



CENTRAL BANK
OF THE REPUBLIC OF AZERBAIJAN

FINANCIAL STABILITY REPORT

2022

January - June



Central Bank of the Republic of Azerbaijan

FINANCIAL STABILITY REPORT*

* The Report is based on the data as of June 2022.

ACRONYMS

CBA – Central Bank of the Republic of Azerbaijan

MCGF – Mortgage and Credit Guarantee Fund of the Republic of Azerbaijan

SOFAZ – State Oil Fund of the Republic of Azerbaijan

ADB – Asian Development Bank

OCP – Open Currency Position

DTI – Debt-to-income ratio

NBCI – Non-bank credit institution

BSFI – Banking sector fragility index

IMF – International Monetary Fund

WB – World Bank

SCC – State Customs Committee

SSC – State Statistics Committee

SSPF – State Social Protection Fund

HP – Hodrick Preskott filter

EIA – Energy Information Administration

ind– individual

p.p. – percentage point

DDCs – developed countries

DGCs – developing countries

NPLs – non-performing loans

NGS – non-government securities

LE – legal entity

CA – capital adequacy

CAR – Capital adequacy ratio

MSME – micro, small and medium sized enterprises

NC – national currency

ROA – return on assets

ROE – return on equity

RWA – risk-weighted assets

GDP – Gross Domestic Product

OVDL – overdue loans

WEO – World Economic Outlook

FX – foreign exchange

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Executive summary

Global supply chain disruptions, surge in prices for energy and food on the backdrop of geopolitical and geoeconomic tensions in the first half year of 2022 conditioned high global inflation. Developments in the world economy weighed on the Azerbaijani economy resulting in higher inflation. Concerted measures by the Government and the CBA to lessen the impact of inflation on economic activity and social welfare of the population allowed safeguarding macroeconomic and financial stability.

The banking sector was highly resilient to external shocks amid complicated geopolitical and macroeconomic developments.

Credit risks of the banking sector have gone through no considerable changes in the first half of the year. The quality of the lending portfolio is at an acceptable level aided by an adequate reserve buffer. Recent changes to the 'Regulations on creation of special reserves for asset classification and loan loss provisioning' and the 'Regulations on prudential ratios and requirements related to credit risks, including large credit exposures' are oriented towards subduing credit risks and neutralizing potential risks.

A high liquidity buffer and the quick liquidity ratio exceeding the minimum norm by 2 times as much elevates resilience of the banking system against liquidity shocks.

The currency position being within the prudential requirements and de-dollarization of recent years alleviate market risks across the system.

Profitability indicators of the banking sector were positively zoned. The capital position of the sector surpasses prudential norms and is capable to absorb potential risks.

Financial indicators of the insurance sector improved. Although the penetration level of the insurance sector remains low compared with benchmark countries, per capita insurance premium increased. The investment portfolio accounts for more than the three fourths of the insurance sector assets; it boosts the role of the insurance sector as a crucial institutional investor in the financial system. Profitability of the insurance sector increased in the second quarter of 2022. The capital position surpasses prudential requirements.

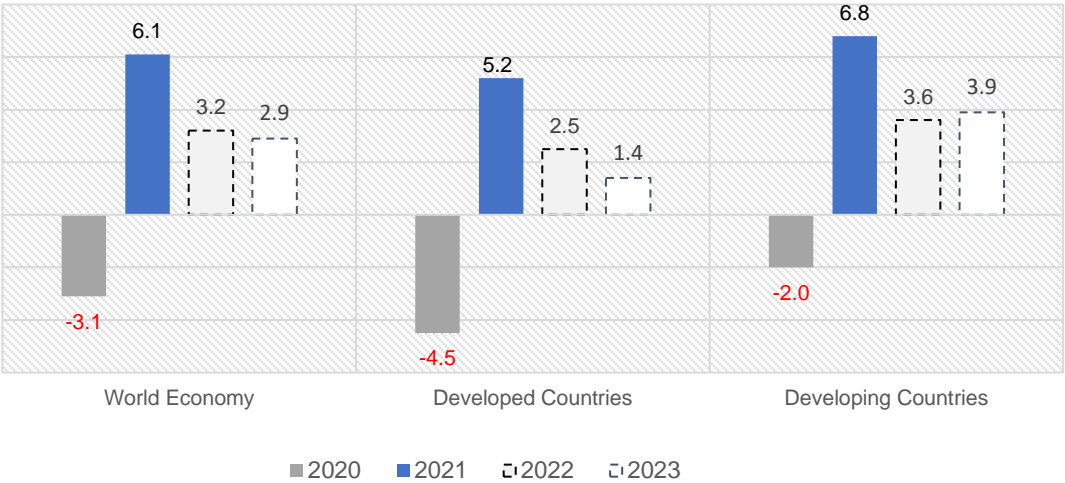
Efforts continued to improve the operating infrastructure of the capital market, align the legal framework to international standards, and support supply and demand in the market to boost the role of the capital market in supporting access of the economy to finance. Over the first half of the year, the corporate securities and Repo market followed a positive dynamics.

Global macroeconomic environment

Despite gradual removal of the COVID-19 pandemic related restrictions in the first half of the year, global supply chain disruptions amid rising geopolitical risks resulted in global inflation hitting the highs of recent 20 years. Historical highs of inflation in the USA and advanced European countries, economic growth plunge in China and geopolitical tension triggered tightening of global financial conditions, as well as elevated uncertainties and risks in the global economy.

Persistent uncertainty forced international organizations to revise economic outlook down amid aggregate demand and supply disbalance in the global economy and complicated geopolitical developments. Whereas IMF predicted 3.6% global economic growth, it is predicted to stand at 3.6% for DGCs and 2.5% for DDCs in 2022.

Chart 1. Real GDP growth forecast, %



Source: IMF, World Economic Outlook (WEO) July 2022

Growth of the consumer price index (CPI) since early 2022 surpassed expectations. In first two quarters of 2022 geopolitical tensions, sanctions and export restrictions led to the surge in global food prices. In January 2022, the price for 1 bushel of wheat was 760 US cents. While in March 2022 this indicator increased by 76% to 1340 US cents. According to the IMF, in June 2022 the CPI yoy increased by 9.1% in the USA and by 9.1% in May in the UK, the highest indicator of recent 40 years in these countries. At the same time, in June inflation stood at 8.6% in the euro area and 9.8% in DGCs. The main reasons for high inflation are high energy and food prices and supply chain disruptions in major areas. According to the August release of the EIA, Brent oil is expected to average \$105/per barrel in 2022 and \$95 in 2023. To note, these predictions are up by \$22 for 2022 and by \$27 for 2023 compared with the February release of the EIA.

Chart 2. Commodity price changes, %



Source: IMF, World Economic Outlook (WEO) July 2022

Fiscal deficit is falling across country groups, however tighter financial conditions increase the debt burden of DGCs. Low income countries that account for the majority of food consumption and are more dependent on food imports, were more affected by high commodity prices. Central banks' raising interest rates to fight inflation resulted in further tightening of financial conditions throughout the world, which pushes the debt burden of DGCs up. According to the IMF, 60% of low-income countries either are facing the national debt crisis, or exposed to a high debt crisis risk. According to the IMF April release, the share of the national debt in GDP in DGCs will increase by 1.3 pp to 67.4%, driven by Asian countries.

Table 1. The share of fiscal balance and national debt in GDP, %

	Fiscal balance				National debt			
	2020	2021	Forecast		2020	2021	Forecast	
World economy	-9.9	-6.4	-4.9	-4.0	99.2	97.0	94.4	94.1
DGCs	-10.5	-7.3	-4.3	-2.9	123.2	119.8	115.5	113.7
USA	-14.5	-10.2	-4.8	-4.0	134.2	132.6	125.6	123.7
Euro area	-7.2	-5.5	-4.3	-2.5	97.3	96.0	95.2	93.4
Japan	-9.0	-7.6	-7.8	-3.5	259.0	263.1	262.5	258.3
DGCs	-9.3	-5.3	-5.7	-5.5	64.9	66.1	67.4	69.8
Asia	-10.4	-6.6	-7.7	-6.9	68.9	72.9	76.5	79.5
Europe	-5.6	-1.9	-4.6	-4.8	37.9	36.3	37.1	38.6
Latin America	-8.8	-4.5	-4.7	-4.2	77.8	72.4	71.7	71.9
Oil producers	-7.4	-2.2	0.2	-0.5	58.7	55.6	49.0	49.5

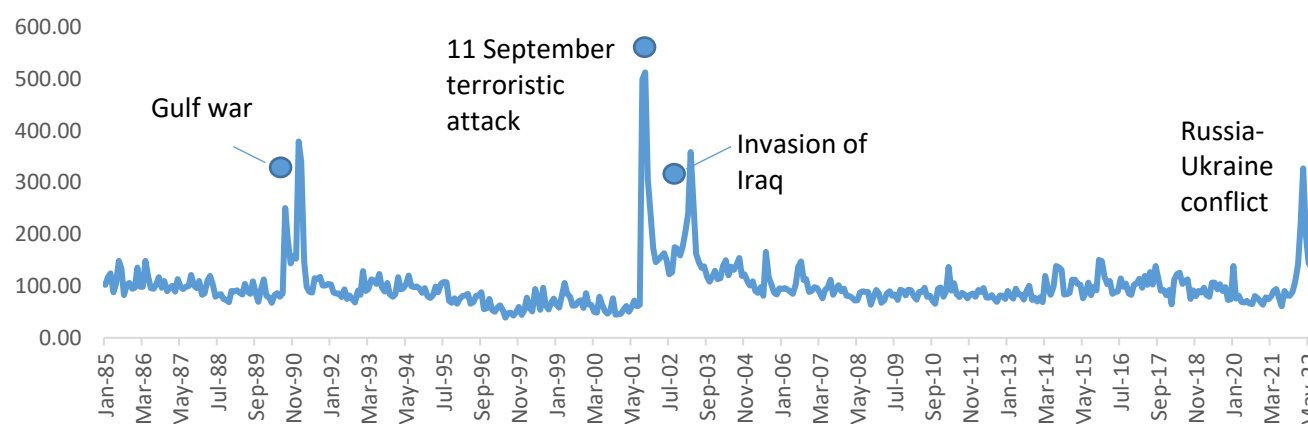
Source: IMF, Fiscal Monitor, April 2022

Box 1. Russia-Ukraine military conflict pass through channels to financial stability

Sanctions imposed on Russia in respect to the Russia-Ukraine conflict under way since February 2022, transportation-logistic disruptions triggered by the conflict and resulting surge in energy and commodity prices elevate global financial stability risks.

According to the Geopolitical risk index developed by Dario Caldara and Matteo Lacoviello¹ (GPR), geopolitical risks increased dramatically amid the Russia-Ukraine conflict. To note, the index rests upon the monthly analysis of articles covering geopolitical tensions and their threats.

Chart 3. The Geopolitical Risk Index



Source: <https://www.matteoiacoviello.com/gpr.htm>

According to the GPR, the Russia-Ukraine war unleashed in February 2022 dramatically increased the index rate that can be compared with the rate observed during the Gulf War of 1991 and the Iraq War of 2003.

The conflict between Russia and Ukraine has been translating to the global financial system through various channels since February 2022. The effect of the sanctions imposed with respect to the conflict on the banking system of our country has been limited up to now. In general, we can group the potential impact of the developments created by the regional geopolitical tension caused by this conflict on the financial system stability into five directions.

¹ Caldara Dario və Matteo Iacoviello (2022), "Measuring Geopolitical risks," American Economic Review, April, 112(4), pages.1194-1225.

Chart 4. Possible pass through channels of regional geopolitical risks to financial stability



High global inflation. Food prices rising due to geopolitical developments and supply chain disruptions keep pushing global inflation. Rising global food prices boost translation of high inflation to domestic prices through an import channel.

Surge in global energy prices. Rising prices in the global energy carriers market associated to the current geopolitical tension have an upward effect on the balance of payments of the country, as an oil and gas exporter. Surge in energy prices and potential growth opportunities for export of gas to Europe may increase exports and fiscal revenues in the medium term.

Disruptions in foreign trade relations. Our country has close trade ties with Russia and Ukraine. Presently, geopolitical processes have no significant impact on economic and trade relations of Azerbaijan with these two countries.

Risks bank assets exposed. Since domestic banks have little funds in Russian sanctioned banks, effects of sanctions on the financial stability of the Azerbaijani banking system is limited.

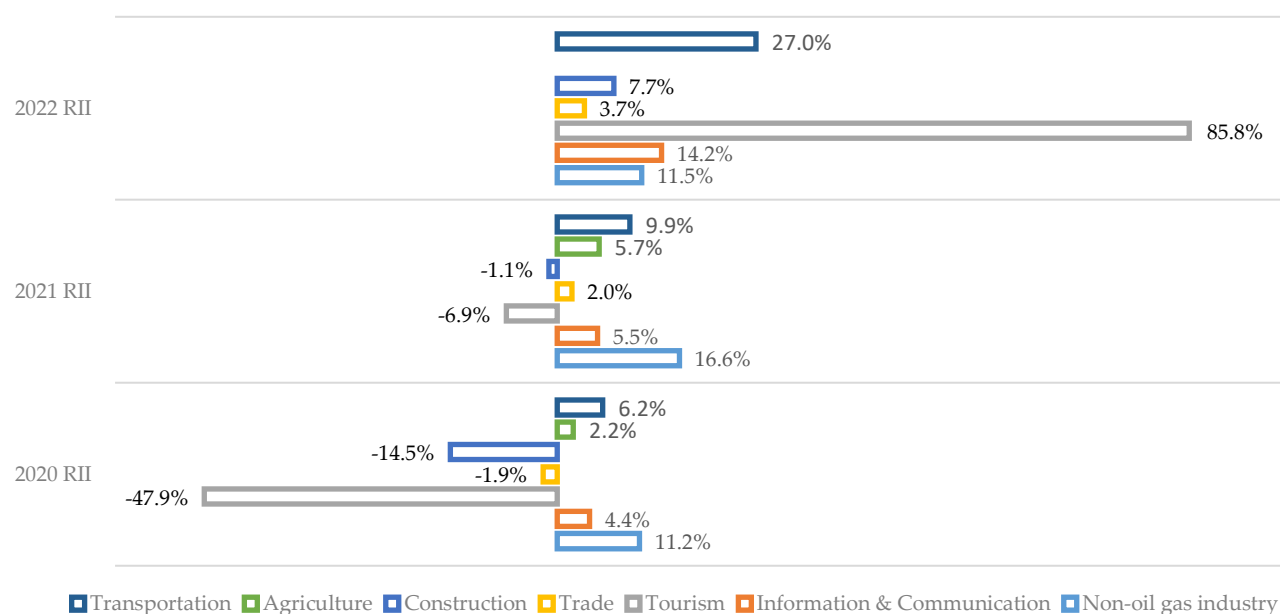
Challenges in execution of bank operations. Although domestic banks faced certain hindrances in operations with correspondent accounts due to the Russia-Ukraine conflict, the impact of this conflict on operations of Azerbaijani banks with correspondent accounts was limited.

Macroeconomic situation in Azerbaijan

The Azerbaijani economy grew in the first half of 2022 despite uncertainties triggered by high global inflation and geopolitical tensions. According to the SSC, in January-June 2022 GDP yoy increased by 6.2% to AZN63.4B. Over the period, oil and gas value added increased by 0.2% and non-oil and gas value added increased by 9.6%. Per capita GDP yoy increased by 5.7% to AZN6304.9.

The non-oil sector grew year over year in the first half of 2022.

Chart 5. Non-oil economic growth rate

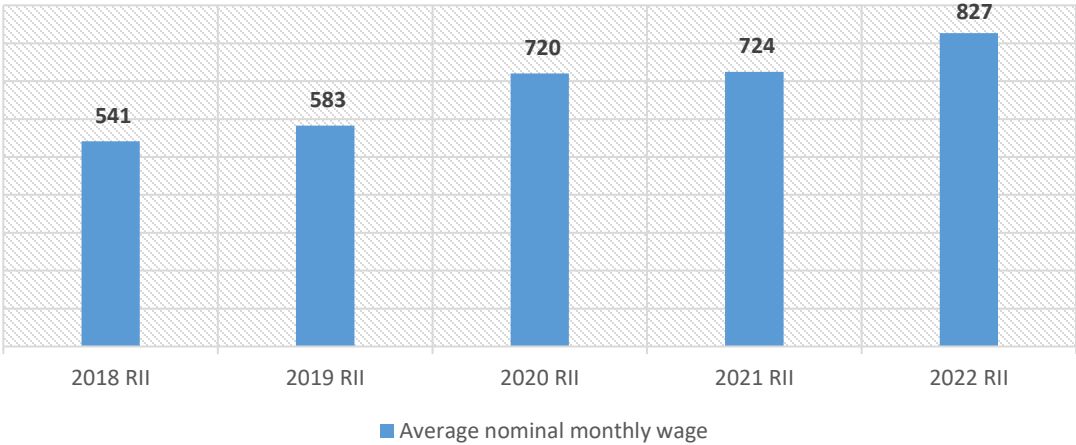


Source: SSC

In first half of 2022, the employment rate and average monthly salary increased year over year. According to the SSC, in January-June the number of hired labor yoy increased by 28.4 thousand (1.7%) to 1706.0 thousand persons – out of which 903.5 thousand are engaged in the public, while 802.5 thousand persons in the non-public sector.

In January-June 2022 average monthly nominal salary of the hired labor yoy increased by 14.2% to AZN827.1. The average monthly nominal salary was higher in the mining industry, finance and insurance, professional, scientific and technical activity, as well as in information and communication.

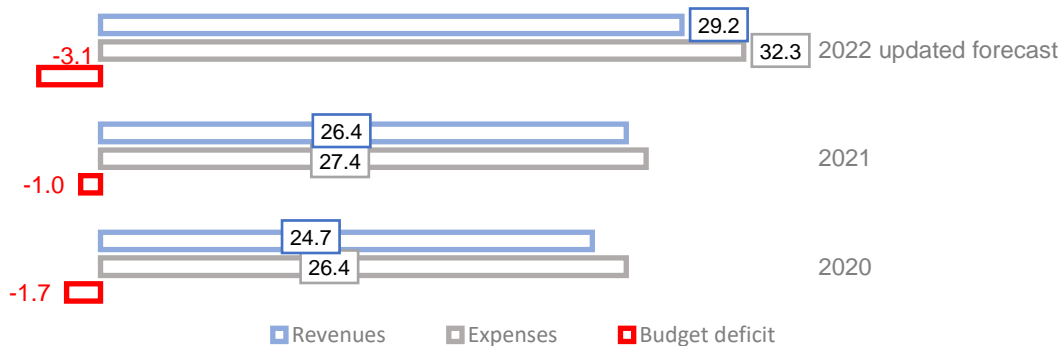
Chart 6. Change in average monthly nominal salary across quarters, in manat



Source: SSC

Revenues and expenses of the state budget were increased for 2022. State budget revenues were higher than the forecast in the current year, which served as the basis to update state budget parameters for the current year. According to the amendment made to the Law of the Republic of Azerbaijan ‘on the State Budget of the Republic of Azerbaijan for 2022’ on 29 June 2022, state budget spending for 2022 was increased by AZN2.4B to AZN32.3B. Budget spending forecast update is attributable to the surge in prices for global energy carriers and food, further strengthening of national security, acceleration of restoration and reconstruction works in liberated territories and the need to finance a number of important measures on ensuring social protection and food security of the population. According to the updated forecast, state budget revenues, funds attracted from various types of taxes, will increase by AZN2.4B to AZN29.2B.

Chart 7. State budget revenues and spending, in billion AZN

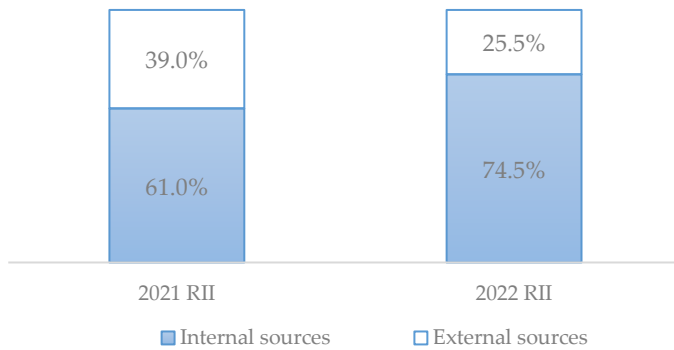


Source: Ministry of Finance

Investment to capital increased. According to the SSC, in the first half of year, AZN6.3B worth funds were channeled from all financial sources for economic and social development of the country (yoy up by 0.7%). Oil and gas investments decreased by

20.7%, while non-oil investments increased by 18.5%. Domestic sources account for 74.5%, while foreign sources for 25.5% of total investments.

Chart 8. Structure of investment to capital

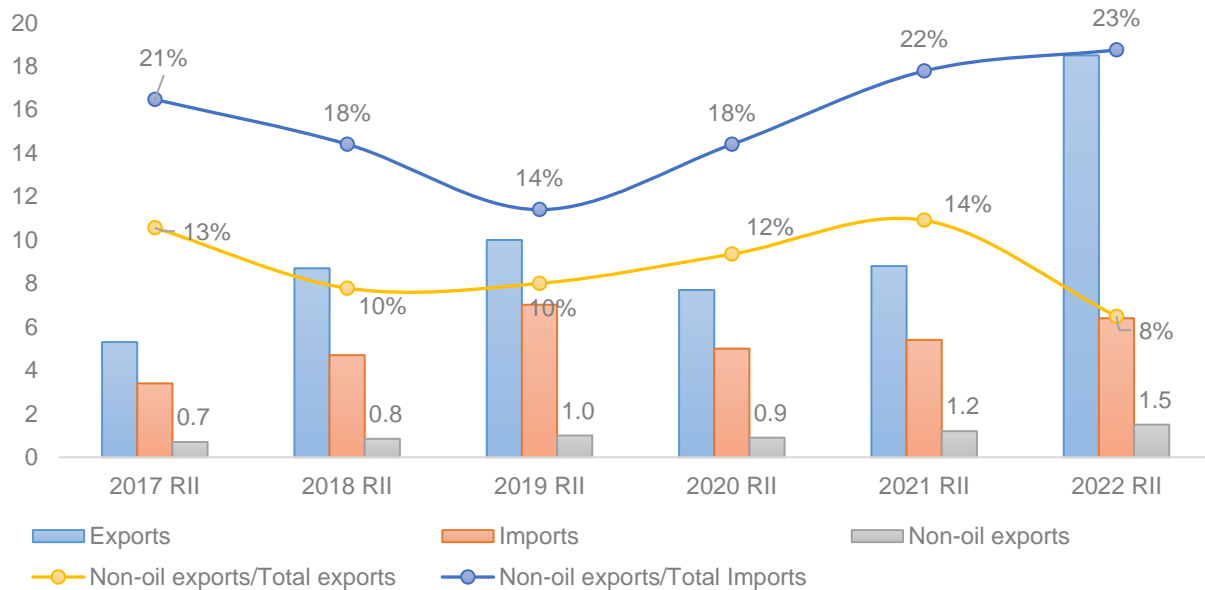


Source: SSC

Exports and imports increased year over year.

According to the SCC, exports yoy increased by 2.1 times (\$9.7B) to \$18.5B, while import increased by 18.5% (\$1 B) to \$6.4B. Non-oil export yoy increased by 25% to \$1.5B. Mineral fuel and oil products account for 92.5% (\$17.1B) of total exports. Pharmaceuticals account for 5.2%, ground vehicles for 9.2% and equipment and mechanical devices for 12.2% of total imports.

