



CENTRAL BANK
OF THE REPUBLIC OF AZERBAIJAN

MONETARY POLICY REPORT

JANUARY-SEPTEMBER

2022
№3



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ACRONYMS

CBA	Central Bank of the Republic of Azerbaijan
ILO	International Labor Organization
BCI	Business Confidence Index
IMF	International Monetary Fund
FDI	Foreign direct investment
WEO	World Economic Outlook
SSC	State Statistics Committee
SCC	State Customs Committee
FAO	Food and Agriculture Organization of the United Nations
FED	Federal Reserve System
EME	Emerging market economy
AE	Advanced economy
OECD	Organization for Economic Cooperation and Development
CCI	Consumer Confidence Index
CPI	Consumer Price Index
APPI	Agricultural Producer Price Index
NEER	Nominal Effective Exchange Rate
OPEC	Organization of the Petroleum Exporting Countries
Yoy	Year over year
REER	Real Effective Exchange Rate
RSM	Real Sector Monitoring
IPPI	Industrial Producer Price Index
GDP	Gross Domestic Product
WTO	World Trade Organization
FX	Foreign exchange
NDA	Net Domestic Assets
NFA	Net Foreign Assets

EXECUTIVE SUMMARY

Over 9 months of 2022, the CBA operated in the environment of multifaceted effects of complicated developments in the global economy under the pressure of geopolitical tension. The global environment is marked with rising inflation, high commodity prices, supply chain disruptions and falling economic growth forecasts. While the international conjuncture is favorable for Azerbaijan in terms of the balance of payments, rising inflation passed through to domestic prices.

The CBA's monetary policy was oriented towards containing foreign and domestic inflation pressures by means of the monetary condition. The main factors that contained inflation were maintaining equilibrium in the FX market amid the balance of payments surplus and appreciation of NEER. Monetary policy decisions were taken in light of actual and forecasted inflation, the level of activity in the real economy and the balance of risks.

The Bank took critical decisions on improvement of the monetary policy operational framework and began to apply monetary policy tools in a new configuration. These measures contribute to activation of the interbank money market and strengthening pass-through of monetary policy decisions to inflation through interest rate channel.

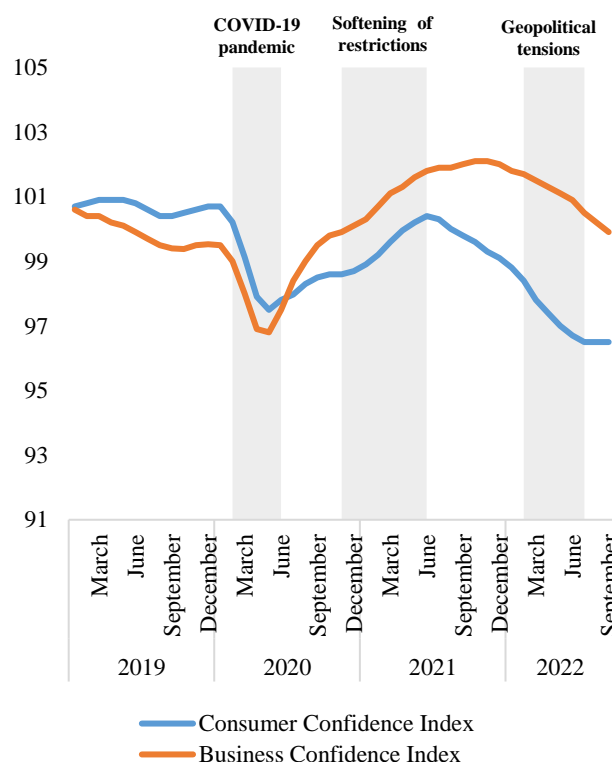
I. GLOBAL ECONOMIC ENVIRONMENT AND THE EXTERNAL SECTOR

1.1. Global economic trends

Over 9 months of 2022 the global economic environment was further complicated in response to effects of geopolitical and geoeconomic tension. Economic slowdown in the countries with a significant share in the global economy had a downward effect on their trade partners too. The stagflation risk became actual on the backdrop of higher inflationary pressures and a tighter monetary policy in most countries.

Amid high uncertainties, global economic activity indicators were prone to dropping over 9 months. Higher geopolitical tension in the aftermath of easing of pandemic restrictions in OECD countries had a negative effect on the CCI and the BCI.

