

Phased complete privatization

- Sends investors a signal about economic "denationalization."
- Allows one to obtain a "fair" value for the block of shares of the asset being sold.
- Allows one to get rid of inefficient assets without shock phenomena.
- Restricts access by potentially unwanted investors to the market.
- Will increase the efficiency and market value of strategic assets.

+13.5%

Average annual growth of GDP in the dynamic scenario

"25% + 1" "50%-1" "Golden share"

Investor enters the capital o the asset and facilitates its enhanced performance. Investor has no veto power. Investor will increase the ownership share and will facilitate the increase in market potential and value. The state reserves the right to a final decision

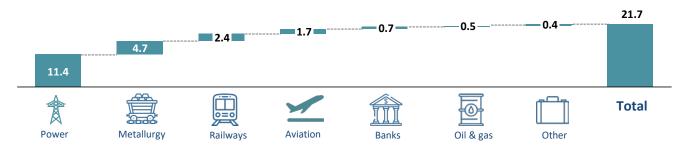
Investor will buy back the 'property from the state. The state reserves the 'golden share'—that is, veto power and dividends, but disengages itself from operational control.

Privatization: results of calculations

At the moment, more than 200 state-owned objects with a total value of USD 733 million are subject to privatization, 61 objects are not subject to privatization.

Property not subject to privatization according to the decree of the President 1

Property value by category, in USD billion (3 quartile)



Examples of business entities not subject to privatization

Navoi Mining and Metallurgical Combinat

Vostok

Uzbekistan Cotton Certification Center Sifat

Uzmakhsusimpex

Uzbektelecom JSC

Center of Radio Communication, Broadcasting, and Television

Uzimpexaloka LLC Uzgeoburguneftgaz JSC

Uzbekgeofizika JSC

Uzbekneftegaz

Uzneftegazdobycha JSC

Uznefteprodukt JSC

Uztransgaz JSC

Xalq Bank

National Bank for Foreign Economic Activity of Uzbekistan

Chirchik Aviation Repair Plant

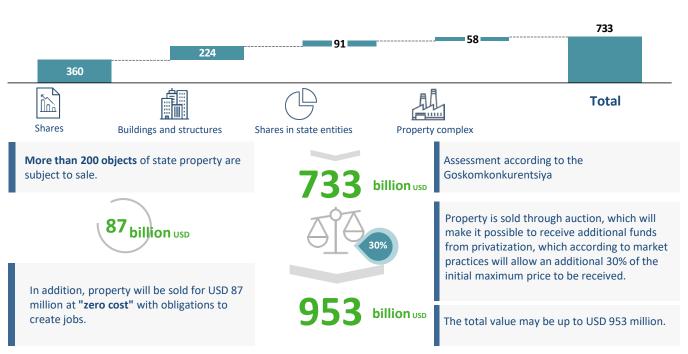
Uzbek Metallurgical Complex

Almalyk Mining and Metallurgical Complex

...total of **61** organizations

Property subject to privatization according to the decree of the President ²

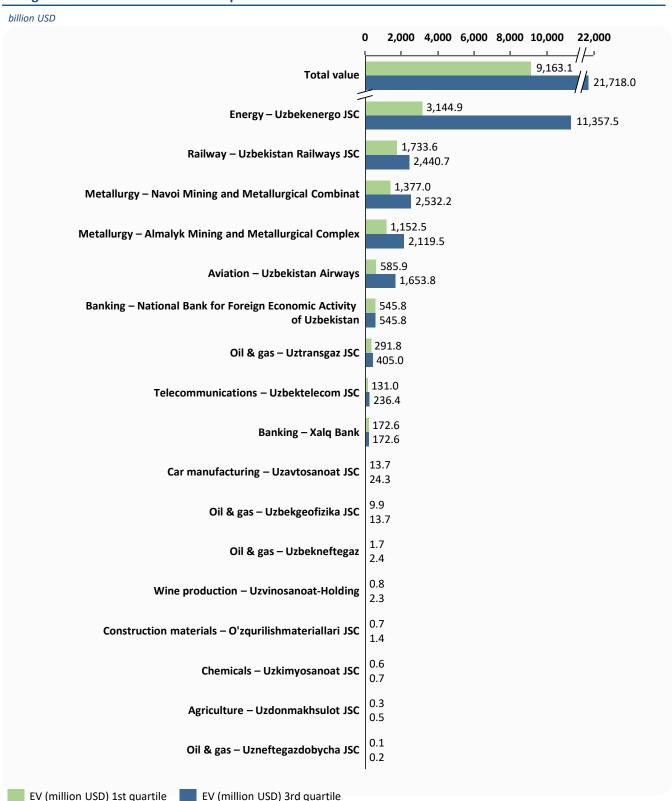
Property value by category, in USD billion