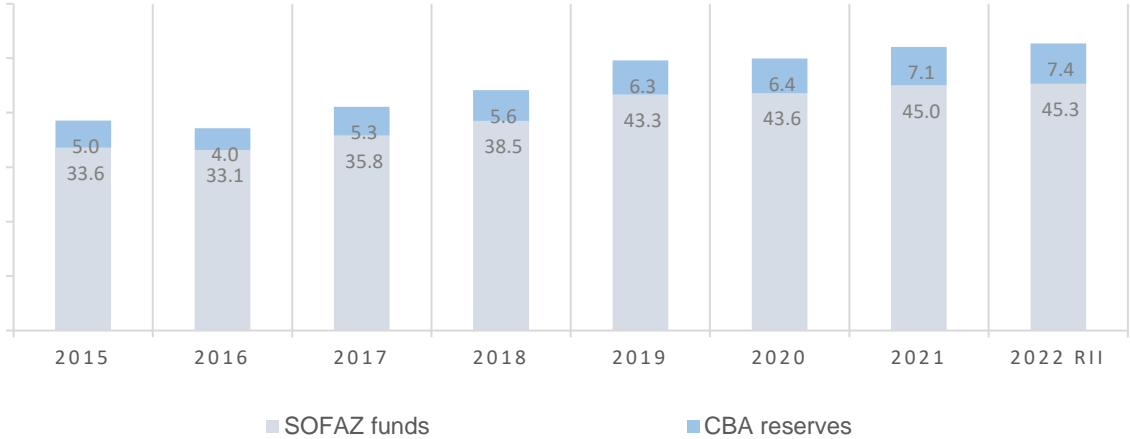
Chart 9. Imports and exports, billion USD



Source: SSC

Foreign exchange reserves keep growing. Foreign exchange reserves have been growing since 2016. CBA’s foreign exchange reserves reached \$7.4B. In general, in the first half of 2022 foreign exchange reserves reached historical highs of recent years.

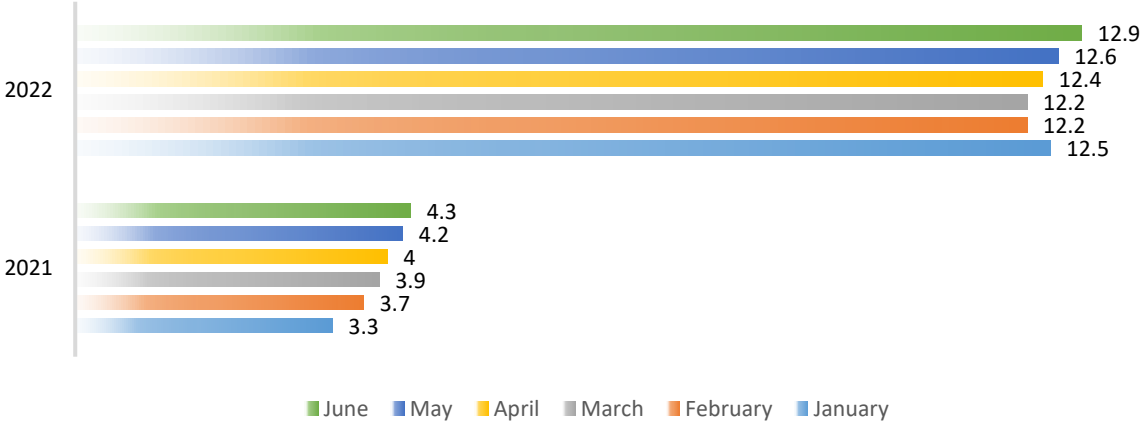
Chart 10. Foreign exchange reserves of the CBA and the SOFAZ, billion USD



Source: CBA, SOFAZ

Rising energy and food prices, including supply chain disruptions pushed inflation in Azerbaijan as in most countries. According to the SSC, in June 2022, 12-month inflation in Azerbaijan was 14.2%, while average annual inflation was 12.9%. Core inflation was 10.7% yoy, and average annual was 9.7%. High inflation was mostly driven by food price hike. In June, annual food inflation stood at 20.6%, average annual food inflation was 18.4%. At the same time, service prices yoy grew by 10.9%. Prices for postal service increased by 58%, natural gas supply by 42% and electricity by 12.5%. The CBA’s monetary policy was oriented towards returning inflation to the target range. CBA has shifted the refinancing rate from 7.25% to 7.75% since the early year.

Chart 11. Comparison of average annual inflation, %



Source: CBA

Despite rising global economic risks, economic growth trends and targeted macroeconomic policy pursued in Azerbaijan allows to safeguard macroeconomic stability.

Overview of the banking system

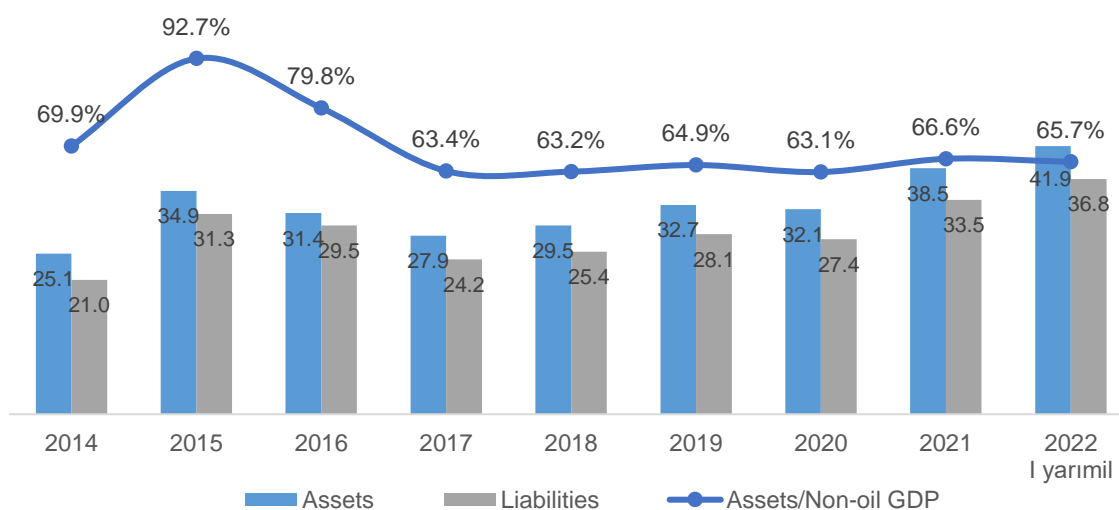
Main indicators of the banking sector were positive in the first half of 2022. Banking sector's profitability and liquidity indicators, as well as the dynamics of aggregate capital across the sector were positively zoned. Analyses suggest that the financial system is highly resilient to external shocks².

- Banking sector assets and liabilities

The balance sheet of the banking sector that posted considerable growth last year on the backdrop of economic growth recovery and expansion of domestic demand kept expanding in second quarter of 2022 as well. Banking sector assets increased by 9% (AZN3.5B) to AZN41.9B, while liabilities increased by 9.8% (AZN3.3B) to AZN36.8B.

The net lending portfolio accounted for 40.7%, liquid assets for 37.3% and other assets for 22% of banking sector assets as of end-Q2 2022. Banking sector liabilities mainly consisted of deposits of legal entities. Deposits of legal entities accounted for 53.3%, deposits of individuals for 28.2% and other liabilities 18.5% of total liabilities.

Chart 12. Banking system assets and liabilities, in billion AZN

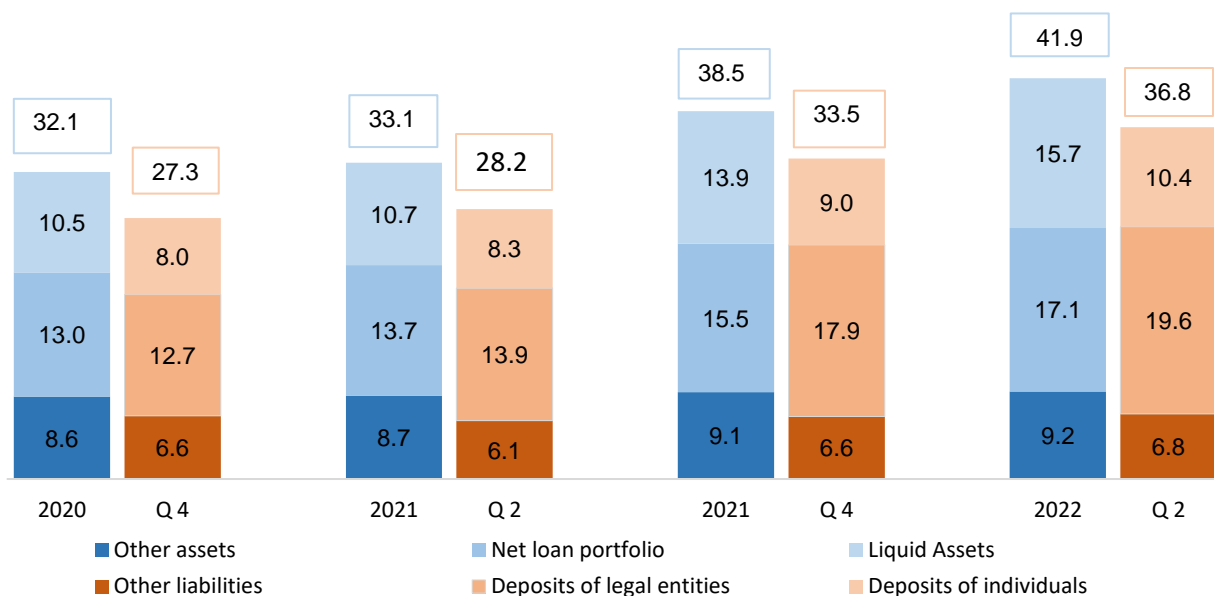


Source: CBA

² The banking sector analysis is based on banks' prudential reporting.

Banking sector assets continued to grow and was 20% higher than the pre-pandemic historical highs. Banking sector assets were supported by a stable growth rate of liabilities amid rising economic activity. In the first half of 2022, deposits of legal entities increased by 9.5% and deposits of individuals increased by 14.9%. At the same time, transformation of the funds attracted by the banking system to the lending portfolio is growing – the lending portfolio rose by 10% in the first half of the year.

Chart 13. Structure of banking system assets and liabilities, in billion AZN

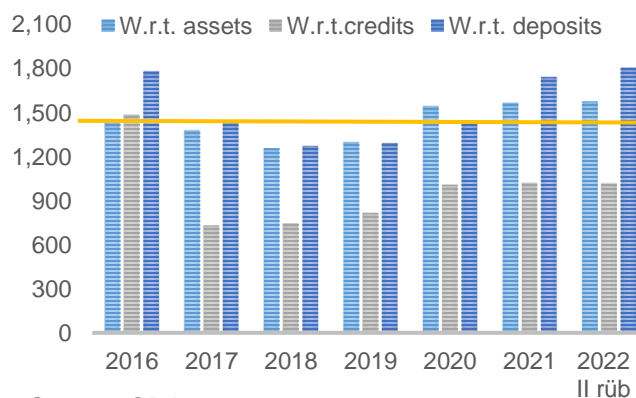


Source: CBA

- Banking system concentration

Concentration in the Azerbaijani banking system is bordering with low and moderate concentration. The Herfindahl-Hirschman Index – HHI³, widely used in international practice to assess concentration, indicates low and moderate concentration in the banking system, attributable to a high number of small and medium-sized banks in the sector.

Chart 14. HHI index



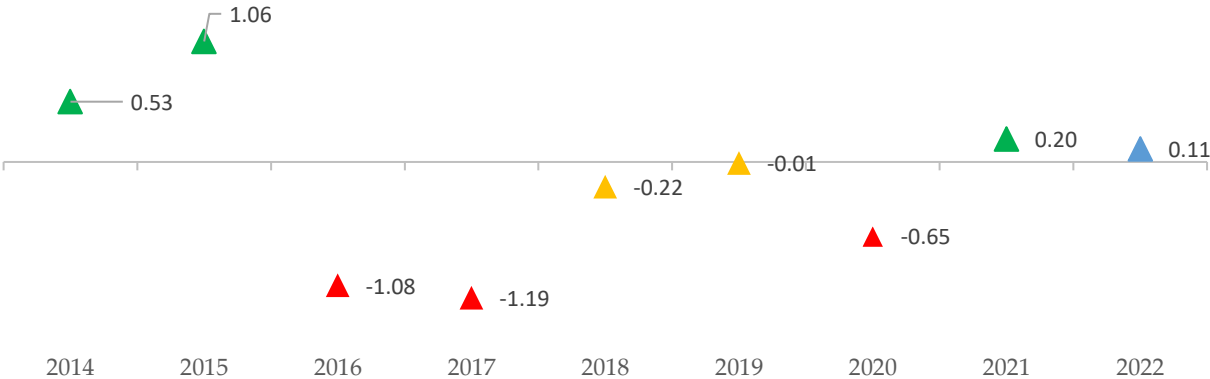
Source: CBA

³ The HHI is used in international practice to measure competitiveness and concentration in markets. According to the practice of the US Department of Justice, markets are divided into 3 parts on the basis of this index: lowly (HHI<1500), moderately (1500<HHI<2500) and highly (HHI>2500) concentrated markets. The value of the HHI may range between 0-10000.

HHI is 1015, 1805 and 1576 on the lending portfolio, the deposit portfolio and assets respectively across the system, indicative of the fact that the lending portfolio is lowly concentrated, assets are around moderately concentrated (1500>), and moderately concentrated on the deposit portfolio.

According to the BSFI, accumulation of potential risks receded. The BSFI, highly used in international practice, assesses banking sector resilience. The index is defined as the average value of the standard deviation of loans granted to the private sector, foreign debt liabilities and savings of the population. A sharp change in the index is assessed as an impact on resilience of the sector. Whereas the recovery of economic growth and expansion of banks’ balance sheets resulted in the “0.20” fragility index⁴ as of end-2021, the index stood at “0.11” amid lower foreign debt liabilities of the banking sector, attributable to less overheating in the sector in the second quarter of 2022.

Chart 15. BSFI index



Source: CBA

⁴ The BSFI between [-0.5; and lower) indicates higher fragility and probability of the realization of risks, (-0.5; 0) indicates moderate fragility, the value between (0; 0.5) - indicates high growth rate of the banking system and accumulation of potential risks, and the value of [0.5; and above) – indicates overheating up and formation of a bubble.

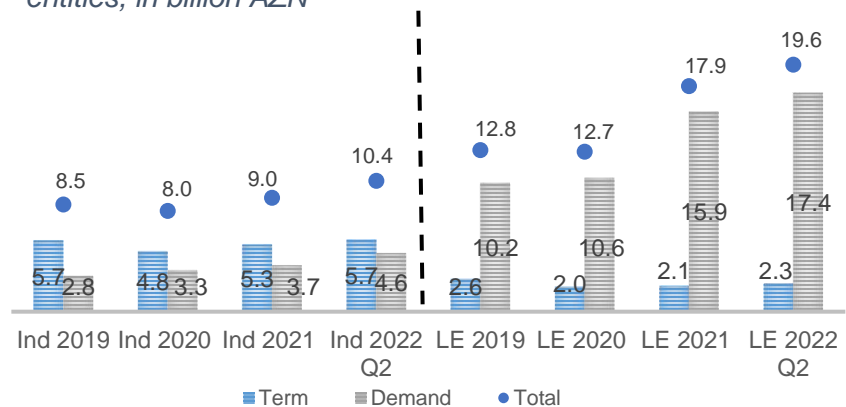
- **Resources attracted across the banking sector**

The deposit portfolio of individuals and legal entities account for 81.5% of banks' liabilities. The deposit portfolio of the sector increased by 11.3% (AZN3B) to AZN30B over six months. Demand deposits account for 73.4% and term deposits 26.6% of the deposit portfolio. The deposit portfolio mainly driven by demand deposits forces banks to maintain a high value of liquid assets.

Current liabilities, in particular deposits of legal entities as the main funding source of the sector. Deposits of legal entities account for 65.4% of the deposit portfolio and 53.3% of total liabilities. Over recent six months deposits of legal entities increased by 9.5% (AZN1.7B) to

AZN19.6B, driven by 88.3% growth in demand deposits (up by AZN1.5B). Demand deposits account for 88.5% (AZN17.4B) of deposits of legal entities. The level of concentration of demand deposits of legal entities is under supervisory surveillance.

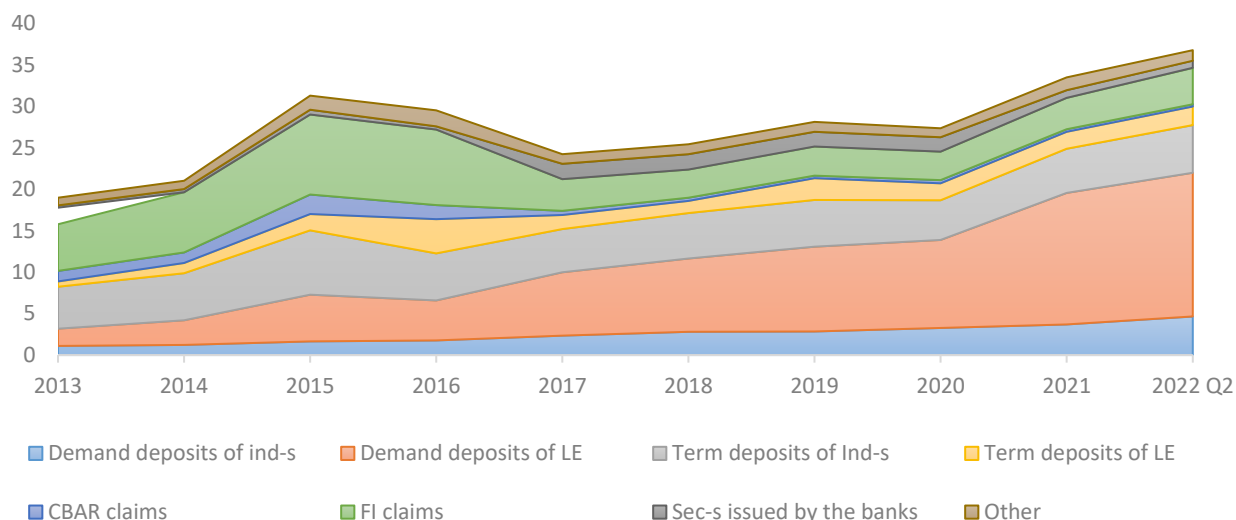
Chart 16. Dynamics of the deposit portfolio of individuals and legal entities, in billion AZN



Source: CBA

Banks' deposit portfolio followed positive dynamics. The deposit portfolio of individuals increased by AZN1.4B (14.9%) to AZN10.4B (34.6% of total deposit portfolio), driven by demand deposit of individuals. Presently, deposits of individuals account for 28% of banks' liabilities. Foreign currency denominated deposits kept dropping compared with the early year. The level of dollarization of deposits of individuals decreased by 0.9 pp to 40.8%. The share of term deposits, long-term and sustainable funding resource, in total deposits of individuals accounted for 55.3% (AZN5.7B).

Chart 17. Funds attracted across the banking sector, in billion AZN

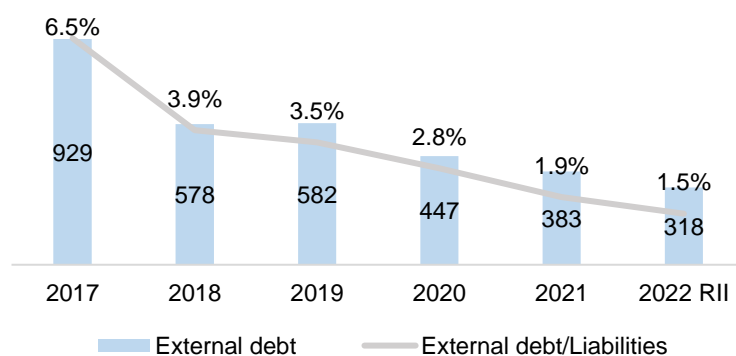


Source: CBA

Securities issued by banks provide long-term funding. As of end-June, the outstanding amount of securities issued by banks made AZN0.88B, only 26% of which is subordinated debt liabilities. Maturity of 94% securities issued by banks is 5 years and over.

Sector's external debt continues to decline. In the first half of 2022 the amount of foreign debt decreased by 17.1% (\$66M) to \$318M⁵. Banks' foreign debt account for 1.5% of total liabilities. Only 33% of payments on foreign debt of the banks shall be paid next year.

Chart 18. External debt dynamics, million USD



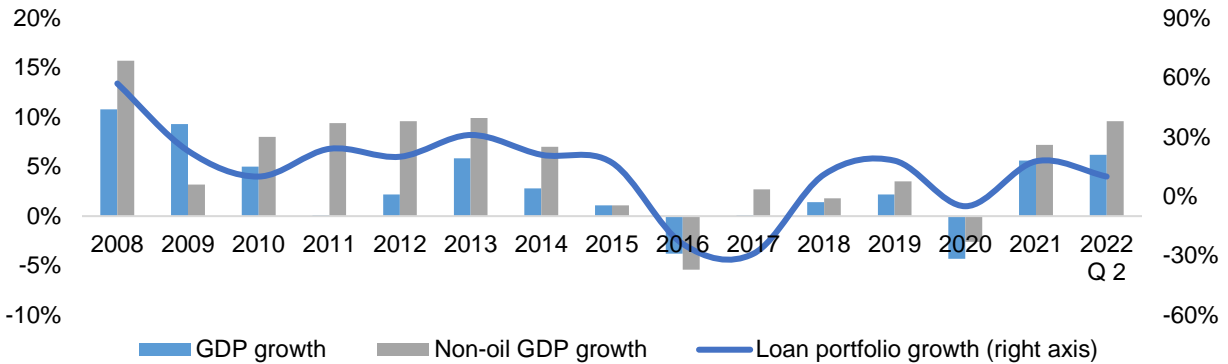
Source: CBA

⁵ Foreign debt is defined as term liabilities attracted by banks from foreign financial institutions and legal entities on the basis of prudential reporting.

- **Bank lending**

High economic activity underpinned banks' lending activity. In second quarter of 2022 the lending portfolio increased by 10% (AZN1.7B) to AZN18.3B. In general, correlation between the lending portfolio and the economic activity is high.

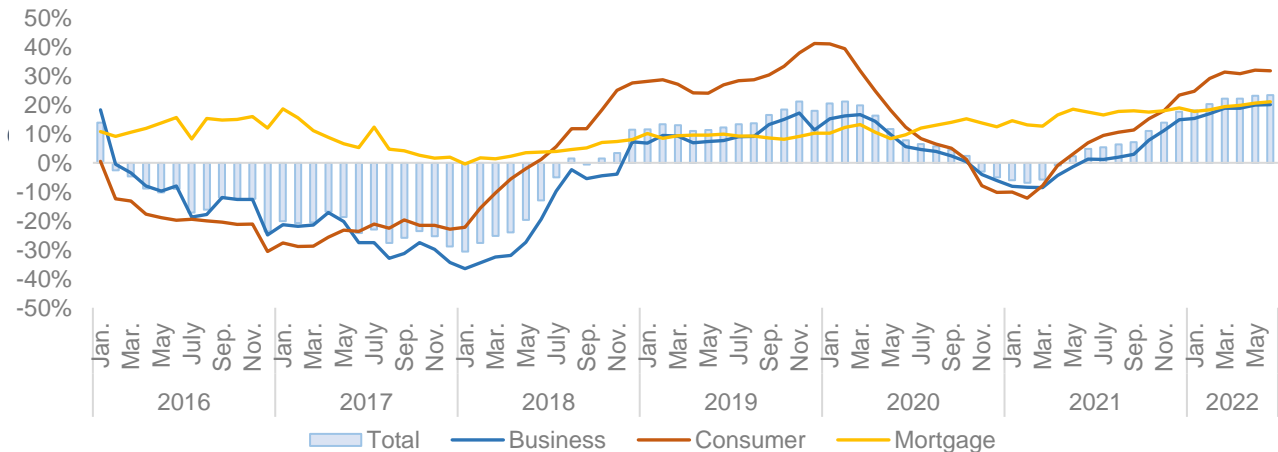
Chart 19. Comparison of the lending portfolio and GDP growth rate



Source: CBA

Analyses suggest that, the annual growth rate of the lending portfolio has reached its high since 2016. The annual growth rate on both the business and mortgage portfolios is in historical highs of recent years. Whereas the annual growth rate on the consumer portfolio is high, it falls below the level of 2019.

Chart 20. Comparison of the annual growth rate of the lending portfolio

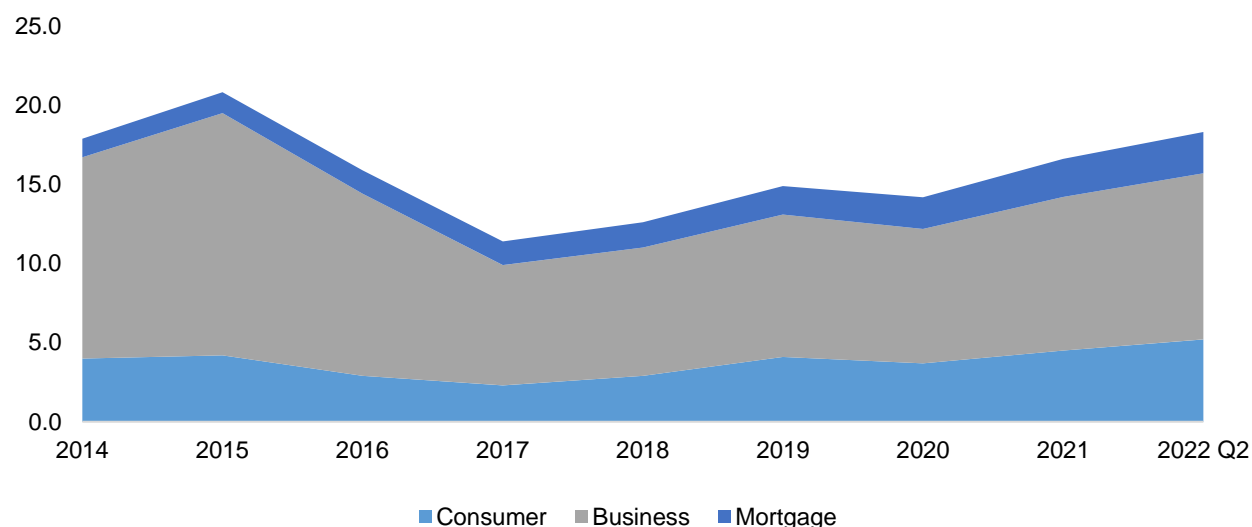


Source: CBA

Business loans account for 57.2%, consumer loans for 28.3% and mortgage loans for 14.5% of the lending portfolio.

The value of the lending portfolio increased by 7.6 % (AZN742M) to AZN10.5B. The mortgage portfolio increased by 10.3% (AZN248M) to AZN2.6B, driven by the state

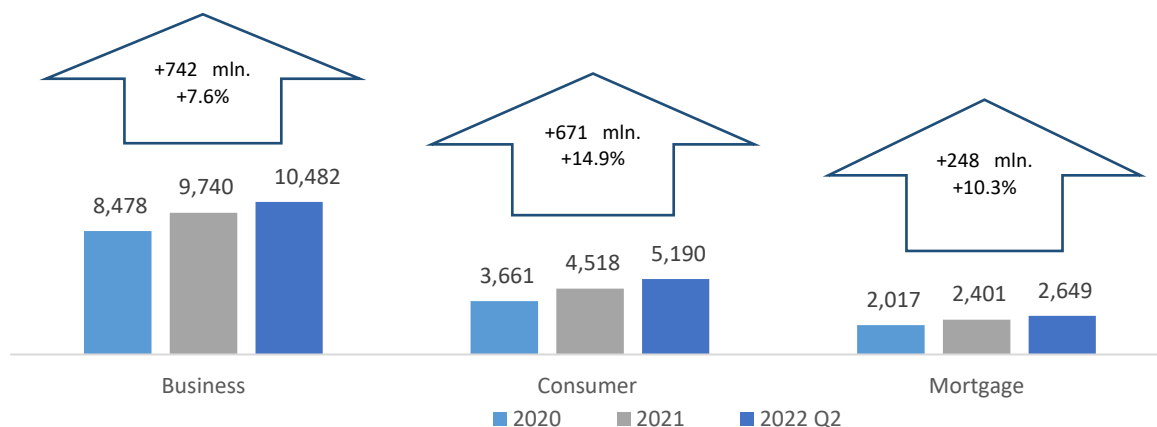
Chart 21. Lending portfolio structure, in billion AZN



Source: CBA

mortgage program. Over the period the consumer loan portfolio increased by 14.9% (AZN671M) to AZN5.2B.

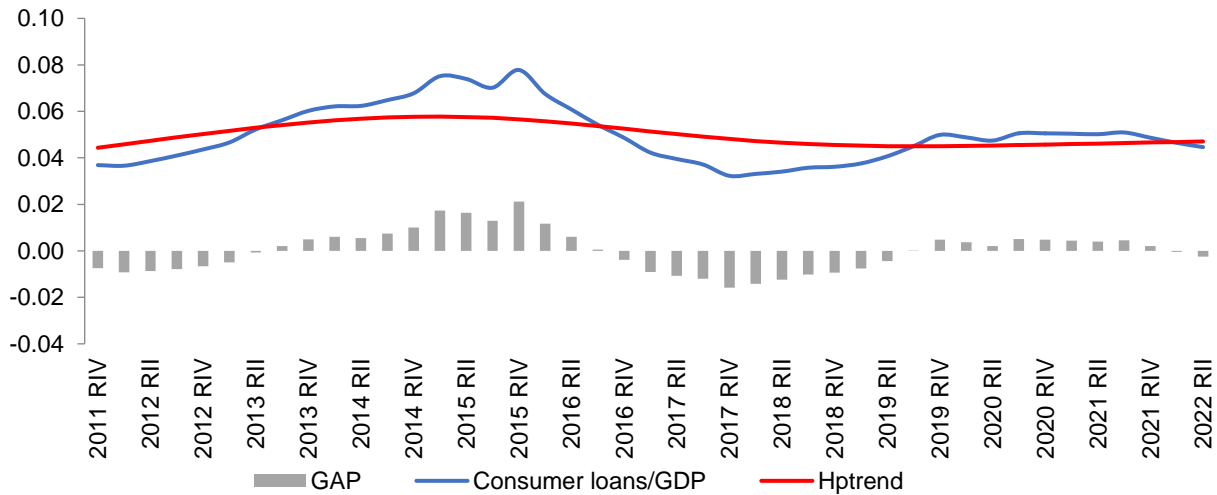
Chart 22. Lending portfolio, in million AZN



Source: CBA

The growth of the consumer portfolio is under supervisory surveillance. The macroprudential policy under way is oriented towards bringing the consumer lending to a sustainable and healthy horizon aided by new changes to the prudential framework in this regard. In Q2, long-term HP trend exceeded the consumer portfolio to GDP ratio, attributable to the fact that the economic growth rate is higher than that of the consumer portfolio.

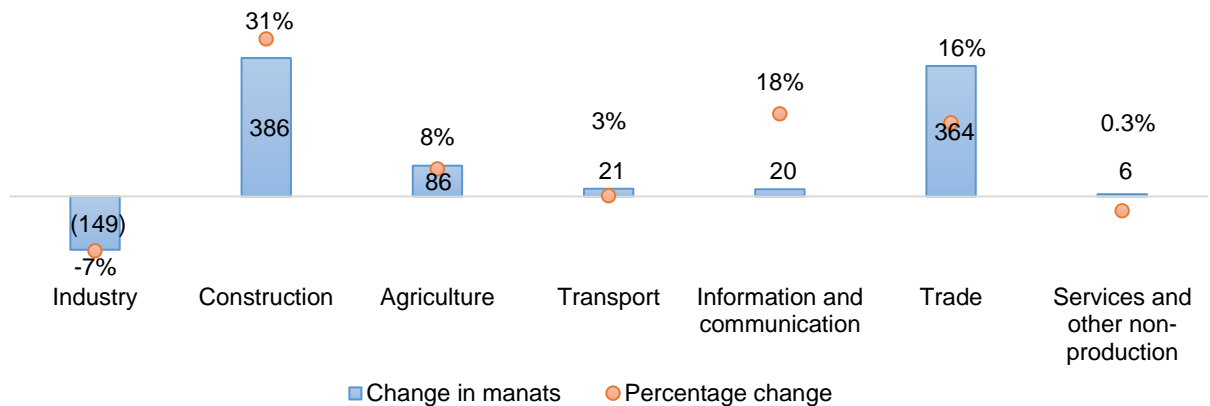
Chart 23. The consumer lending portfolio to GDP ratio, HP trend, %



Source: CBA

Revival in the economy was accompanied with rising demand for business loans. The rise in the business portfolio was mainly driven by construction (AZN386M), trade (AZN364M) and agriculture (AZN86M).

Chart 24. Half year dynamics of the business portfolio, million AZN



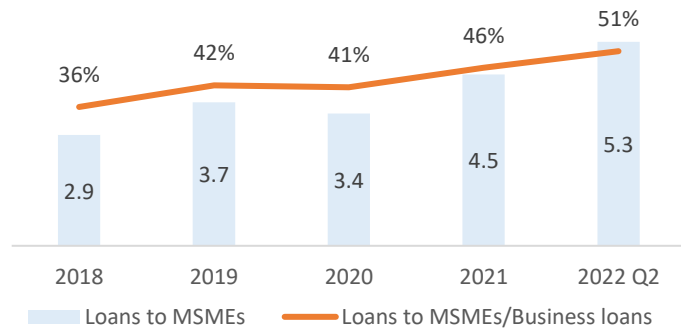
Source: CBA

Loans to micro, small and medium-sized enterprises continued positive growth dynamics. In the first half of year, MSME lending increased by 19% to AZN5.3 B.

MSME lending is mainly funded by banks' own funds. Banks have been actively involved in funding of MSMEs at the expense of their own funds over recent years.

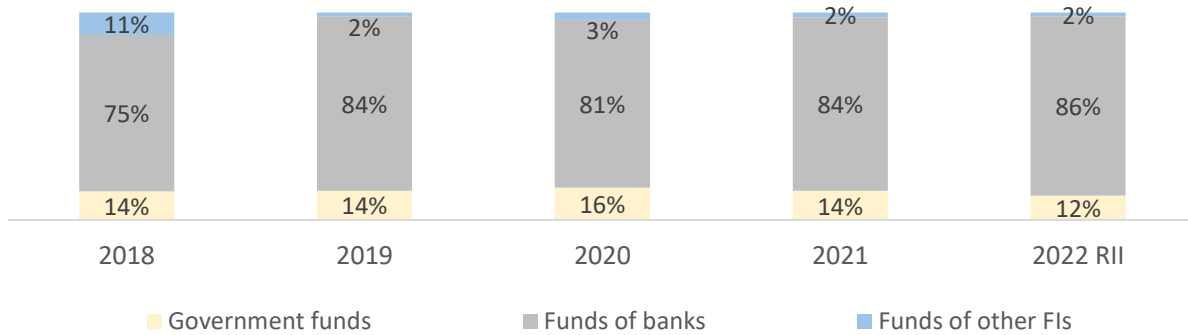
The amount of loans issued from banks' own funds have increased by 23% (AZN839M) since the beginning of the year to AZN4.6B. Moreover, government support mechanisms are crucial in elevating access of MSMEs to finance. The 'Socio-economic development Strategy for 2022-2026' includes the actions plan with respect to making the government support mechanisms for MSMEs more effective, targeted and transparent and expanding access to financial resources.

Chart 25. MSME lending, billion AZN



Source: CBA

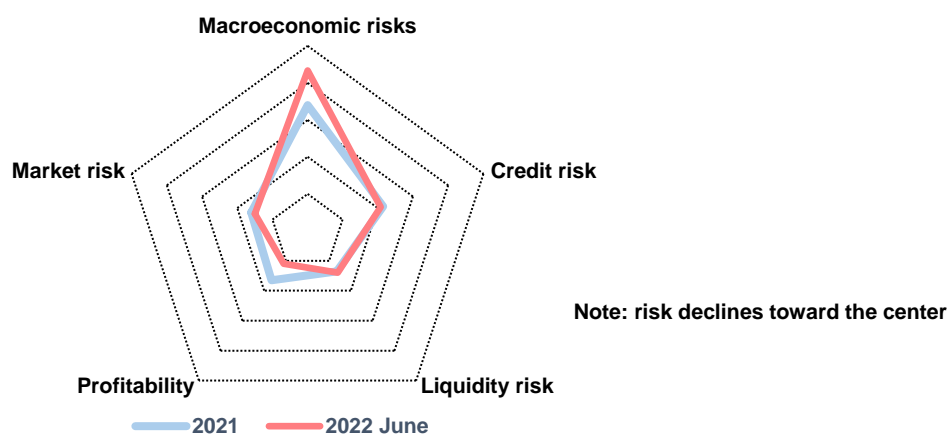
Chart 26. Structure of MSME lending in terms of funding sources



Source: CBA

Main banking sector risks stem from the macroeconomic environment.

Chart 27. Risk mapping of the banking sector



Source: CBA

Macroeconomic risks:

Although economic activity has boosted over six months, uncertainty triggered by complicated geopolitical developments and global inflation remain core macroeconomic risks for financial stability. The adequate monetary and fiscal policy pursued allows safeguarding macroeconomic stability.

Credit risks:

Although credit risks are on an acceptable and manageable level, vulnerability zones remain. The quality of the portfolio, the level of provisioning and the restructured portfolio and debt burden of borrowers are under the constant monitoring of the supervisory authority.

Profitability position:

Despite going through a complicated macroeconomic condition, banking sector's ability to generate profit increased. The supervisory focus is on even distribution of profitability across the sector and the growth rate of non-interest expenses.

Market risks:

A lower open currency position on the banking sector and stable de-dollarization since 2016 drove down market risks.

Liquidity risks:

Being in a comfort zone, banking sector liquidity is resilient to possible short-term shocks. Initiatives will continue to distribute liquidity more homogenously across the sector.

Box 2. Recent changes to the regulatory framework

A number of changes to the prudential framework ensure sound lending in the banking sector, mitigate risks, at the same time, support credit investments to the real sector, stimulate banks' participation in the securities market, apply risk-based supervisory approach, and improve the ecological situation. Findings of the Credit Conditions Survey, conducted by the CBA since Q1, also support that these changes are critical⁶. Survey findings suggest that, all types of lending, in particular, consumer lending increased, population's indebtedness grew, there are difficulties in realization of loan collateral and credit risks exist on certain areas and subjects.

In this regard, changes were made to the 'Regulations on creation of special reserves for asset classification and loan loss provisioning', the 'Regulations on calculation of bank capital and its adequacy', as well as the 'Regulations on prudential ratios and requirements related to credit risks, including large credit exposures'⁷ both to ease and tighten the requirements.

Changes related to easing the requirements

Changes made to ease the requirements to lessen the pressure of loans on bank capital in order to support real sector lending growth:

- A new 'standard assets exposed to additional risks' sub-category was created in the standard loans category. The new category supports easing of the pressure of real sector lending to bank capital and re-channeling of available funds to real sector lending.
- Write-off of loss assets from the balance sheet has been simplified and now the Supervisory Board may delegate this authority to the Management Board within certain limits.

To improve social welfare of the population the downpayment requirement for the purchase of first apartments for individuals who do not have a residential area has been reduced (The LTV ratio has been eased). In addition, under the new changes, a real estate loan issued in accordance with the LTV ratio is considered a fully secured asset.

Changes to stimulate participation of banks in the securities market

In addition to the premium market segment of the BSE, all securities traded in the standard market segment have been categorized as 'medium quality' securities, and an easier reserve requirement has been set.

⁶ <https://uploads.cbar.az/assets/b6f491363444aa4829bd773d7.pdf>

⁷ The 'Regulations on regulation of credit risks on a single borrower or a related group of borrowers' have been renamed as the 'Regulation of prudential ratios and requirements regarding credit risks, including large credit exposures'.

To stimulate the interbank market the limit on the maximum interbank credit exposure has been eased by 5 pp, as well as interbank credit exposures have been differentiated and reduced in accordance with the banks' credit ratings (before 100% risk weight was assigned to domestic bank exposures irrespective the rating).

Changes were made to both Regulations to *adjust the regulatory framework to the Basel II standards on banking supervision* and references to OECD countries have been removed when determining the quality of collateral. To improve the ecologic situation in the country and stimulate use of eco automobiles the DTI limit was eased and the limit on amount was removed, a new limit is now set depending on the production year and type of the engine. A more favorable DTI ratio has been applied to electric and hybrid cars that are more eco-friendly.

Changes related to the tightening of the requirements

Tightening requirements to subdue credit risks in banks

- New classification criteria have been defined on doubtful and loss assets for adequate provisioning of not only problem loans, but also all liabilities with the same bank of the borrower whose probability of default is high, and conditions for returning substandard loans to the standard category have been tightened.
- To slow down overheating in the credit market a limit on the maximum amount of the credit risk on credit exposure has been set in the amount of 50% of Tier I Capital after deductions (without reducing in accordance with the types of collateral defined as the securitization of credit exposure).
- The bank provided a number of tightening to mitigate potential risks related to restructuring and refinancing. A limit has been set on the classification category of a new debt liability channeled to repayment of borrower's overdue loans. Under the change, the category of the new loan may not exceed the lowest classification category of overdue loans. At the same time, additional provisioning requirements have been set on re-restructuring, a term requirement on improving the classification category of the asset with restructured annuity schedule.
- It has been determined that the classification category of the assets written off from and recovered to the balance sheet should be maintained in accordance with the approach on restructured loans.

Tightening requirement to prevent risks related to foreign currency denominated borrowing

- The risk weight of business loans in foreign currency for unhedged borrowers (with no foreign currency income) has been shifted from 120% to 200%.

Tightening requirements to ensure sound lending amid rapid growth of consumer lending, reduce excess indebtedness of the population and protect the sector from potential threats

- Higher capital requirement has been set for banks for loans with high DTI ratios and interest rates (risk weight increased by 50 pp).
- Limits have been set for the cap of the DTI ratio with certain exceptions and a term requirement for consumer loans, including restructured consumer loans have been shortened.
- To subdue risks related to re-restructuring of consumer loans, provisioning requirements based on the DTI ratio have been tightened to include all consumer loans restructured, whose limits have been increased, as well as those taken from the same bank over recent 6 months to the scope of the requirement.
- A change has been made to recognize credit lines in calculations in full in order to avoid post-factum violations since unused credit lines are more likely to roll over to the balance.

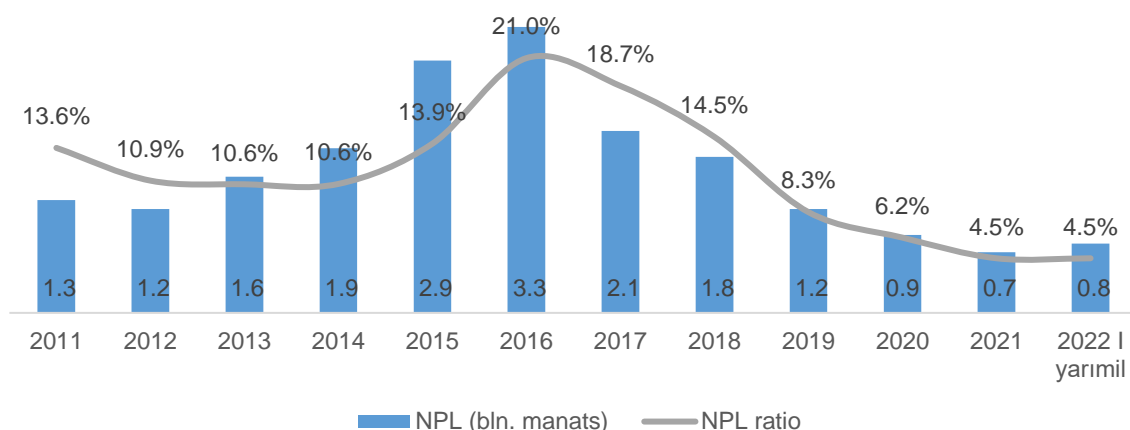
Application of risk-based supervisory approach

- A risk-based approach applied on off-balance sheet liabilities.
- To strengthen risk-based supervision, new reporting requirements have been brought to the CBA in accordance with the Basel Committee principles.

Credit risk of the banking system

There has been no change in credit risks in the first hal of 2022 - the NPL ratio remained unchanged.

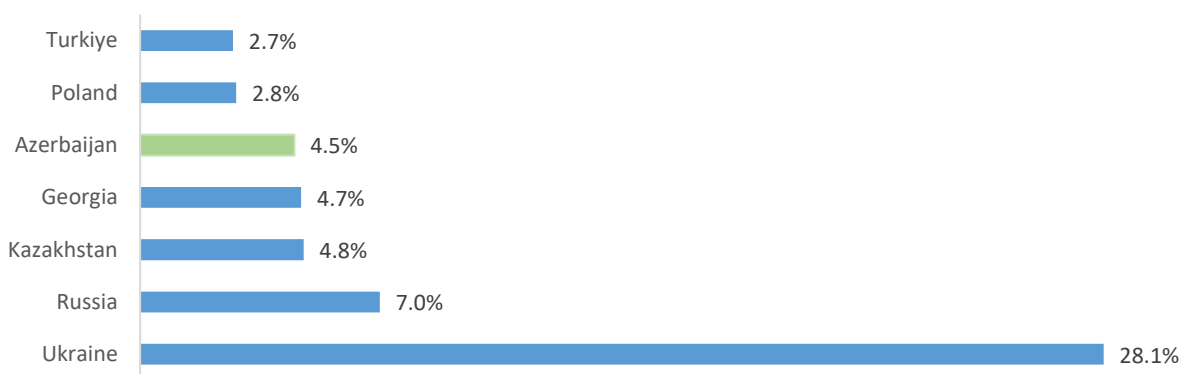
Chart 28. NPL portfolio on the banking sector



Source: CBA

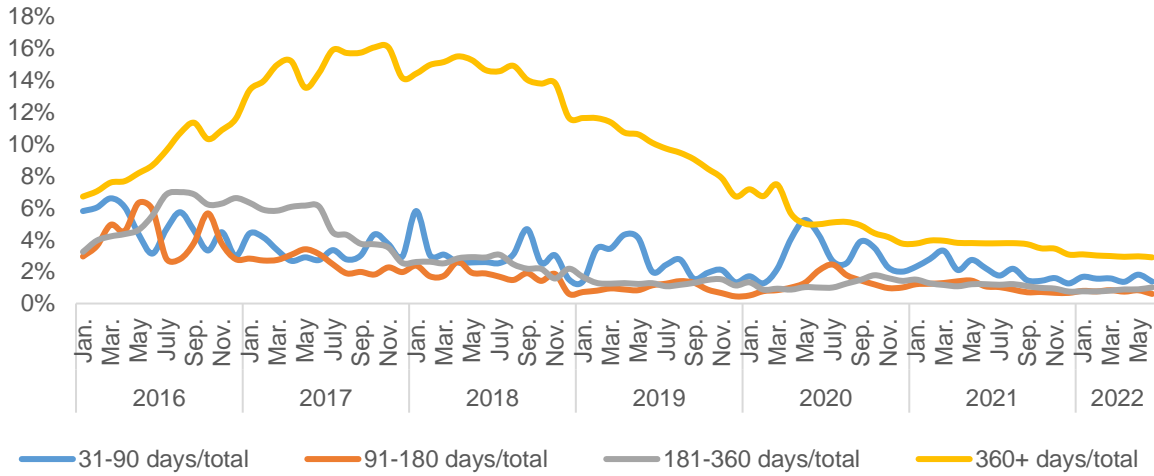
The NPL ratio stands at 4.2% on loans issued in the national currency and 5.6% on loans issued in a foreign currency. In general, as a credit risk indicator the NPL ratio is on a satisfactory level compared to benchmark countries.