Privatization: detailing

A selective calculation of the value of state property from the list of property not subject for sale by comparative indicators shows that the value may be from USD 9 billion to USD 22 billion.

Range of values of state-owned companies



Note: Comparison is made as of August 31, 2018. EV (enterprise value) is the valuation of the company taking into account all sources of its financing: debt, preferred shares, minority interest, and ordinary shares of the company.

Sources: reports of companies, open data.

The concept has been developed with the support and assistance of

Administration of the President of the Republic of Uzbekistan

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Executive authority

- State Committee for Investment
- State Committee of the Republic of Uzbekistan for Roads
- State Committee of the Republic of Uzbekistan for Geology and Mineral Resources
- State Committee of the Republic of Uzbekistan for Land Resources, Geodesy, Cartography, and State Cadastre
- State Committee of the Republic of Uzbekistan for Tourism Development
- State Statistics Committee of the Republic of Uzbekistan
- State Committee of the Republic of Uzbekistan for Environmental Protection
- State Inspectorate for Control and Supervision over the Technical Condition and Safety of Large and Especially Important Water Management Facilities under the Ministry of Emergency Situations of the Republic of Uzbekistan
- State Committee for International Relations and Friendly Ties of the Republic of Uzbekistan with Foreign Countries
- State Forestry Committee of the Republic of Uzbekistan
- State Committee of the Republic of Uzbekistan for Assistance to Privatized Enterprises and Competition Development
- Ministry of Foreign Trade of the Republic of Uzbekistan
- Ministry of Water Resources of the Republic of

Uzbekistan

- Ministry of Higher and Specialized Secondary Education of the Republic of Uzbekistan
- Ministry of Preschool Education of the Republic of Uzbekistan
- Ministry of Housing and Communal Services of the Republic of Uzbekistan
- Ministry of Employment and Labor Relations of the Republic of Uzbekistan
- Ministry of Health of the Republic of Uzbekistan
- Ministry of Innovation Development of the Republic of Uzbekistan
- Ministry of Foreign Affairs of the Republic of Uzbekistan
- Ministry of Culture of the Republic of Uzbekistan
- Ministry of Public Education of the Republic of Uzbekistan
- Ministry for Development of Information and Communication Technologies of the Republic of Uzbekistan
- Ministry of Agriculture of the Republic of Uzbekistan
- Ministry of Construction of the Republic of Uzbekistan
- Ministry of Finance of the Republic of Uzbekistan
- Ministry of Economy of the Republic of Uzbekistan
- Ministry of Justice of the Republic of Uzbekistan
- Uzbek Agency of Automobile Transport
- Central Bank of the Republic of Uzbekistan

Legislative authority

- Office of the Legislative Chamber of the Oliy Majlis
- Senate of the Oliy Majlis of the Republic of Uzbekistan

Judicial authority

• Supreme Court of the Republic of Uzbekistan

Nongovernmental organizations, support institutions, companies

- Uzavtosanoat JSC
- Uzbekistan Airways (Ўзбекистон Ҳаво Йўллари)
- Toshshakhartranskhizmat JSC (Urban Transport Management)
- Uzbekistan Railway JSC
- Uzpakhtasanoat JSC
- Uzbekneftegaz JSC
- Uzbekenergo JSC
- Uzdonmakhsulot JSC

- Uzsharobsanoat JSC
- Uztekstilprom Association
- Uzcharmsanoat Association
- Forecasting and Macroeconomic Research Institute
- Regional Producers of the Republic of Uzbekistan
- Fund for Support of Export of Small Businesses and Private Enterprises
- Uzbekozikovkatholding Holding Company