Chart 29. Comparison of the NPL ratio across countries



Source: IMF, relevant supervisory authorities

Chart 30. Breakdown of the NPL portfolio on delinquencies



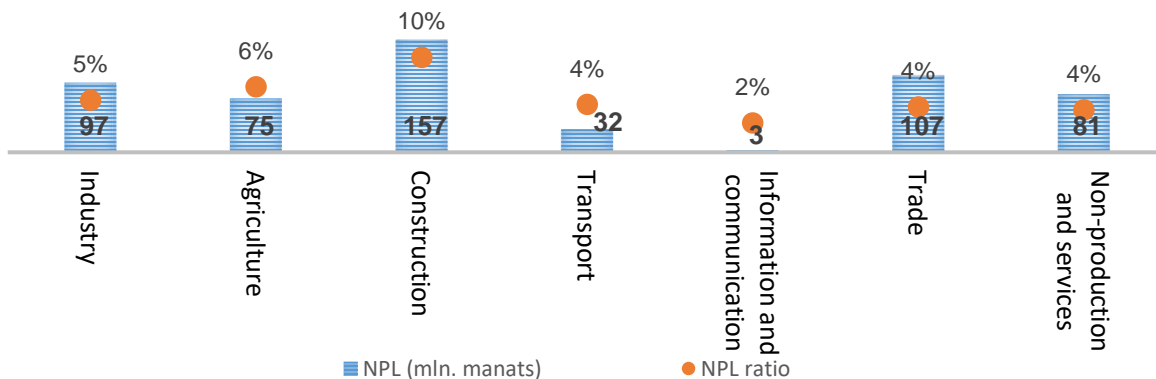
Source: CBA

The dynamics of the delinquency of the NPL portfolio also indicates that credit risks subdued. The share of NPLs with over one year delinquency in the portfolio has decreased by 11.3 pp to 2.9% from 14.2% since 2017.

There has been no considerable change in credit risks on the business portfolio. The NPL ratio on the business portfolio was 5.3%. NPL loans on the business portfolio are concentrated in construction – 28% of total NPL portfolio of business loans.

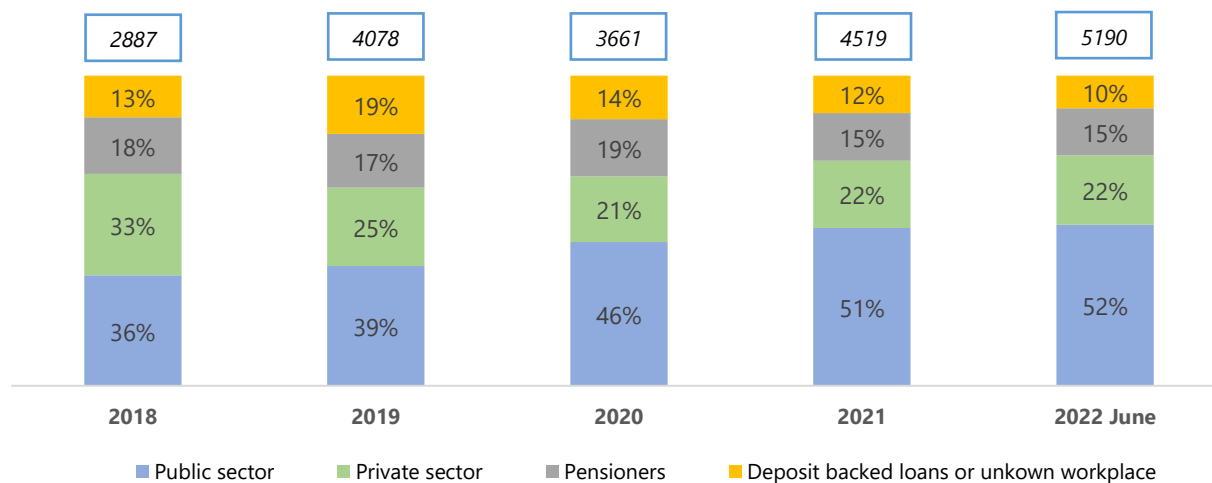
There has been no dramatic change in the NPL ratio on the consumer portfolio. Over six months the NPL ratio on consumer loans increased by 0.2 pp to 4.3%. 74% of the consumer portfolio was provided to public and private sector workers with stable incomes. In general, the share of those engaged in the public sector in the consumer lending portfolio has been increasing recently.

Chart 31. NPL portfolio structure across economic sectors



Source: CBA

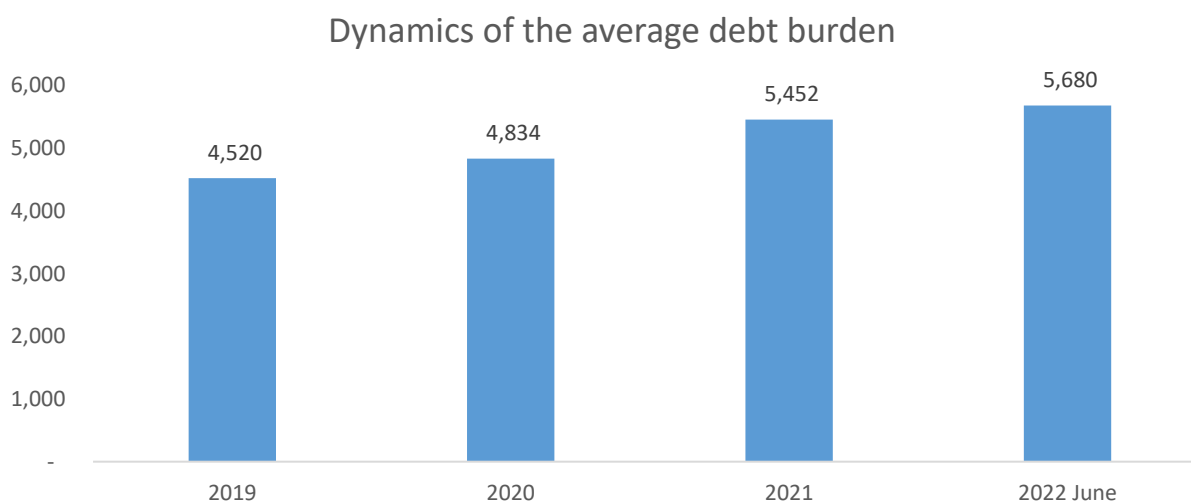
Chart 32. Borrower structure across the consumer lending portfolio, %



Source: CBA

Average debt burden grew in the first half of 2022⁸. However, according to recent changes to the regulatory framework the cap of the DTI ratio has been set to 70%. To that end, the debt burden of socially vulnerable population is expected to decrease in future.

Chart 33. Dynamics of the average debt burden, AZN

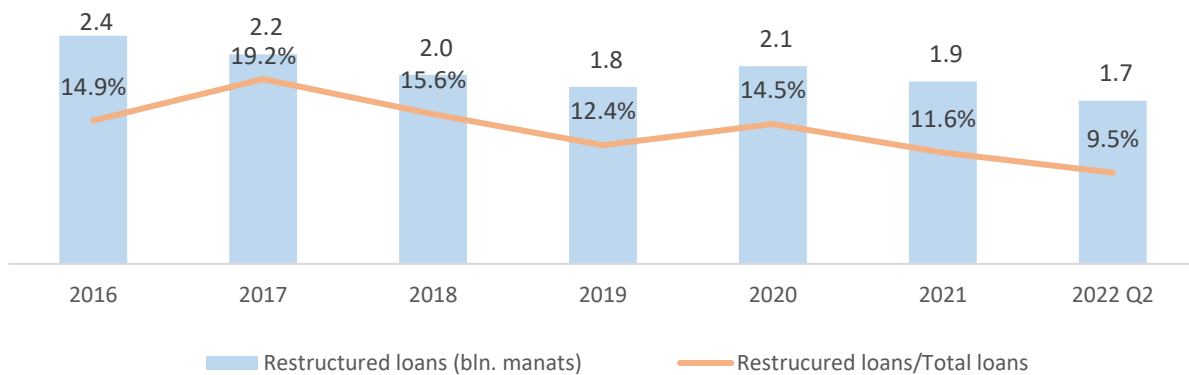


Source: CBA

⁸ Calculation was based on borrowers whose outstanding debt ranges between AZN500 – 150 000 (PIN based)

The volume of NPLs in mortgage lending declined. In the second quarter of 2022, NPLs on the mortgage portfolio decreased by 19.4% (AZN12.9M) to AZN53.4M. As a result, the NPL ratio decreased by 0.7 pp to 2% as of the end-period. The NPL ratio on the loans issued from the funds of the AMCGF (61% or AZN1.6B of total mortgage lending) was 0.5%.

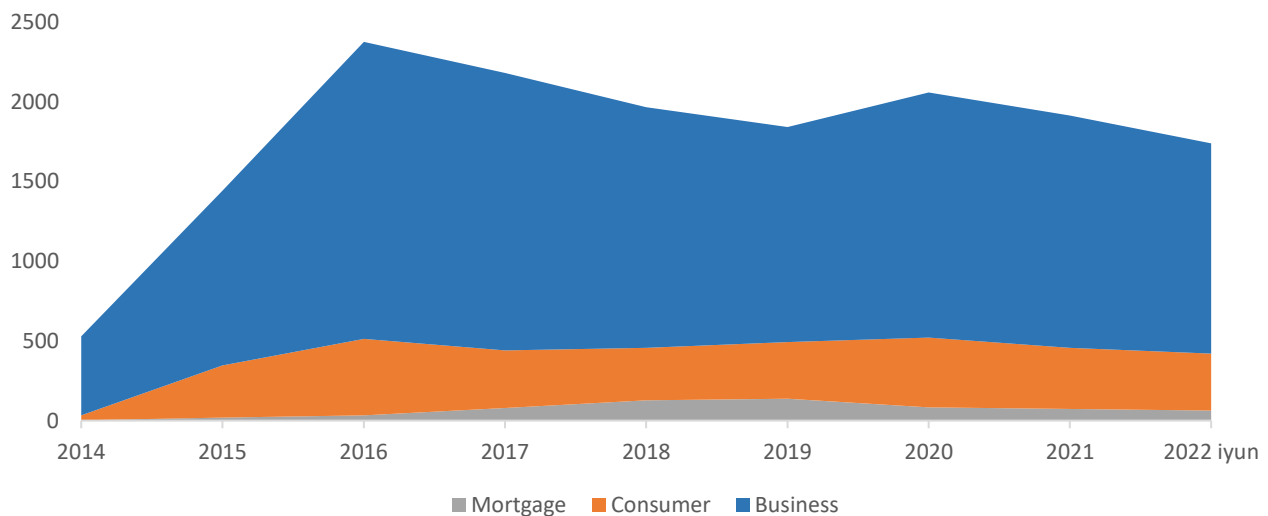
Chart 34. Dynamics of the restructured portfolio



Source: CBA

The restructuring portfolio is decreasing. The restructured portfolio decreased by 9.1% (AZN175M) to AZN1.7B over six months. The share of restructured loans in total lending portfolio decreased by 2.1 pp to 9.5%. The share of restructured loans in total portfolio is in lows of recent five years.

Chart 35. Structure of the restructured portfolio, million AZN



Source: CBA

Sectorial analysis of restructured loans portfolio indicates that the share of business loans is higher. Restructured loans on the business portfolio amounts to AZN1.3B (the three fourths of total restructured loans portfolio). Restructured loans on the consumer portfolio amounts to AZN356M and AZN64M on the mortgage portfolio. Over recent six months the restructured loans portfolio has decreased across all three segments. At the same time, the share of the loans restructured two and more times in total restructured loans portfolio shifted from 36% to 32%. Regulation of possible risks on the restructured loans portfolio is under constant monitoring of the supervisory authority. In this regard, relevant changes to the regulatory framework have been made recently. (Box 2).

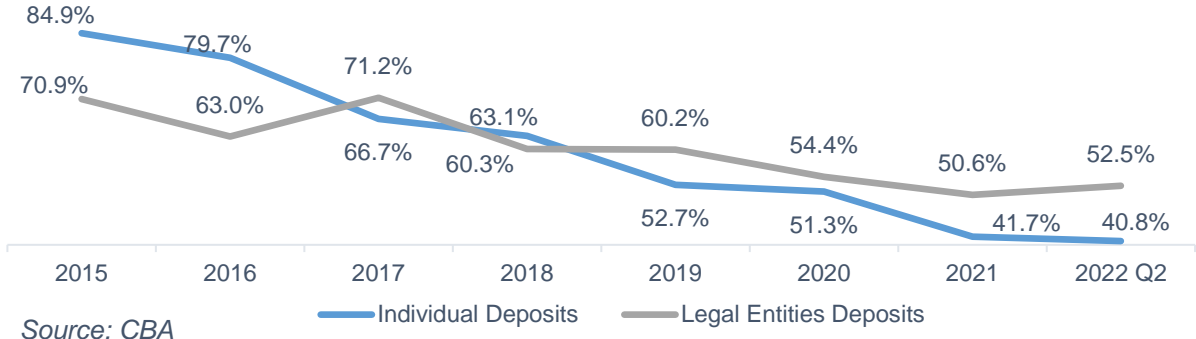
Market risk of the banking system

The currency position of the banking sector is within prudential requirements. In June 2022 the banking system’s short open currency position amounted to \$255M, the prudential norm on exchange rate risks – the open currency position to aggregate capital ratio was negative 9.1%.

In July 2022, the short open currency position of the International Bank of Azerbaijan (IBB) was decreased, resulting in an improved positive 2.7% banking system’s open currency position to aggregate capital ratio. Being within normative requirements, the currency position of the sector is in a safe zone and allows safeguarding financial stability.

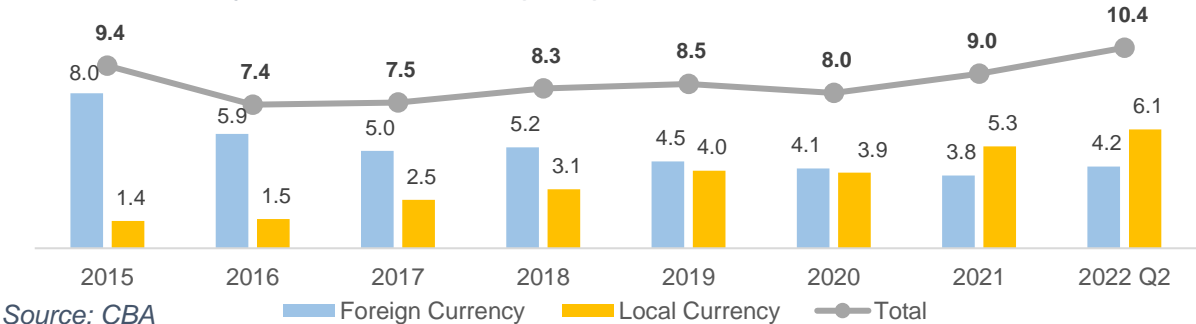
The de-dollarization trend in the banking sector that began in 2015 continues. As of the end of Q2, 46% of banking system liabilities and 40% of assets are in foreign currency (73% and 58% in 2015 respectively).

Chart 36. Dollarization of the deposit portfolio



The leading driver of the de-dollarization trend of liabilities was the deposits of individuals, which is a key indicator of confidence in the banking system. In the first half of the year, dollarization of total deposits of individuals decreased by 0.9 pp to 40.8%, while dollarization of term deposits decreased by 2.7 pp to 41.8%. The main reasons for

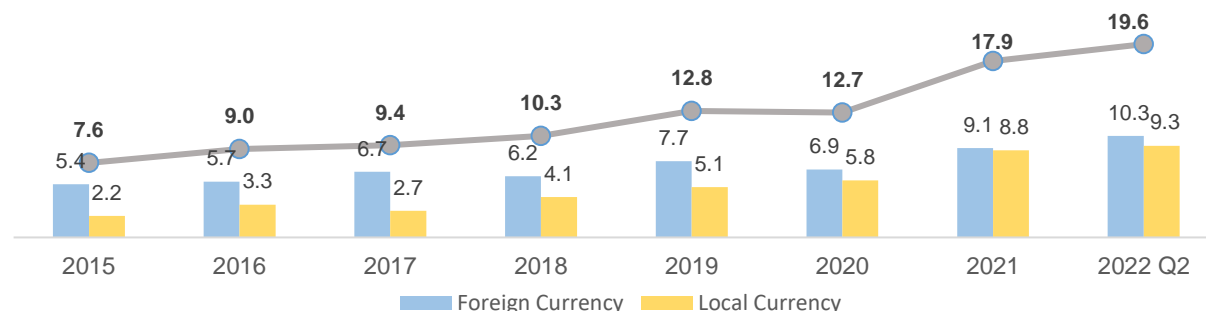
Chart 37. Currency breakdown of the deposit portfolio of individuals, billion AZN



the growth of national currency denominated deposits are confidence in the manat and high interest rates on savings and deposits in the national currency.

Dollarization of deposits of legal entities is higher than that of deposits of individuals. Dollarization of deposits of legal entities increased by 1.9 pp to 52.5%. Foreign currency denominated deposits of legal entities are mainly concentrated in demand deposits.

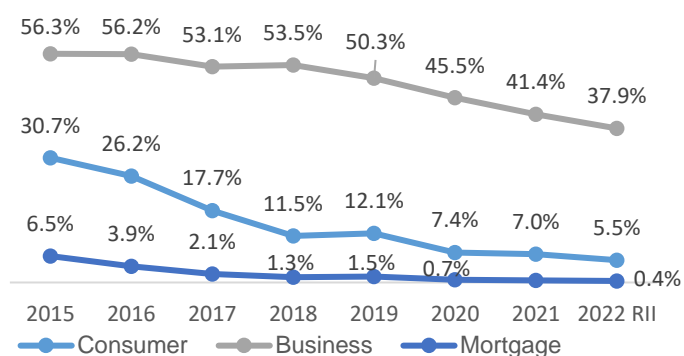
Chart 38. Currency breakdown of the deposit portfolio of legal entities, billion AZN



Source: CBA

Dollarization of lending portfolio is in historical lows across all segments. Over the period, the stable exchange rate of the manat and wider lending in the manat resulted in the rise in national currency denominated loans. In the first half of the year, dollarization of the lending portfolio decreased by 2.9 pp to 23.3%. Dollarization of business loans decreased by 3.5 pp to 37.9%, dollarization of consumer

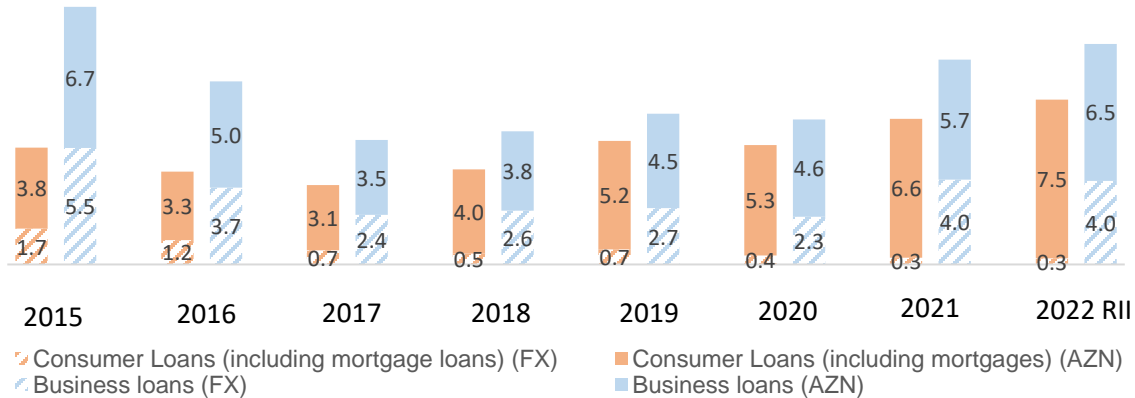
Chart 39. Share of lending portfolio in foreign currency



Source: CBA

loans decreased by 1.5 pp to 5.5%, and that of mortgage loans decreased by 0.1 pp to 0.4%. Restriction of granting consumer loans in foreign currency to borrowers with no income in foreign currency allowed dollarization of the consumer portfolio to drop to historical lows. Moreover, according to regulations of the CBA, real estate (mortgage) loans are required to only be issued in the national currency, it stipulated the fact that the mortgage portfolio is nearly in the national currency.

Chart 40. Currency structure and dynamics of the lending portfolio, billion AZN



Source: CBA

Banks’ sensitivity to interest rates does not threaten their stability. The interest rate risk as part of the market risk was analysed by means of the duration method⁹. Since most of the assets and liabilities in the sector are recognized in their carrying value, calculations are carrying value based and discounted by the CBA interest rate. The main source of maturity mismatch between assets and liabilities is that the difference between the average weighted duration of loans and attracted deposits is about 4 times.

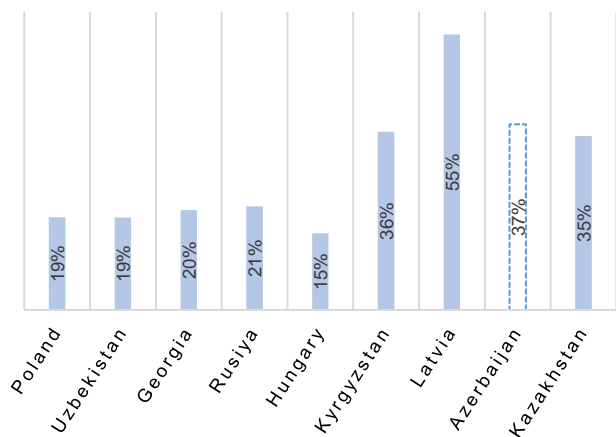
An increase in interest rates because of a positive duration difference has a downward effect on the capital adequacy ratio. According to simulations, a 1% rise in the interest rate decreases the capital adequacy ratio by only 0.9 p.p that does not threaten the financial stability of the banking system.

⁹ The duration analysis is used for measuring the weighted average term of assets and liabilities according to Macaulay duration concept. To remind, the duration gap analysis measures the sensitivity of banks to market interest rates with the following formula: $\partial(asset) - \frac{\partial(liability) \times liability}{asset}$. During the analysis, assets and liabilities are discounted by the discount rate of the CBA.

Liquidity risk of the banking system

Being in a comfort zone liquidity of the sector has an adequate buffer against potential external shocks. The quick liquidity ratio of the banking system is 61%, twice the minimum requirement (30%). Liquid funds account for 37.4% of total assets, which is a higher indicator compared to benchmark countries.

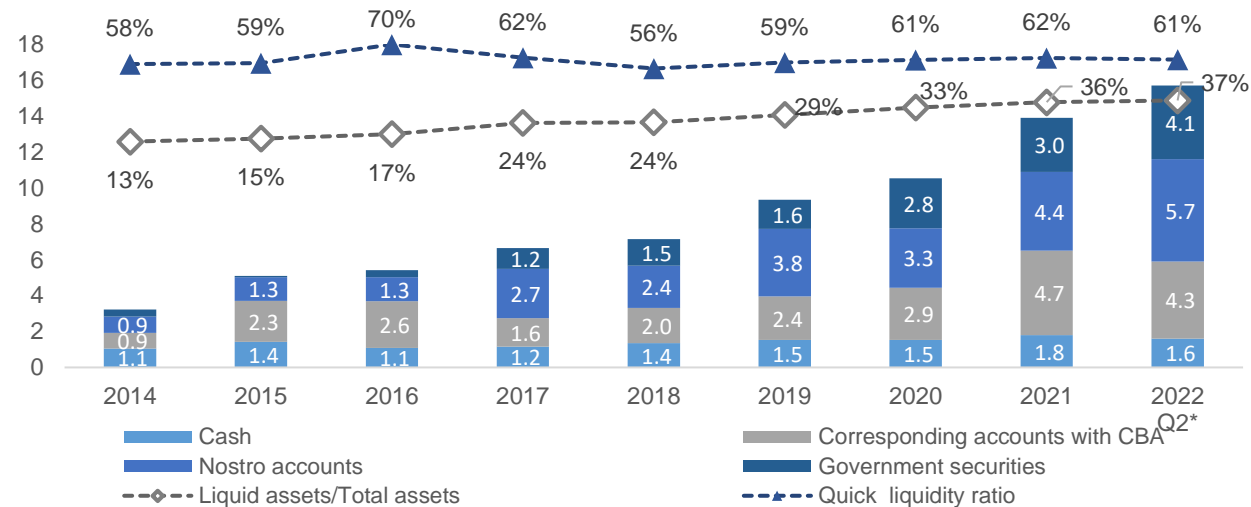
Chart 41. The share of liquid assets in total assets by countries



Source: IMF and relevant supervisory authorities

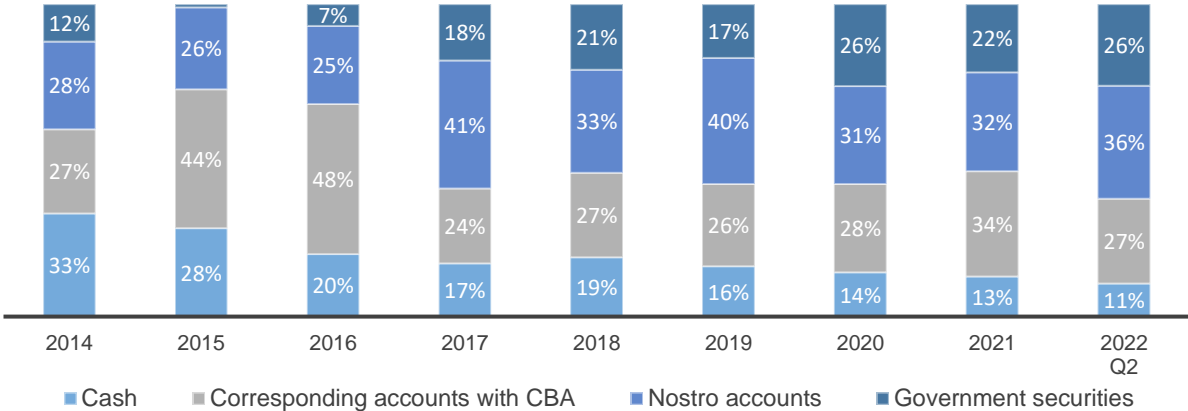
The size of liquid assets and their share in total assets keep growing at the expense of dynamic growth of demand deposits of legal entities and individuals. In second quarter of 2022, liquid assets increased by 13% (AZN1.8B) to AZN15.7B. 36.2% of liquid assets is concentrated in nostro accounts, 27.1% in correspondent accounts with the CBA, 26.2% in government securities and 10.5% in cash funds. Compared with the pre-pandemic period, there was an increase in all components of liquid assets. Liquid assets of the banking system exceed demand deposits of individuals over three times and cover a considerable part of demand deposits of legal entities.

Chart 42. The structure of liquid assets, billion AZN



Source: CBA

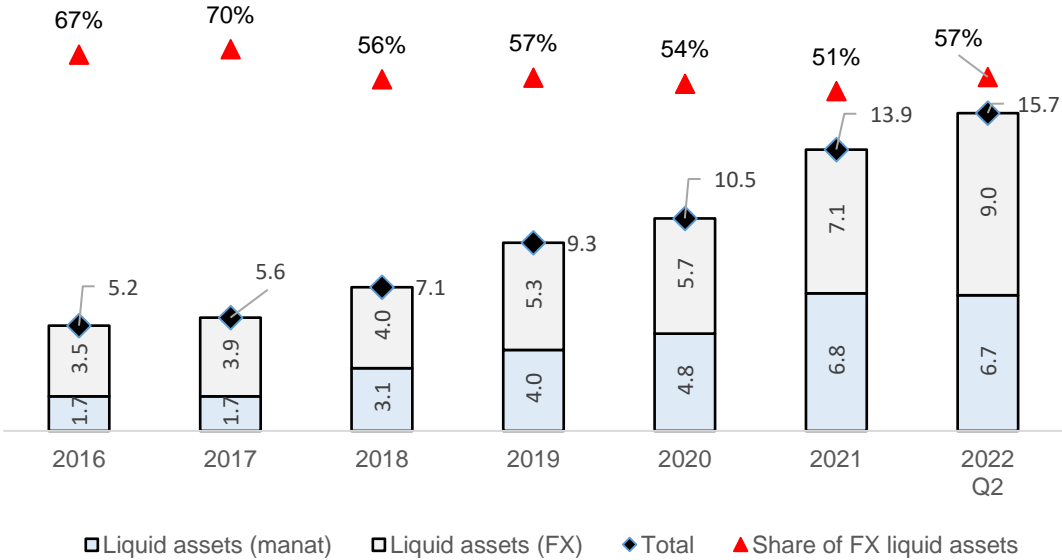
Chart 43. The share of liquid asset components in liquid assets



Source: CBA

The share of liquid assets in foreign currency increased in the structure of liquid assets. In the first half of 2022, liquid funds in the national currency decreased by 0.9% (AZN62M) to AZN6.7B. While foreign currency denominated liquid assets of the sector yoy increased by 26.3% (AZN1.9B) to AZN9B.

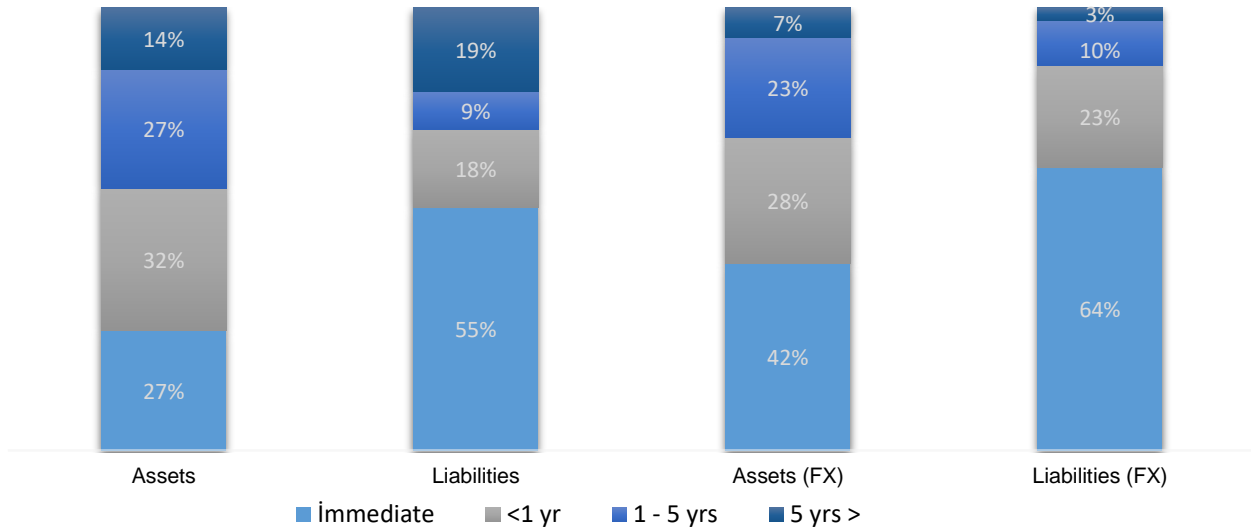
Chart 44. Currency structure of liquid assets, in billion AZN



Source: CBA

The share of assets with up to one-year maturity in total assets makes 59%, while the same indicator amounts to 73% for liabilities. The fact of 69% of liabilities being less than 90 days of maturity obstructs long-term financing.

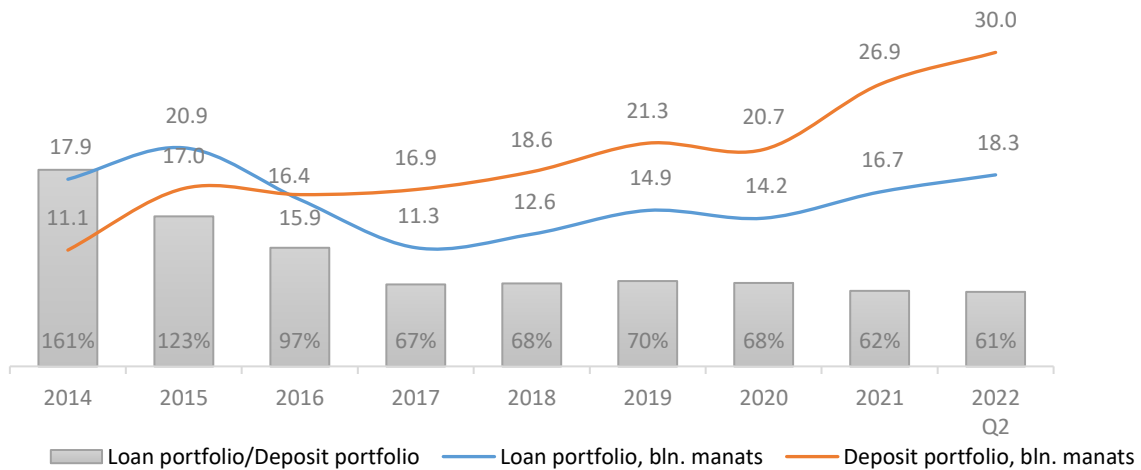
Chart 45. Maturity structure of assets and liabilities



Source: CBA

The dynamics on loans to deposits ratio indicates that banks have a resource base to ensure lending. In the second quarter of 2022, the ratio of the lending portfolio to the deposit portfolio yoy decreased by 1 pp, the lowest indicator of recent years.

Chart 46. The lending portfolio to the deposit portfolio



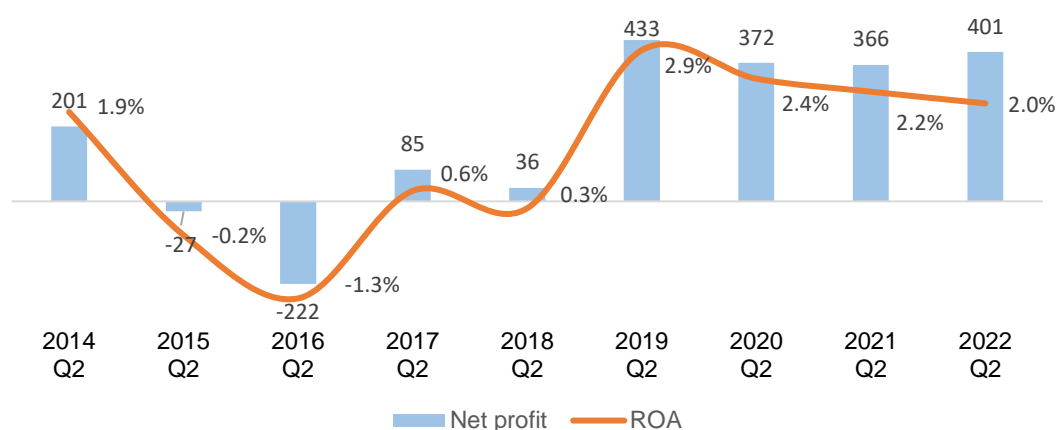
Source: CBA

Banking system profitability

Profitability of the sector in the highs of the post-pandemic period. In the first two quarters of 2022, banking system's net profit amounted to AZN401M, yoy up by 9.6% (AZN35M). 24 banks operated at a profit, while two banks end the half of year with a loss. Aggregate loss of the loss-making banks decreased by AZN1M to AZN5M, the share of these banks in the sector is just 0.87% in terms of assets. Net profit of 24 banks operating at a profit yoy increased by 9.1% (AZN34M) to AZN406M.

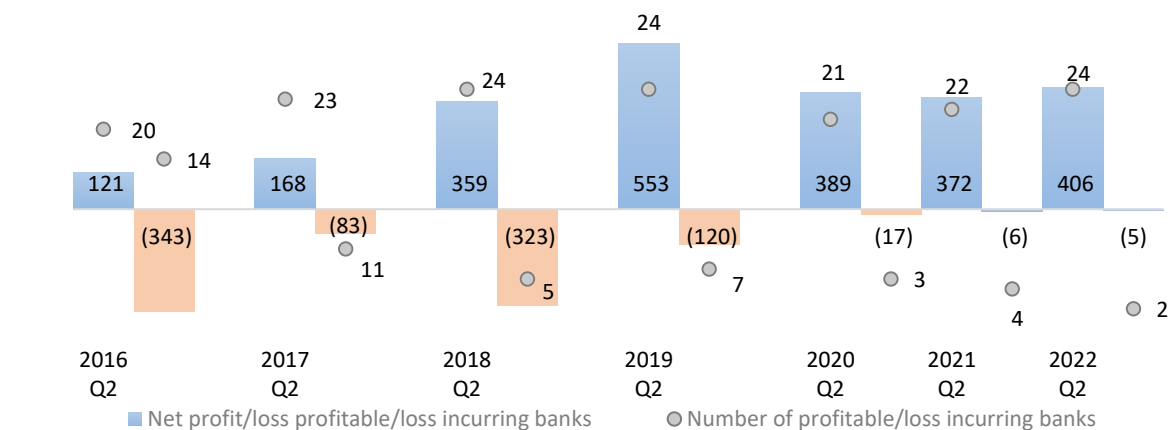
Profitability indicators across particular banks is also positive. The number of banks operating with loss has decreased over recent six years.

Chart 47. Banking system profitability, in million AZN



Source: CBA

Chart 48. The number and dynamics of banks operating at a profit and loss, in million AZN



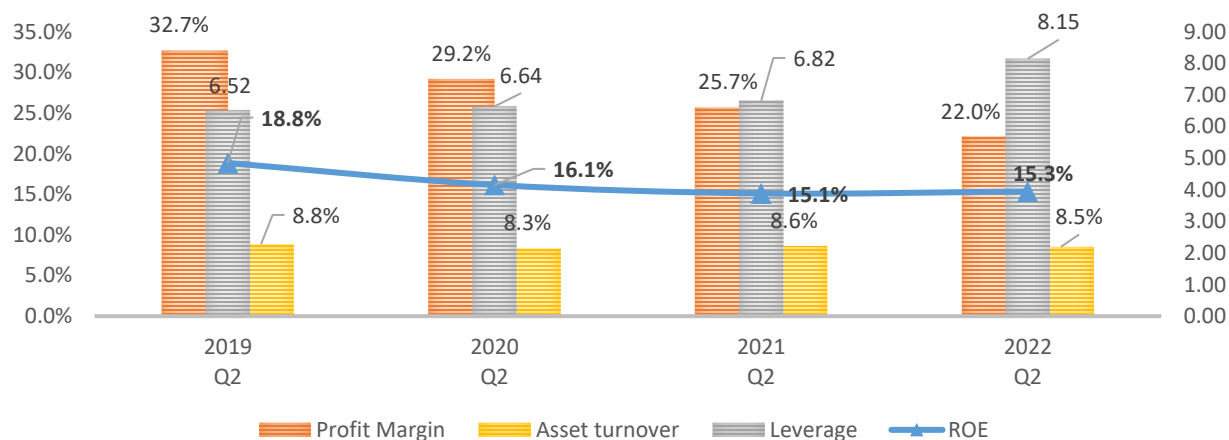
Source: CBA

However, despite the rise in banking sector profitability and the number of banks operating at a profit, the growth rate of assets of the sector was higher than that of profitability that stipulated the drop of the ROA.

A high leverage played key role in the formation of profitability in banks. In first half of 2022, the banking sector’s ROE increased by 0.2 pp to 15.3%. The DuPont¹⁰ analysis, widely used in international practice on the analysis of profitability components, suggests that banks operated at a higher leverage over recent six months, the main factor that stipulates ROE growth. Rapid growth of assets over the period increased the leverage ratio. Despite the rise in assets, because of relevant growth in total income, the asset turnover decreased just by 0.1 pp. Whereas net profit of the sector followed positive dynamics, its lower growth rate compared to total income led to low profit margin. In the second quarter of 2022, net profit margin yoy decreased by 3.7 pp.

Net profit growth was driven by net interest income. Yoy rise in net interest income by AZN207M (28.3%), and non-interest income by AZN115M (27%) ensured the rise in

Chart 49. Du-pont – ROE decomposition analysis



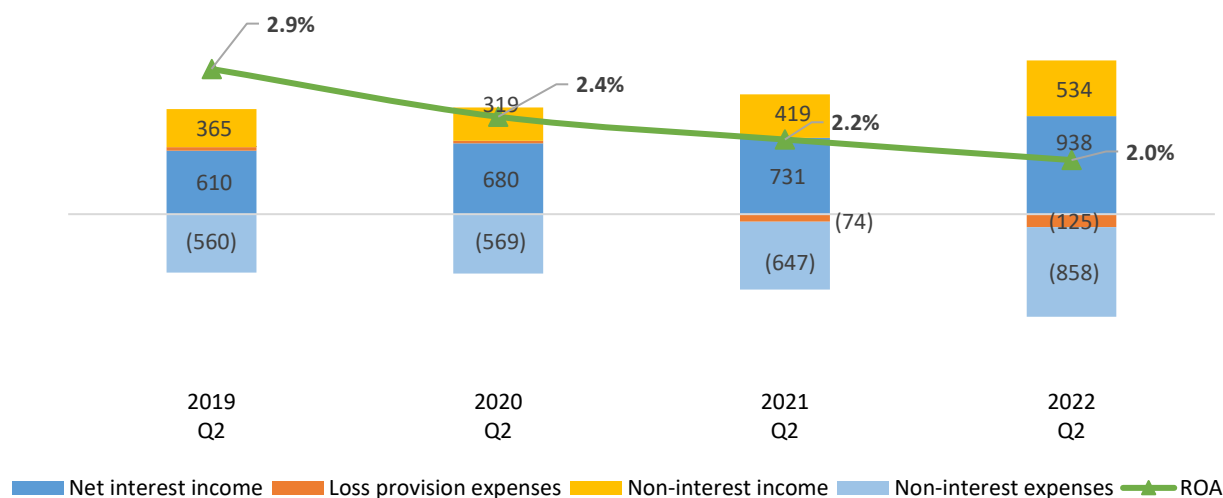
Source: CBA

nominal profitability of the banking sector. Despite this growth, rise in expenses related to specific reserves by AZN51.7M (69.4%), and rise in non-interest expenses by AZN211M (33%) led to drop in profit margin.

Specific reserves increased due to consumer loans. According to the current macroprudential framework, where the DTI ratio is over 45% on consumer loans, these loans should be classified as non-standard assets and 25% specific reserves created.

¹⁰ DuPont Analysis is a method used to decompose the different drivers of return on equity (ROE). In widespread international practice, ROE is equal to the product of profit margin (net profit / gross revenues), asset turnover (total revenues / assets) and leverage ratio (assets / balance sheet capital).

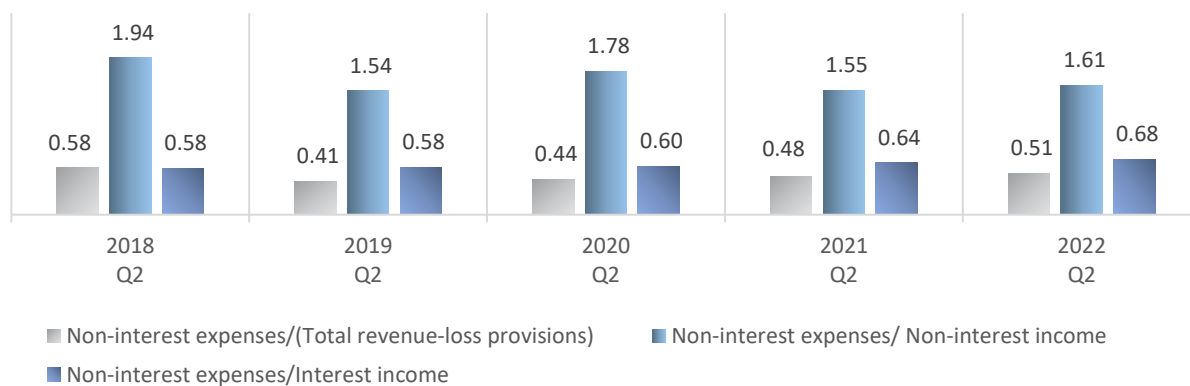
Chart 50. Decomposition and dynamics of the profit by the sector, in million AZN



Source: CBA

Sector's efficiency indicators are falling on the backdrop of rising non-interest expenses. The ratio of non-interest expenses to net aggregate income, the main efficiency indicator of the sector since 2019, and the ratio of non-interest expenses to interest income are following negative dynamics. In the first half of 2022, non-interest expenses accounted for 51% of net aggregate income, yoy up by 3 pp. Although the dynamics of interest and non-interest income is positive, the growth rate of non-interest expenses is higher.

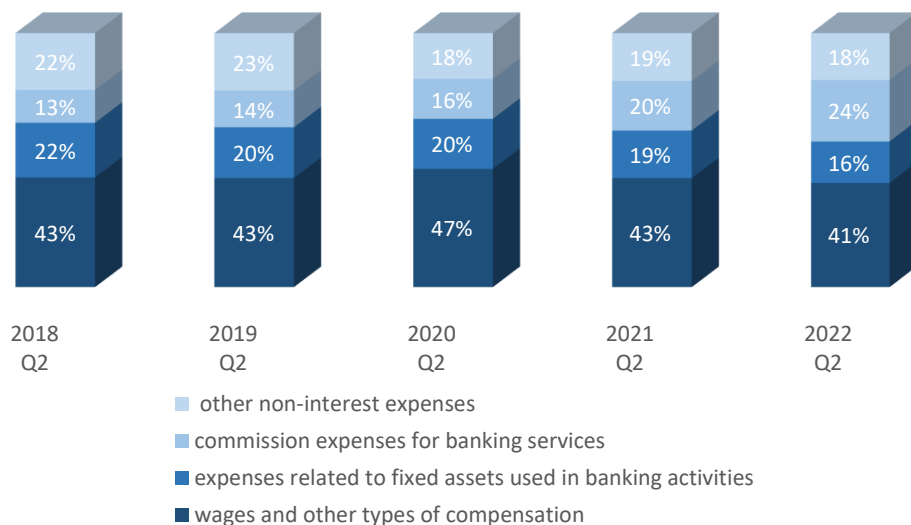
Chart 51. Efficiency indicators of the banking sector



Source: CBA

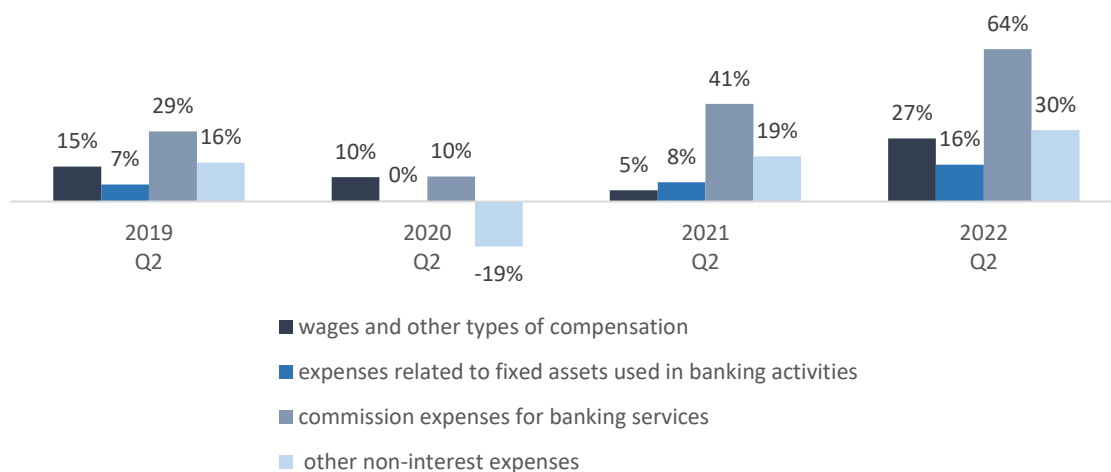
Consequently, the ratio of non-interest expenses to interest income yoy increased by 4 pp, and the ratio to non-interest income increased by 6 pp. The growth is driven by wages and salaries and commissioning expenses that account for a main share in the structure of non-interest expenses. In second quarter of 2022, salary expenses (41% of non-interest expenses) yoy increased by 27% (AZN74M), commissioning expenses (24% of non-interest expenses) increased by 64% (AZN81M).

Chart 52. Structure of non-interest expenses



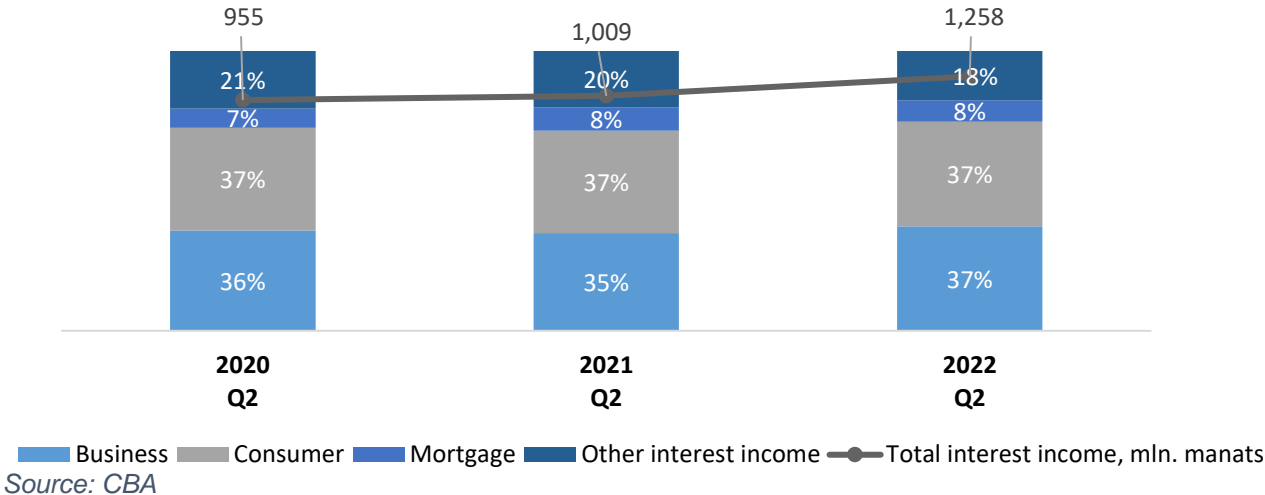
Source: CBA

Chart 53. Growth rate of non-interest expenses



Source: CBA

Chart 54. Interest income structure



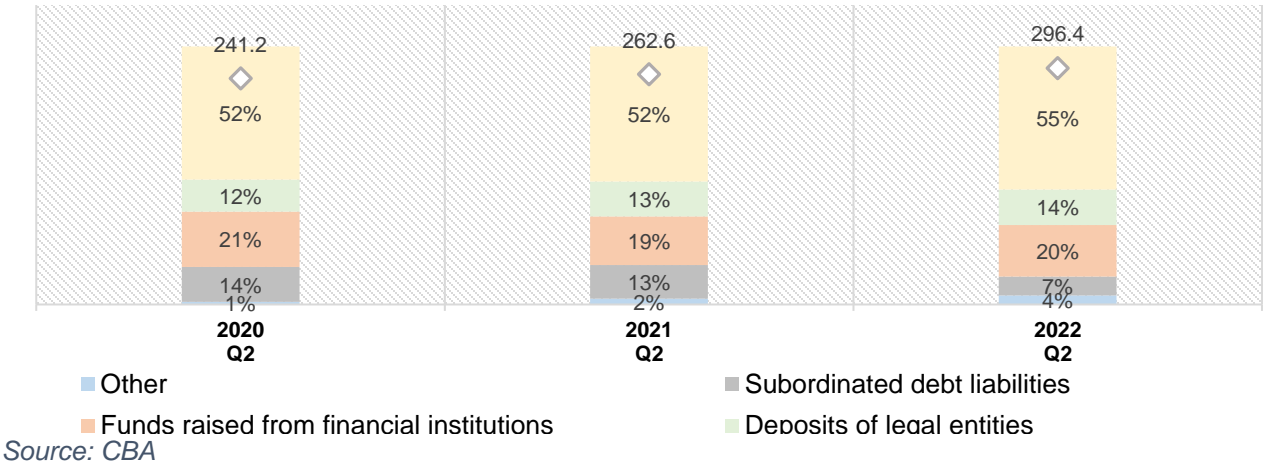
Banks' interest income was formed mainly due to consumer and business loans.

In the first half of 2022, sector's interest income increased by 25% (AZN249M), interest expenses increased by 13.3% (AZN35M) to AZN1.3B and AZN298M respectively. Interest income is mainly driven by consumer (AZN470M) and business loans (AZN469M) as in the previous year. In the second quarter of 2022, interest income per consumer and business loans portfolio accounted for 45% of interest income on total lending portfolio and 37% of total income.

The main part of banks' interest expenses include expenses related to deposits of individuals.

Deposits of individuals, the key sustainable funding source of banks, form a considerable portion of interest expenses (55% or AZN165M). Other main items of interest expenses include deposits of legal entities and loans to financial institutions.

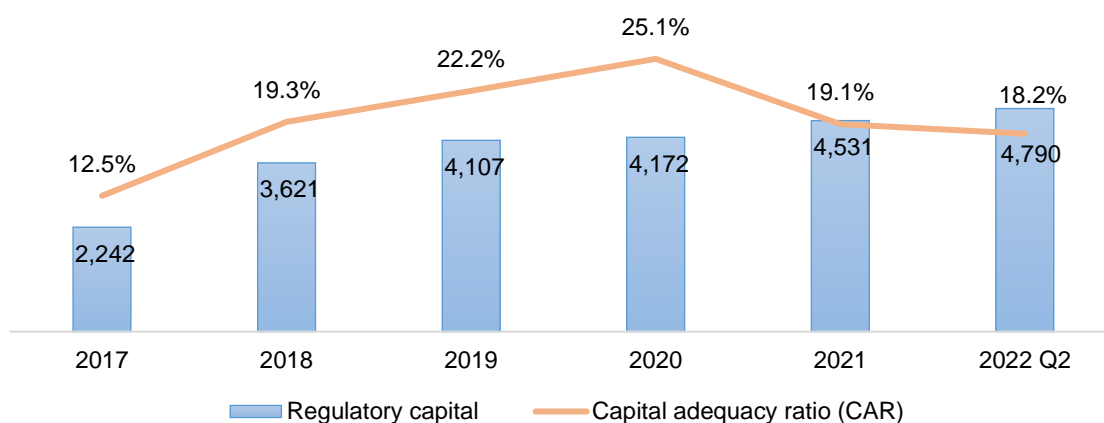
Chart 55. Interest expense structure



Capital position of the banking system

The capital position of the sector surpasses prudential requirements and is capable to absorb potential losses. As of end first half of 2022, Tier I capital of the sector amounted to AZN4.2B, and aggregate capital amounted to AZN4.8B. The CAR (capital adequacy ratio) made 18.2%, about two times as much the minimum requirement. Aggregate capital of the sector increased by 5.7% (AZN259M) compared with end-2021.

Chart 56. Capital adequacy, in million AZN

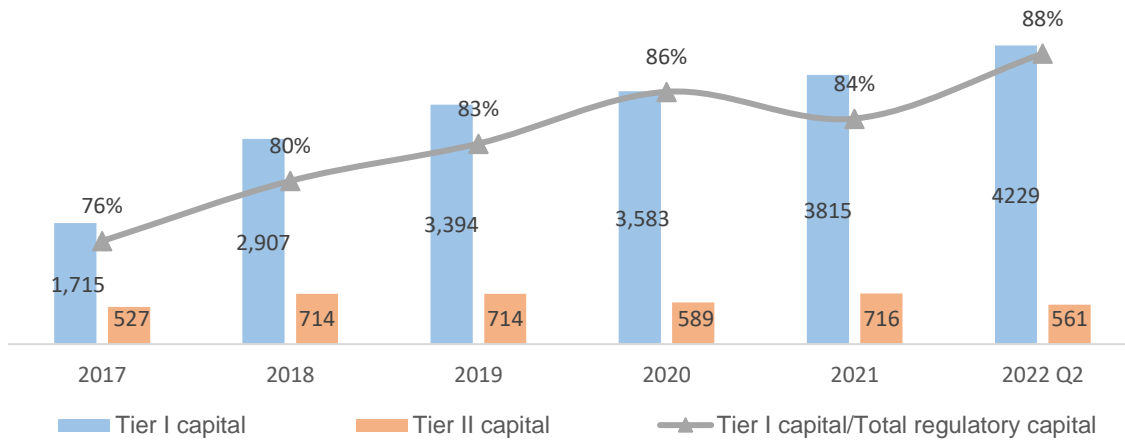


Source: CBA

Despite the rise in aggregate capital compared with the end-2021, the CAR decreased by 0.9 pp to 18.2%, mainly due to the fact that the growth rate of risk-weighted assets is higher than that of aggregate capital.

The share of Tier I capital reached the highs. Compared with the end of the previous year, in the first half of 2022, the size of Tier I capital, deemed to be of high quality, increased by AZN413M (11%) to AZN4.2B at the expense of internal profit generation of banks. Whereas the share of Tier I capital in total capital decreased slightly in 2021, share of Tier I capital in total capital has increased up to 88% in the reporting period. In general, Tier I capital continued to increase over recent 5 years due to internal profit generation and capital injection.

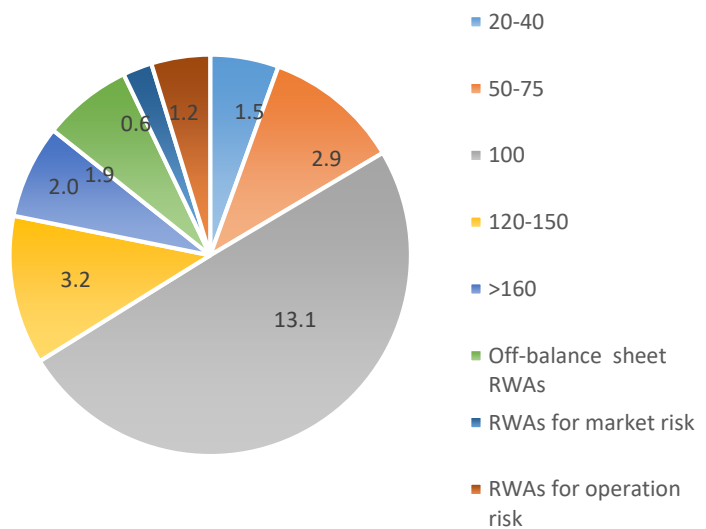
Chart 57. Capital structure, in million AZN



Source: CBA

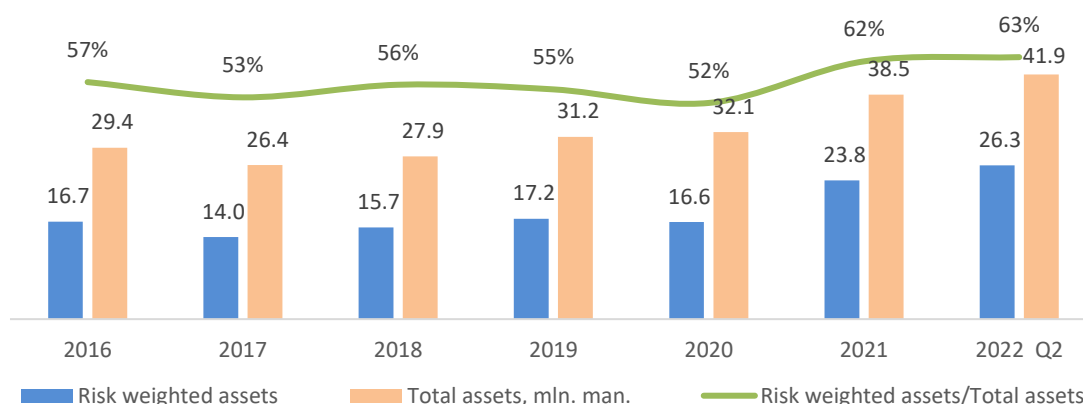
In first half of 2022, RWAs increased. The size of RWAs increased by 10.8% (AZN2.6B) on the backdrop of the 5.7% (AZN259M) rise in total capital. As a result, the RWAs to total assets ratio increased by 1 pp to 63% over the year, the main reason is continuous increase in the size of lending portfolio by banks since the post-pandemic period, the rise in requirements on RWAs since 2021 upon tightening and inclusion of operating and market risks to the calculation of RWAs. In the first half of 2022, RWAs amounted to AZN26.3B, out of which AZN24.5B – loans, AZN0.6B from market and AZN1.2B from operating risks.

Chart 58. Breakdown of RWAs on risk categories, in billion AZN



Source: CBA

Chart 59. Assets and RWAs

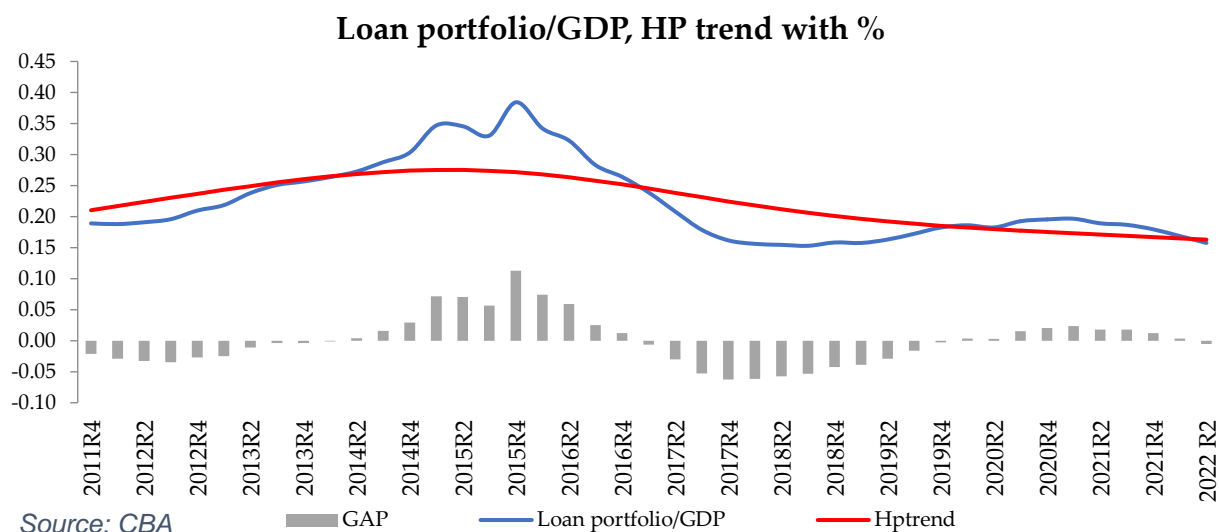


Source: CBA

Consideration of a counter-cyclic capital buffer under the Basel III standards.

According to the ‘Regulations on calculation of bank capital and its adequacy’, the CBA may apply a 0 – 2.5% capital buffer on Tier I capital and the total capital adequacy ratio in line with the economic cycle and the dynamics of the lending portfolio. As a macroprudential tool, the counter-cyclic capital buffer provides for the prevention of systemic risks and lessening vulnerability to cyclic developments, the result of excess lending in the banking sector. A credit gap¹¹ is used as the main indicator to calculate the counter-cyclic capital buffer. In case the credit gap ranges between 2-10%, the counter-cyclic buffer is set between 0-2.5%. Presently, the credit gap is - 0.5%.

Chart 60. The lending portfolio to GDP ratio, with the HP Trend



Source: CBA

¹¹Credit gap – is the difference between the ratio of the loan portfolio to customers by banks to GDP in the relevant period and the indicator of the long-term trend of this ratio for that period.

Table 2. Selected main indicators of the banking system*, in million AZN

	2022 QII	2022 QI	2021 QIV	2021 QIII	2021 QII	2021 QI
Balance sheet items						
Total assets	41,920	39,673	38,462	34,527	33,070	32,521
Liquid assets	15,669	14,925	13,866	11,426	10,692	10,812
Lending portfolio	18,320	17,528	16,659	15,539	14,857	14,352
Business loans	10,482	10,182	9,740	9,002	8,729	8,565
Consumer loans	5,190	4,831	4,518	4,239	3,940	3,680
Mortgage loans	2,649	2,515	2,401	2,297	2,188	2,107
Total liabilities	36,774	34,732	33,493	29,655	28,220	27,672
Current liabilities	24,346	22,831	20,594	18,877	18,114	16,932
Deposits of individuals	10,379	10,201	9,032	8,664	8,271	8,013
Term deposits	5,736	5,502	5,339	5,238	5,007	4,806
Demand deposits	4,642	4,699	3,693	3,426	3,263	3,207
Deposits of legal entities	19,603	18,058	17,906	14,986	13,854	13,038
Term deposits	2,251	1,934	2,053	2,092	2,073	2,119
Demand deposits	17,353	16,124	15,853	12,895	11,781	10,918
Equity	5,146	4,942	4,969	4,871	4,850	4,849
Capital position						
Tier I capital	4,229	4,265	3,815	3,842	3,969	4,187
Aggregate capital	4,790	4,528	4,531	4,422	4,441	4,431
RWA	26,346	25,003	23,781	22,833	19,087	18,806
Tier I capital adequacy	16.1%	17.1%	16.0%	16.8%	20.8%	22.3%
Aggregate capital adequacy	18.2%	18.1%	19.1%	19.4%	23.3%	23.6%

	2022 QII	2022 QI	2021 QIV	2021 QIII	2021 QII	2021 QI
Profitability						
Net profit	401	174	609	506	366	149
ROA	2.0%	1.8%	1.8%	2.0%	2.2%	1.8%
Liquidity risk profile						
Liquid assets	15,669	14,925	13,866	11,426	10,692	10,812
Share of liquid assets in total assets	37.4%	37.6%	36.1%	33.1%	32.3%	33.2%
Instant liquidity ratio	61.4%	64.0%	61.6%	58.1%	57.9%	63.4%
Credit risk profile						
Non-performing loans	827	812	749	859	902	918
Business loans	552	558	499	556	593	620
Consumer loans	222	192	183	221	212	189
Mortgage loans	53	62	66	81	97	109
NPL ratio	4.5%	4.6%	4.5%	5.5%	6.1%	6.4%
Business loans	5.3%	5.5%	5.1%	6.2%	6.8%	7.2%
Consumer loans	4.3%	4.0%	4.1%	5.2%	5.4%	5.1%
Mortgage loans	2.0%	2.5%	2.8%	3.5%	4.4%	5.2%
Market risk profile						
Dollarization of assets	40.0%	39.9%	39.4%	38.9%	38.5%	40.2%
Dollarization of liabilities	45.7%	46.5%	45.3%	46.1%	46.5%	48.8%

* Prudential reporting methodology based calculation.

Non-bank credit institutions

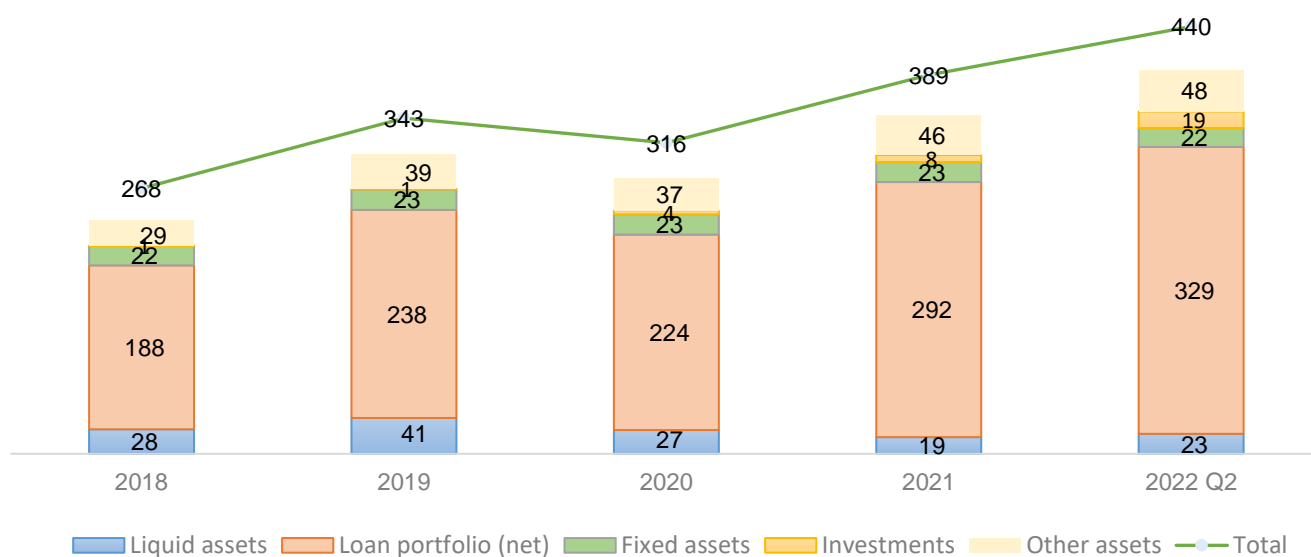
The role of non-bank credit institutions (NBCIs) in financial intermediation remains negligible.

In general, the market share of NBCs in the financial system in terms of assets makes 1.0%¹². 15 out of operational 97 NBCIs have foreign capital, in 11 of which the share of foreign capital ranges between 50%-100%. As of June, 2022, the number of NBCIs was 55, and the number of credit unions was 41. Over 6 months, the number of employees of NBCIs increased by 42 persons to 2 592 persons, while the number of branches increased by 11 to 280. Licenses of 2 NBCIs were revoked and no new NBCI license was issued over the reporting period.

Total assets of NBCIs operating throughout the country increased by 13.3% (AZN52M) to AZN440M, driven by the net lending portfolio. Over the period, net lending portfolio increased by 12.4% (AZN36M), mainly due to consumer loans. The investment portfolio of NBCIs (participation share in other subsidiaries) increased by over 2 times to AZN19M.

Consumer loans still account for the main part of the portfolio of NBCIs. As of end of six months of 2022 consumer loans account for 62% (AZN227M), and business loans

Chart 61. Assets of non-bank credit institutions, in million AZN

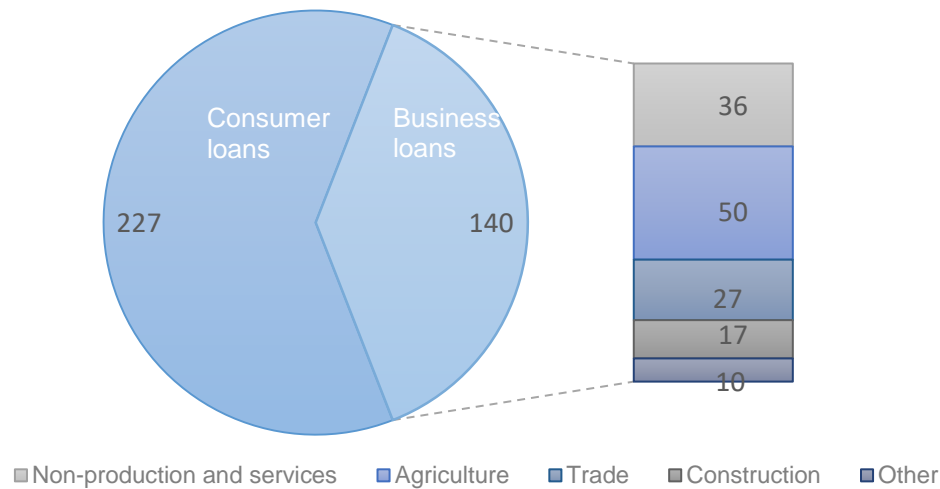


Source: CBA

¹² The 'Agrarcredit' CJSC was skipped in the analysis of NBCIs.

account for 38% (AZN140M) of the lending portfolio of NBCIs. 35.6% of the business portfolio (AZN50M) was issued to agriculture, 26.1% (AZN36M) to non-production and services and 19.0% (AZN27M) to trade.

Chart 62. Lending portfolio structure of NBCIs, in million AZN



Source: CBA

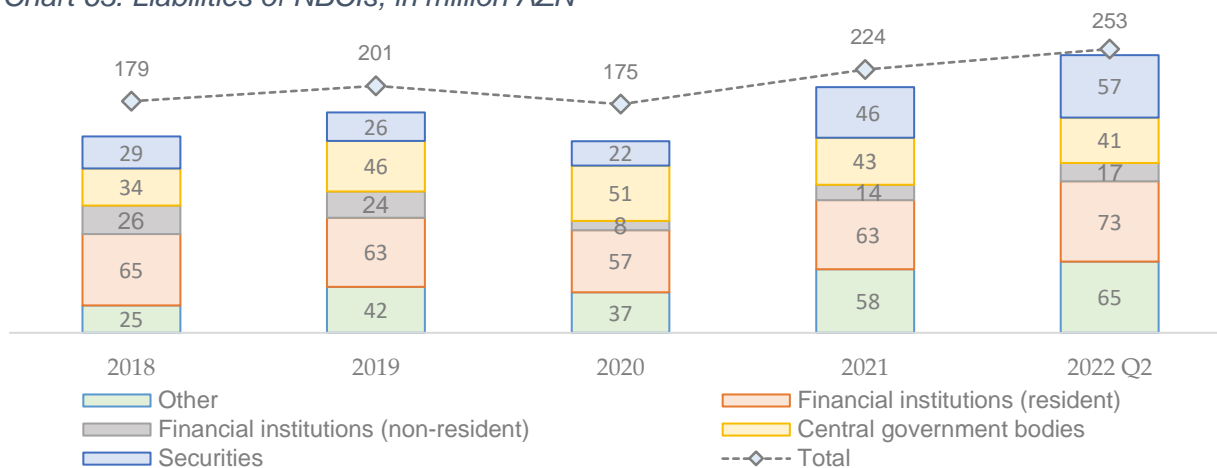
Although a concentration level in NBCIs is low, there are signs of concentration there. The Herfindahl-Hirschman Indeks - HHI¹³ widely used in international practice to assess concentration suggests that concentration is low in NBCIs, because there is a large number of small and medium sized NBCIs in the sector. The HHI is 514 and 568 respectively in terms of the share of assets and the lending portfolio across the sector. However, note that, there are only 13 NBCIs whose assets are over AZN10M (they account for 73.6% (AZN323M) of total assets). In addition, there are 25 NBCIs whose assets fall below AZN2M (5.3% of total assets).

¹³ The HHI is used in international practice to measure competitiveness and concentration in markets. According to the practice of the US Department of Justice, markets are divided into 3 parts on the basis of this index: lowly (HHI<1500), moderately (1500<HHI<2500) and highly (HHI>2500) concentrated markets. The value of the HHI may range between 0-10000.

Liabilities of the sector increased by 14% (AZN32M) to AZN253M, driven by liabilities attracted from banks. The size of loans attracted from banks over six months increased by 24% to AZN66.3M, as a result, the share of bank loans in liabilities increased by 2 pp to 26.2% compared with the end of the previous year. Loans are mainly taken from resident banks. Whereas over the period liabilities due to other financial institutions increased by AZN1.8M (8%), their share in total liabilities decreased by 0.5 pp to 9.4%. Moreover, although the portfolio of securities issued by NBCIs grew by AZN11M, the share of issued securities in total liabilities decreased by 2 pp to 22.4%. Growth in securities is concentrated on a limited number of NBCs. Over recent 6 months, the sector's foreign debt has increased by 23% (AZN3M) to AZN17M.

The quality of the lending portfolio improved on the backdrop of the recovery of economic activity. In the first half of 2022, the NPL portfolio of the sector decreased by

Chart 63. Liabilities of NBCIs, in million AZN

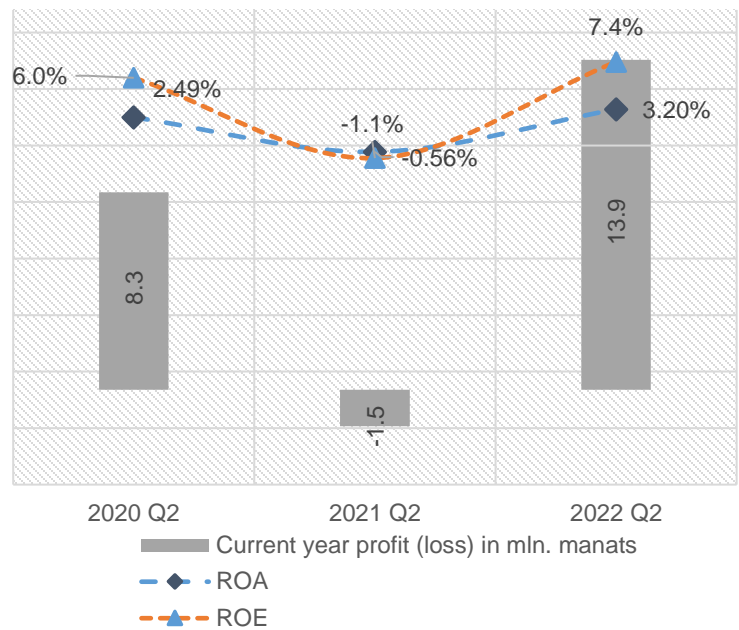


Source: CBA

2.4% to AZN67.5M. The NPL ratio of the sector is 18.3%. NPLs are mainly concentrated in the business sector. The NPL portfolio amounts to AZN27.4M on consumer loans (the NPL ratio 13%), and AZN38.1M (the NPL ratio 27%) on business loans.

The sector is operating at a profit. In the first half of 2022, the sector generated AZN13.9M worth profit (yoy loss was AZN1.5M). As of the end of the reporting period ROA and ROE of the sector was 3.2% and 7.4% respectively.

Chart 64. Profitability indicators of NBCis



Source: CBA

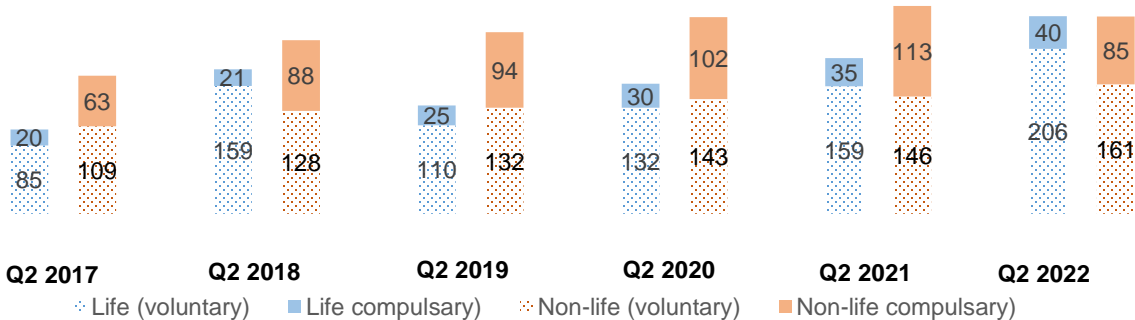
Insurance sector

By the end of the first half of 2022, there were 20 insurance companies and one reinsurance company in the Azerbaijani insurance market. 5 out of 20 insurance companies are life, while 15 are non-life insurance companies. 28 insurance brokers and 672 insurance agents contributed to activities of the insurance sector.

Insurance premiums increased. In the first half of 2022 insurance premiums yoy increased by 8.7% (AZN39M) to AZN492M, driven by voluntary insurance (up by 20.4% (AZN62M)). Compulsory insurance decreased by 15.5% (AZN23M). Growth in voluntary insurance (AZN62M) was driven by the endowment life insurance (AZN51M). In general, over recent 5 years insurance premiums have increased by 78% (AZN215M). Insurance premiums collected across life insurance classes increased by 136% (AZN142M), and by 43% (AZN74M) across non-life insurance classes.

Insurance claim expenses decreased in the first half of 2022 – claim expenses yoy decreased by 29.5% (AZN73M) to AZN175M, due to claim expenses on life insurance classes. Over the reporting period, claim expenses on life insurance classes decreased by 40% (AZN57M) to AZN85M, attributable to relevant drop in claim expenses as a result

Chart 65. Insurance premiums, in million AZN

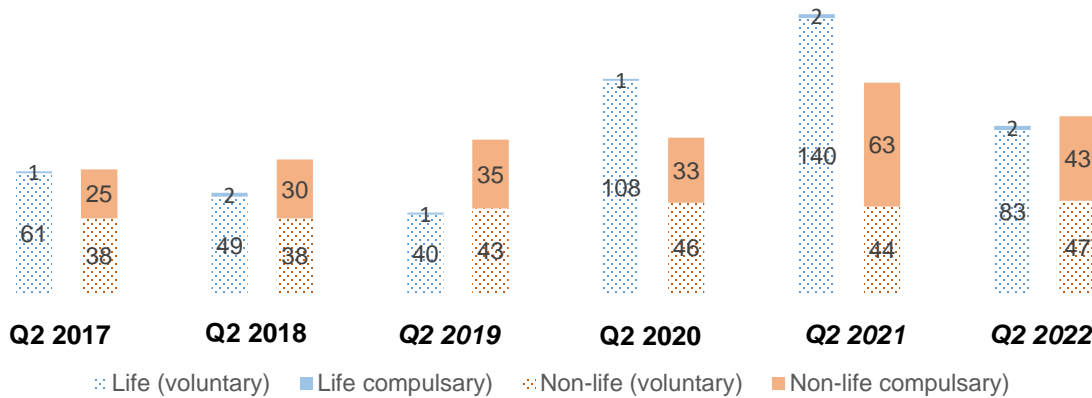


Source: CBA

of the decrease in collections on the backdrop of the decrease in national benefits since 2019. Claim expenses in non-life insurance class decreased by 15% (AZN17M) to AZN90M, driven by the transfer of the state compulsory insurance to the balance of the SSPF. At the same time, this drop is eased by the rise in claim expenses resulting from the hike in the number of cases of CCLIMVO* and medical insurance.

* CCLIMVO – compulsory civil liability insurance for motor vehicle owners

Chart 66. Insurance claim expenses, in million AZN

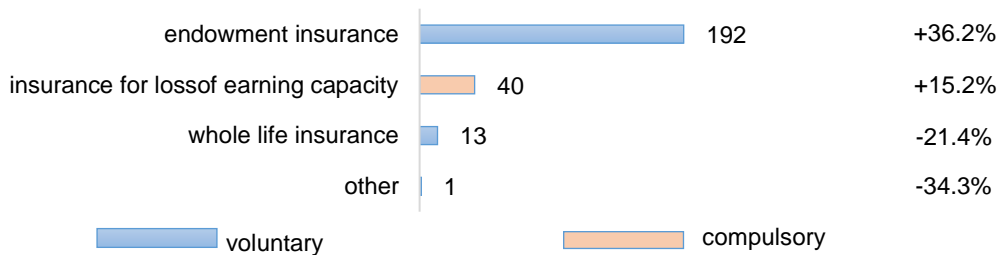


Source: CBA

- The structure of premiums across insurance classes:

The endowment life insurance prevails in the structure of life insurance classes (AZN192M, 78% of total life insurance premiums – yoy up by 36.2% or AZN51M). Voluntary medical insurance (AZN78M, 32% of total non-life insurance premiums), compulsory motor third party liability insurance (AZN48M, 20% of total non-life insurance premiums) and compulsory property insurance (AZN35M, 14% of total non-life insurance premiums) prevail in the structure of non-life insurance classes. The main drivers of growth within the non-life insurance class were voluntary air transport insurance (+72%, AZN+2.97M), voluntary medical insurance (+10.4%, AZN+7.3M), and compulsory property insurance (+ 10.1%, AZN+3.2M).

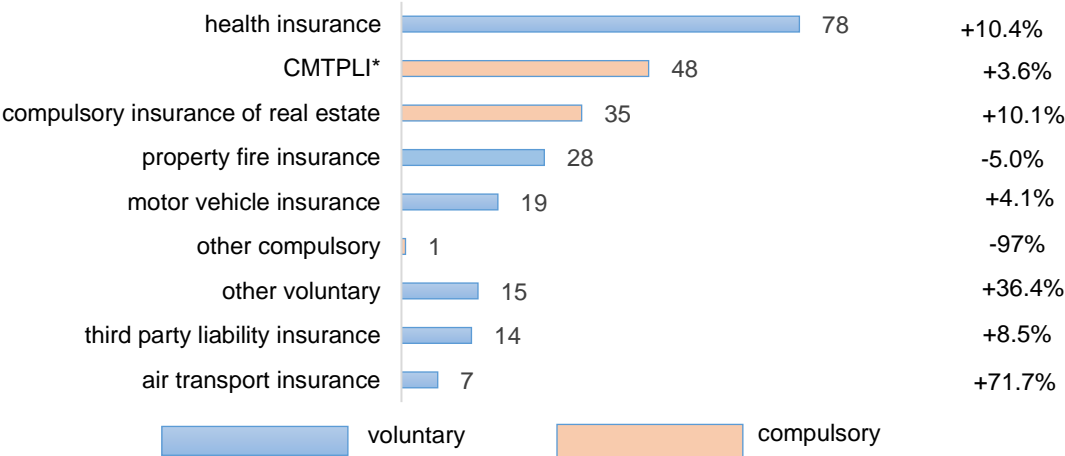
Chart 67. Structure of life insurance premiums across classes, in million AZN



Source: CBA

* Compulsory insurance against industrial accidents and occupational diseases

Chart 68. Structure of non-life insurance premiums across classes, in million AZN



Source: CBA

- **Structure of claim expenses across insurance classes**

The endowment insurance is the main class in the structure of claim expenses within the life insurance too. While endowment life insurance claim expenses yoy decreased by 41%, this insurance class made 96% (AZN81M) of total claim expenses (AZN85M).

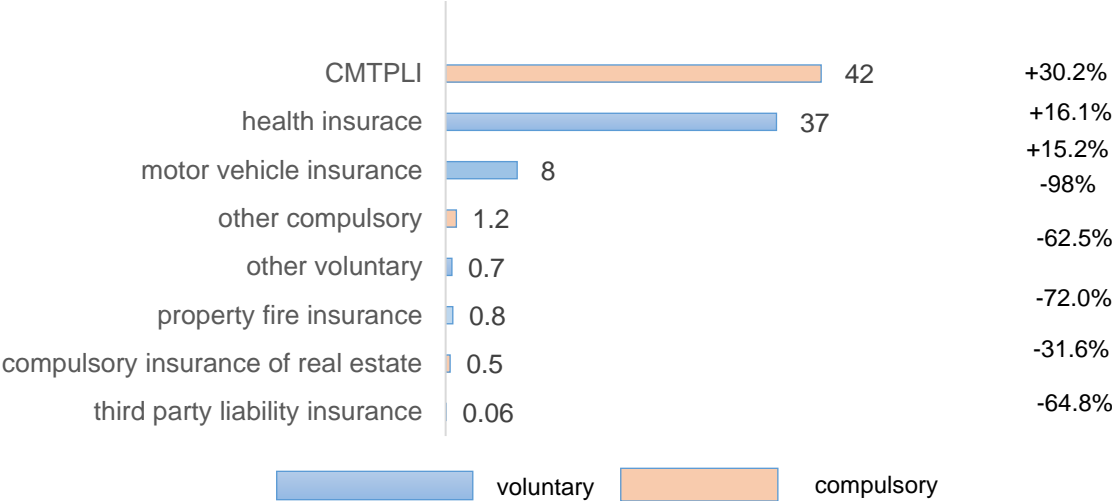
Chart 69. Structure of life insurance payments across classes, in million AZN



Source: CBA

Compulsory motor third party liability insurance (AZN42M, 46.3% of non-life expenses), voluntary medical insurance (AZN37M, 41% of non-life claim expenses) and insurance of vehicles (AZN8M, 9.3% of non-life claim expenses) prevail in non-life insurance claim expenses. Claim expenses increased year over year across these insurance classes. Claim expenses on compulsory motor third party piability insurance increased by 30.2%, on voluntary medical insurance by 16.1% and on insurance of vehicles by 15.2%.

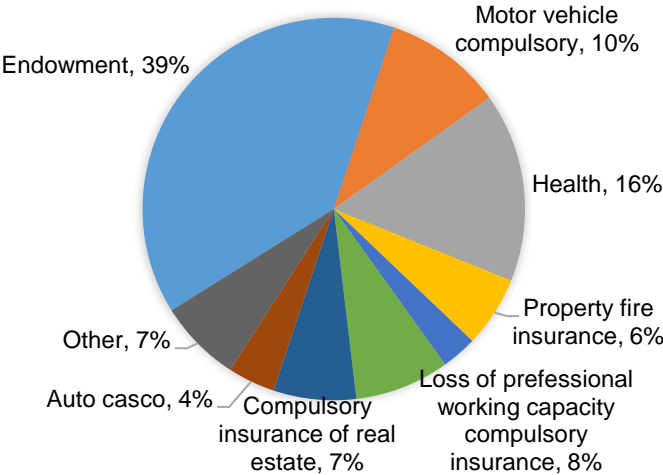
Chart 70. Structure of non-life insurance payments across classes, in million AZN



Source: CBA

Concentration exists within the insurance sector among classes. Over the half of insurance premiums is on three insurance classes. In the first half of 2022, the share of main insurance classes accounted for 65% of total premiums.

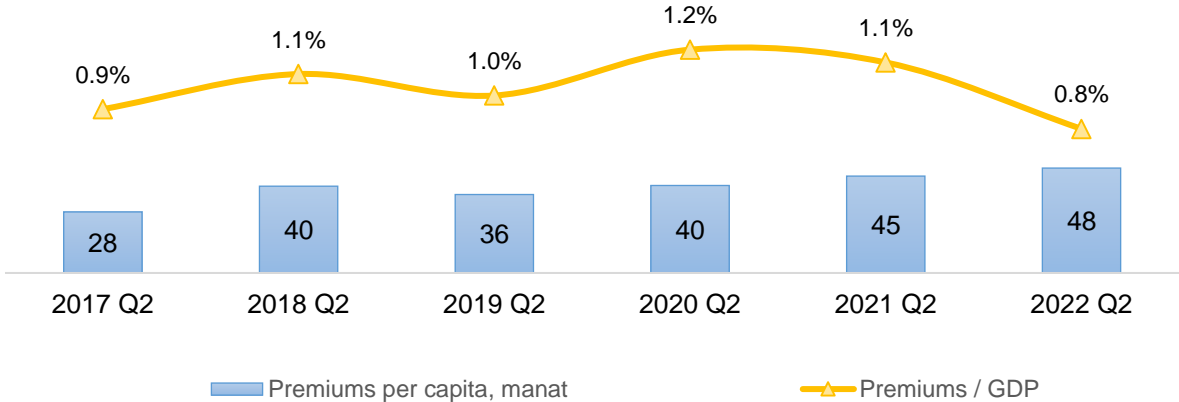
Chart 71. Structure of insurance classes across premiums



Source: CBA

Whereas the share of insurance premiums in GDP decreased, per capita insurance premium increased. The share of insurance premiums in GDP yoy decreased by 0.36 pp to 0.78%, attributable to the fact that GDP growth was faster than the growth in insurance premiums in the post-pandemic period. In general, the penetration indicator lags behind the one in benchmark countries. Increasing penetration levels in the insurance sector is one of the main directions of the strategic activity of the Central Bank. Wider range of digital services and application of digital solutions under the insurance sector growth strategy will both boost digitalization and support penetration of the sector. At the same time, large-scale insurance awareness events, improvement of the effective market infrastructure to elevate trust in the insurance sector and introduction of the up to date corporate governance will further accelerate the penetration in upcoming years.

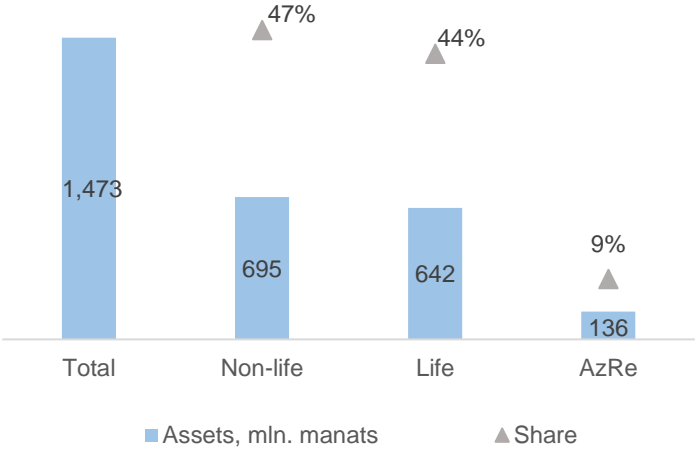
Chart 72. The penetration level of the insurance sector



Source: CBA

Assets of the sector increased by 11% (AZN148M) to AZN1 473M compared with the early year¹⁴. Assets of the non-life sector increased by 2% (AZN12M) to AZN695M, while assets of the life sector increased by 18% (AZN99M) to AZN642M. Assets of the AzRe increased by 37% to AZN136M.

Chart 73. Insurance sector assets, in million AZN



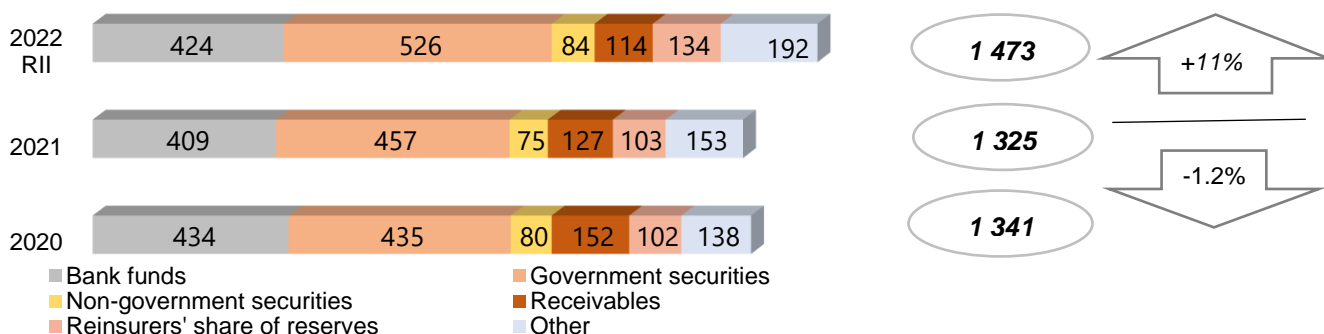
Source: CBA

Insurance sector assets are mainly invested in government securities and bank funds. In general, the investment portfolio accounts for 77% insurance sector assets. Assets include government securities (36% or AZN526M), funds with banks (29% or AZN424M) and non-government securities (6% or AZN84M). Life insurance companies account for 64% of the securities portfolio of the insurance sector. The investment portfolio of life insurance companies mainly stems from the endowment life insurance. In general, 97% of the investment portfolio of insurance

¹⁴ The analysis covers 20 operating insurer and one exceptional reinsurer, skipping insurance companies whose licenses have been revoked.

companies is concentrated in Azerbaijan. The book value of assets invested abroad (mainly Turkey and Georgia) amounted to AZN36M.

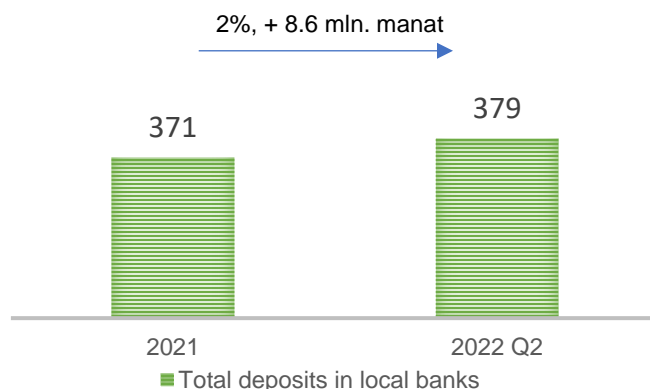
Chart 74. Asset components, in million AZN



Source: CBA

Deposits of insurers with domestic banks increased by 2% (AZN8.6M) to AZN379M.

Chart 75. Funds of insurance companies with domestic banks, in million AZN



Source: CBA

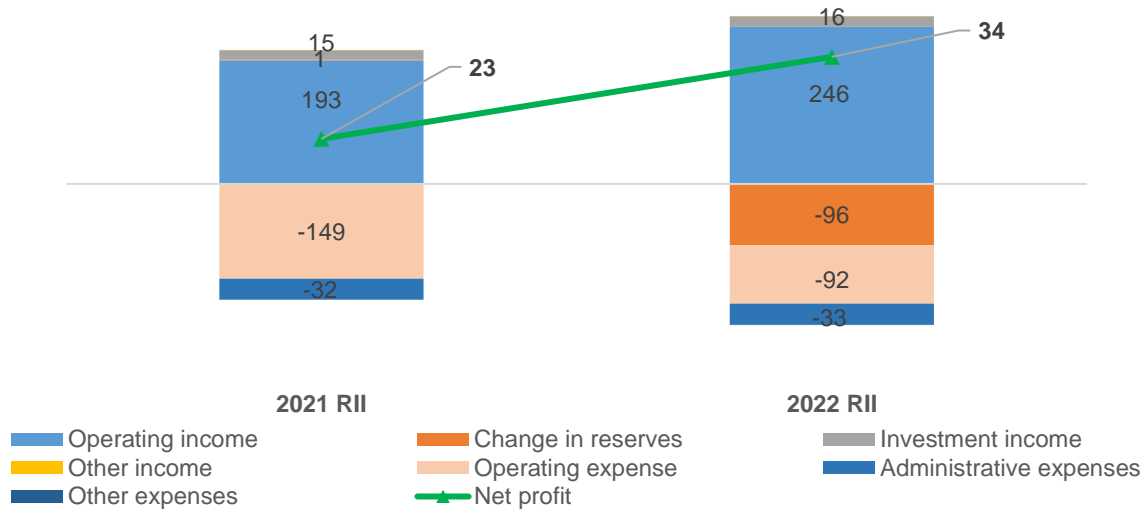
The sector generates profit mainly from life insurance companies.

Profitability of the sector increased over the period. Net profit of the sector increased by 47% (AZN11M) to AZN34M. Profitability stemmed from AZN53M worth rise in operating income and AZN57M drop in operating expenses. AZN97M worth change in reserves had an adverse effect on profitability. Profitability of

the non-life insurance sector increased by 31% (AZN4.6M) to AZN19.4M, driven by yoy drop in net insurance reserves by 56% (AZN38M). At the same time, AZN7.8M worth drop in main operating expenses and AZN2.7M rise in other income contributed to the increase in net profit.

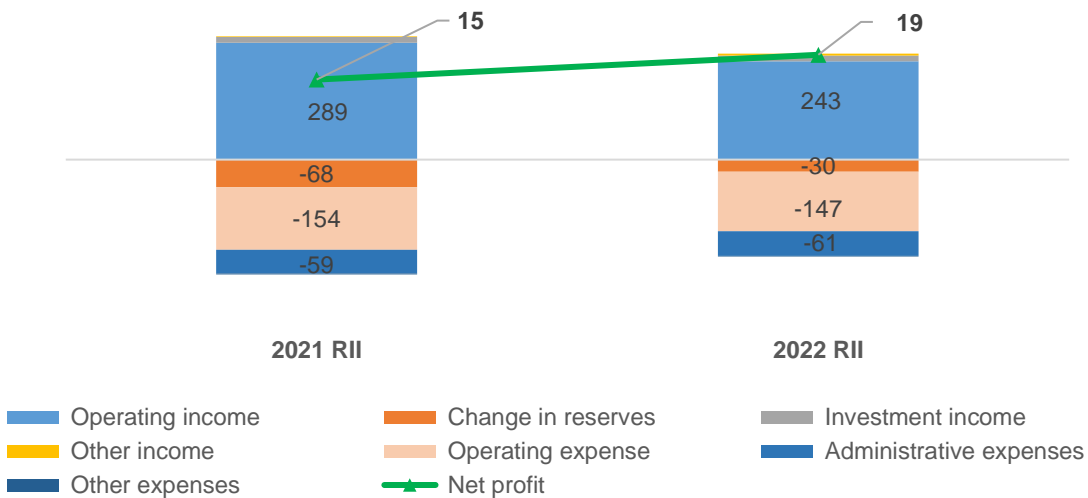
At the same time, ROA on the insurance sector yoy decreased by 0.6 pp to 5.8%.

Chart 76. Profitability indicators of life insurance companies, in million AZN



Source: CBA

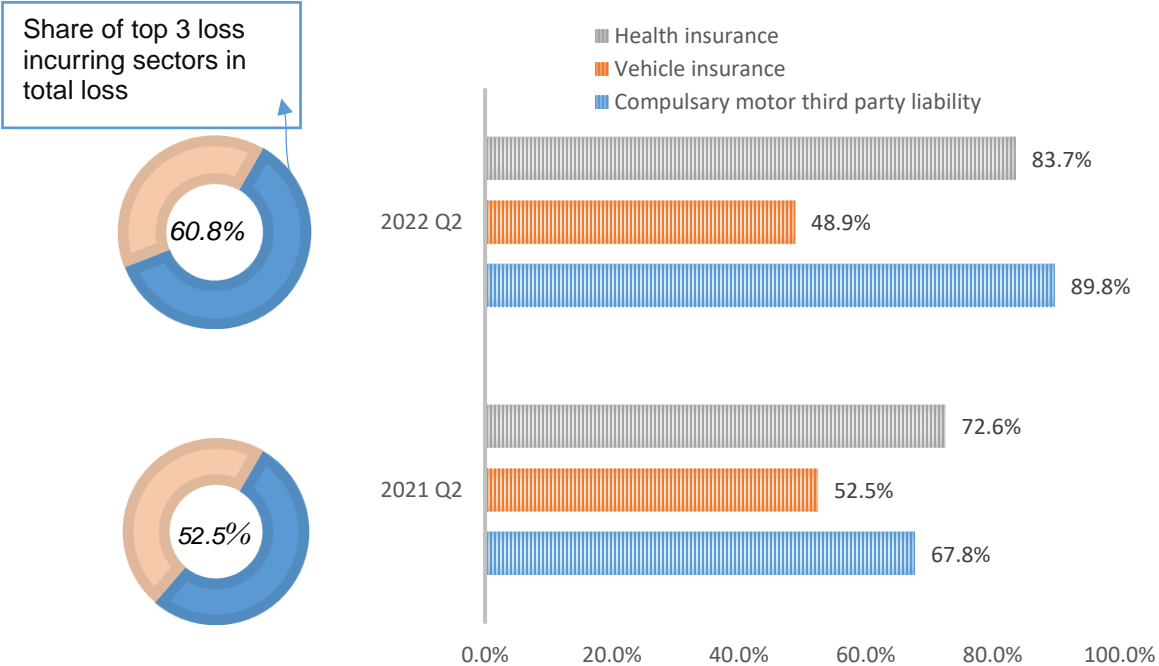
Chart 77. Profitability indicators of non-life insurance companies, in million AZN



Source: CBA

In the first half of 2022, the loss ratio on three classes with the highest loss increased year over year. To note, the rise was driven by compulsory motor third party liability insurance (yoy up by 22 pp). Whereas this indicator decreased by 3.6 pp on voluntary insurance of vehicles, it increased by 11.1 pp on voluntary medical insurance. In general, the share of three classes with the highest loss in total losses increased by 8.3 pp to 60.8%.

Chart 78. Three insurance classes of the insurance sector with the highest losses



Source: CBA

Received and transferred reinsurance premiums increased, while reinsurance claim expenses decreased compared to the corresponding period of previous year. Over the reporting period, total reinsurance premium received yoy increased by 8% (AZN1.4M) to AZN18.5M, reinsurance claim expenses decreased by 85% (AZN24M) to AZN4.3M, and transferred reinsurance premiums increased by 6% (AZN3M) to AZN50M. Reinsurance premiums were collected by an exceptional reinsurer (AZN17M) and insurers with reinsurance licenses (AZN1.5M). 100% of premiums collected by insurers and 60% collected by the exceptional reinsurer stemmed from the domestic market. AZN1M worth reinsurance claim expenses were made by insurers and AZN3.3M by the exceptional reinsurer. 71% of claim expenses was paid by insurers within the country and 72% of claim expenses were paid outside country by the exceptional reinsurer.

As for transferred reinsurance premiums, insurers transferred 61% (AZN29M) and the exceptional reinsurer transferred 95% (AZN3M) of these premiums abroad. Over the reporting period, insurance risks were mostly transferred to Great Britain, Norway and Germany. Insurance risks mostly transferred to reinsurance were aircraft civil liability insurance (42% of total risk), compulsory property insurance (21% of total risk), fire and other risks insurance (19% of total risk) and water transport insurance (5% of total risk).

Table 3. Statistical reinsurance information

<i>Insurers</i>	RI premium (received)		RI payment (paid)		RI premium (transferred)	
	Within the country	Outside	Within the country	Outside	Within the country	Outside
2021 (QII)	2.7	0.1	0.6	0.0	16	29
2022 (QII)	1.5	0.0	0.7	0.3	18	29

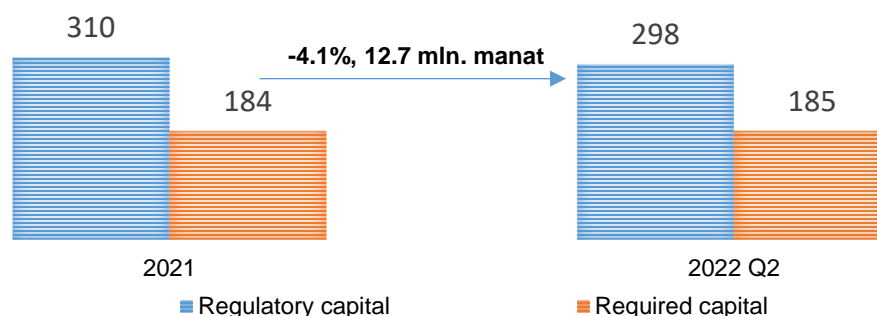
<i>Exceptional reinsurer</i>	RI premium (received)		RI payment (paid)		RI premium (transferred)	
	Within the country	Outside	Within the country	Outside	Within the country	Outside
2021 (QII)	9.9	4.5	27.3	0.1	0.05	3.0
2022 (QII)	9.8	7.2	0.9	2.4	0.2	3.0

<i>Total</i>	RI premium (received)		RI payment (paid)		RI premium (transferred)	
	Within the country	Outside	Within the country	Outside	Within the country	Outside
2021 (QII)	12.6	4.6	27.9	0.1	16.05	32
2022 (QII)	11.32	7.17	1.63	2.71	20	32

Source: CBA

Insurance sector capital exceeds aggregate capital requirements. In general, as of June 2022, equity of the insurance sector (together with the exceptional reinsurer) amounted to AZN489M and aggregate capital was AZM298M. Aggregate capital on life insurance exceeded the capital requirement by 1.8 times (AZN44M) and amounted to AZN101M. The similar indicator for the non-life insurance was 1.4 times higher (AZN40M) and amounted to AZN147M. The development of the Solvency II based methodological framework is of the main priorities for the development of the insurance sector to boost the insurance sector resilience and ensure risk based calculation of capital.

Chart 79. Aggregate and required capital, in million AZN

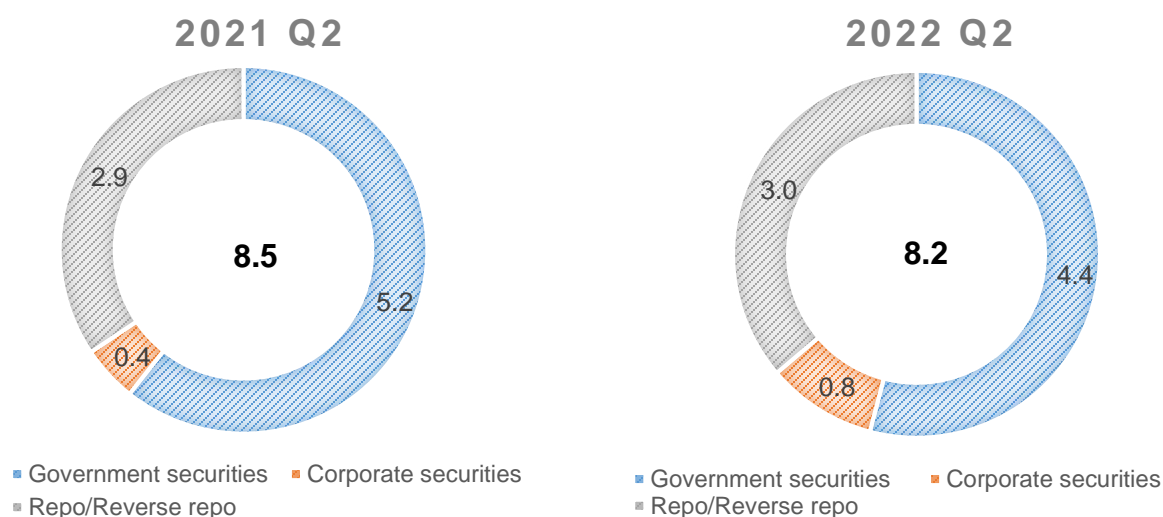


Source: CBA

Capital market

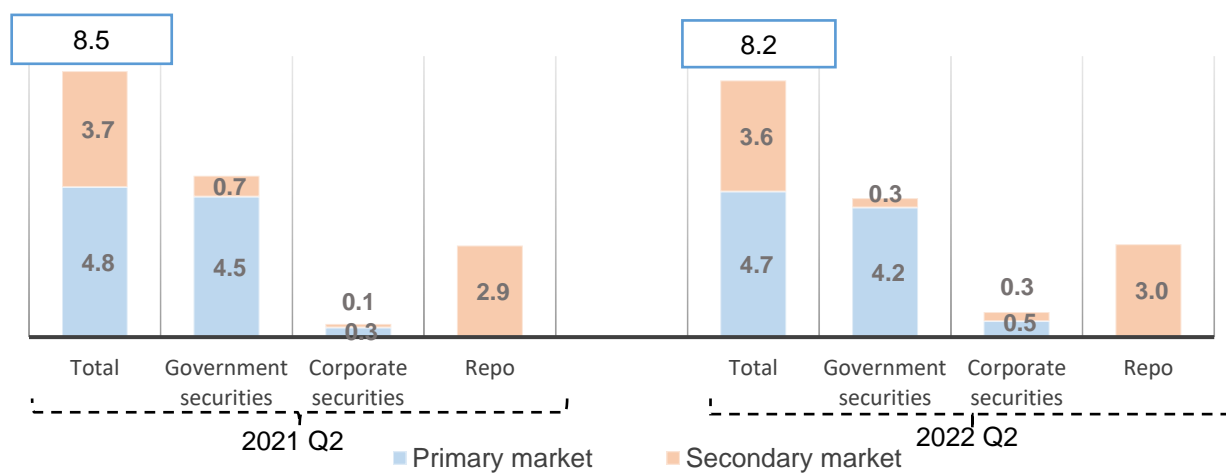
Whereas the securities market contracted in the first half of 2022, circulation of corporate securities increased. Total trade turnover of the securities market yoy decreased by 3.5% to AZN8.2B, driven by government securities. Circulation of government securities decreased by 14% (AZN730M). At the same time, corporate securities turnover increased by 89% (AZN376M) and trade turnover of Repo transactions increased by 2% (AZN46M).

Chart 80. Capital market turnover, in billion AZN



Source: CBA

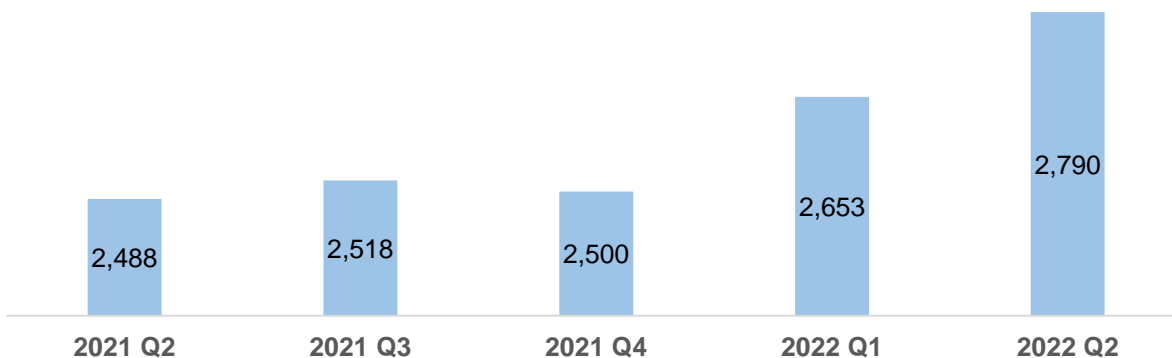
Chart 81. Primary and secondary market operations, in billion AZN



Source: CBA

The volume of government bonds in circulation increased. The volume of government bonds in circulation yoy increased by 12% to AZN2.8B due to the issuance of government bonds with longer maturity. However, as of June 2022, turnover of government bonds yoy decreased by 42% to AZN0.9B.

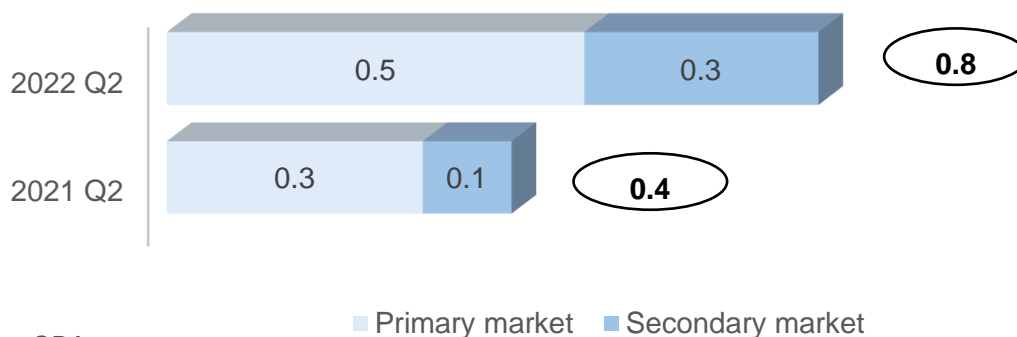
Chart 82. Government bonds in circulation, in billion AZN



Source: CBA

The size of corporate securities market increased. Stimulus measures oriented towards revival of the corporate securities market allowed increasing the volume of transactions in this segment. In the first half of 2022, the volume of primary market transactions on placement of corporate securities increased by 63% to AZN510M, while secondary market operations increased by more than 2 times to AZN287M.

Chart 83. Trade turnover of corporate securities, in billion AZN



Source: CBA

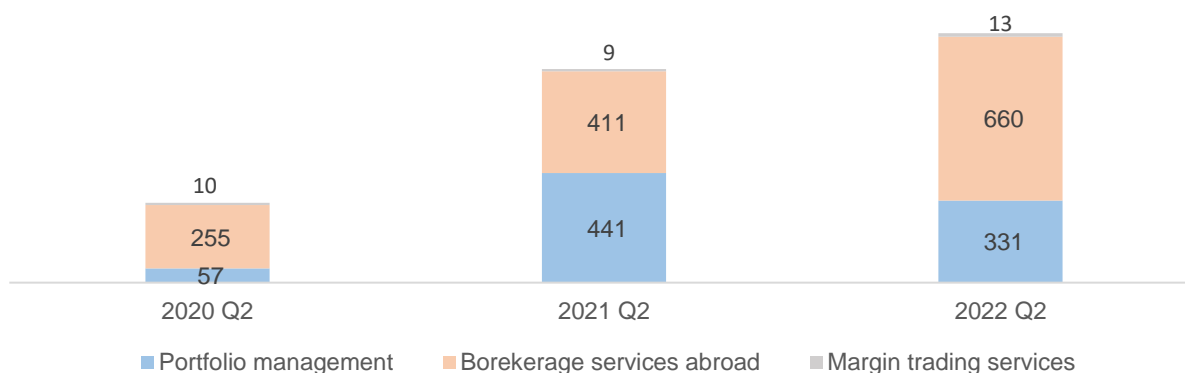
In accordance with the Socio-economic development Strategy of the Republic of Azerbaijan for 2022-2026, the CBA continued efforts to improve the normative legal

base and expand institutional development and infrastructural capacity on further deepening of the corporate securities market. To determine economic and fiscal stimuli with an eye to increase access of issuers and investors to the capital market, a number of changes was made to the Tax Code of the Republic of Azerbaijan on 13 May 2022 on creation of a favorable tax regime in the capital market. According to the changes, from 1 February 2023, dividends, discounts and interest income paid on shares and bonds with maturity of 5-year that publicly offered and traded in a regulated market are exempted from taxation. At the same time, calculation of interest tax on bonds has been improved in accordance with international practice. To develop the capital market, under its activity direction the CBA takes efforts to adjust the legal framework to international standards, improve the market infrastructure and support supply and demand at the market.

Challenges related to the institutional development of the capital market necessitates the modernization of the market infrastructure as well. Works are under way on launch of a centralized operation system that covers trade and post-trade transactions in the capital market. At the same time, the CBA, the National Depository Center and the Baku Stock Exchange started efforts on the launch of a single portal on digitalization of the issuance of securities. The system will allow maintaining the registration of securities electronically through a single-window system.

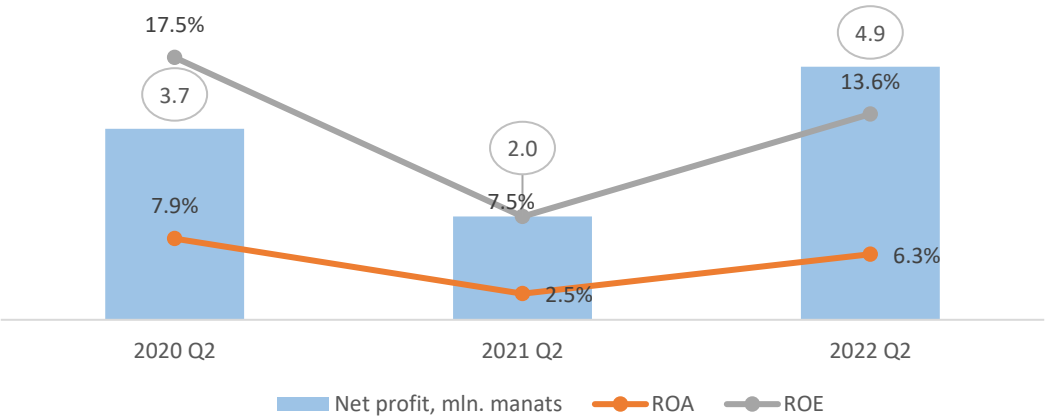
While assets of investment companies decreased slightly, their yield grew. In Q2 2022, assets of investment companies amounted to AZN77.4M. Over the period, one investment company received an investment license; investment companies are numbering 13. In addition, a customer base of investment companies expanded. In Q2 2022, customer assets increased by 17% to AZN1.0B. Net profit of investment companies yoy increased by 2.5 times to AZN4.9B.

Chart 84. Customer assets of investment companies, in million AZN



Source: CBA

Chart 85. Profitability of investment companies



Source: CBA

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