Chart 1. Business and Consumer Confidence Indexes in OECD countries



Source: OECD

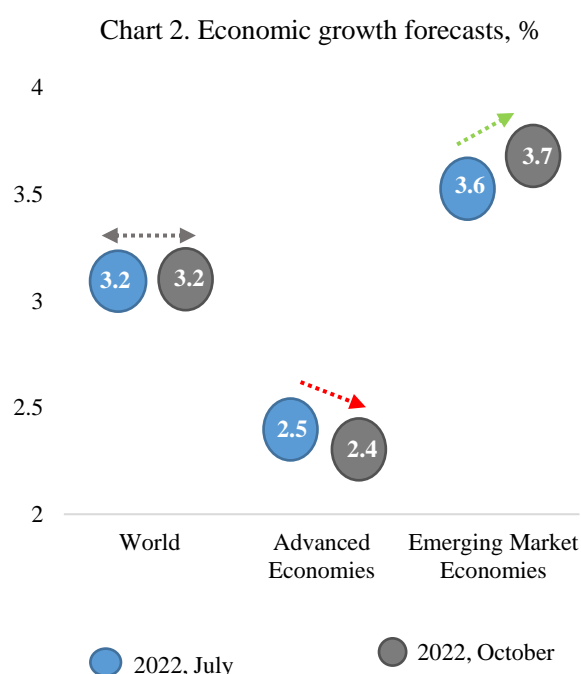
International organizations revised global growth outlook down in light of recent trends in the global economy. The IMF WEO October 2022 predicts 2.7% global growth in 2023 – 0.9 and 0.2 pp lower than in April and July forecasts respectively.

The IMF WEO October 2022 forecasts 2.4% economic growth for AEs in 2022 (down by 0.1 pp compared with July forecast) and 1.1% in 2023 (down by 0.3 pp). Higher than expected actual inflation in AEs, monetary tightening by central banks, geo-political and geo-

economic tensions led to the drop in economic activity indicators. Economic growth for 2022 was revised down to 1.6% for the USA, up for the euro area and the UK to 3.1% and 3.6% (respectively), left unchanged for Japan (1.7%) compared with July forecast. Economic growth slowdown in the long-run is mainly attributed to falling real income in the USA amid high inflation, persistent uncertainty resulting from geopolitical and geoeconomic tension in the euro zone, and monetary policy tightening by central banks.

The euro area, dominated by geopolitical tensions and directly affected by ongoing developments, strives to diversify alternate sources and import channels to lessen energy dependency on Russia and ensure energy security.

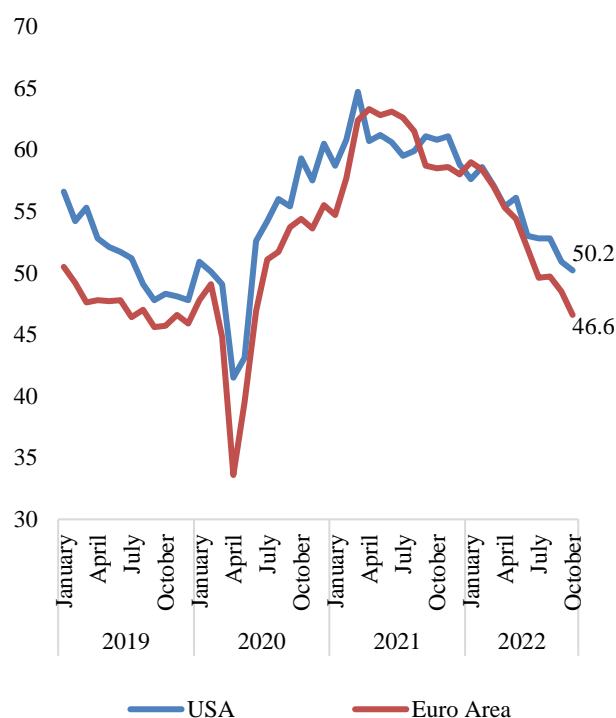
The Purchasing Manager's Index (PMI) ¹ used in the measurement of economic activity in production has been falling since early 2021 in the USA and the euro area, the main actors of the global economy, as monetary tightening translates to domestic production.



Source: IMF World Economic Outlook, October 2022

¹ The Purchasing Managers' Index measures trends in sectors – over 50 stands for expansion and below 50 – stands for contraction compared with the previous month.

Chart 3. Purchasing Managers Index (PMI)



Source: Institute for Supply Management and Market Economics

In September, the unemployment rate stood at 3.5% in the USA, in August 6.6% in the euro area, 2.5% in Japan and 3.5% in the UK. Despite rising nominal income of the population in most AEs, real income is falling. At the same time, complication of investment conditions also weigh on economic growth.

Deteriorated economic activity indicators translated to fund indices as well. The Dow Jones depreciated by 19.9%, the S&P 500 by 21.9%, the Nasdaq by 31.9%, the FTSE Eurotop by 15.9% and the Nikkei by 10.4%.

The IMF in WEO October 2022 revised economic growth outlook for EMEs up by 0.1 pp to 3.7% for 2022 and down by 0.2 pp to 3.7% for 2023 compared with July forecast. Downward revision of long-term economic growth forecast for EMEs is attributable to more expensive lending from AEs triggered by the tighter monetary condition along with geopolitical and geoeconomic tensions.

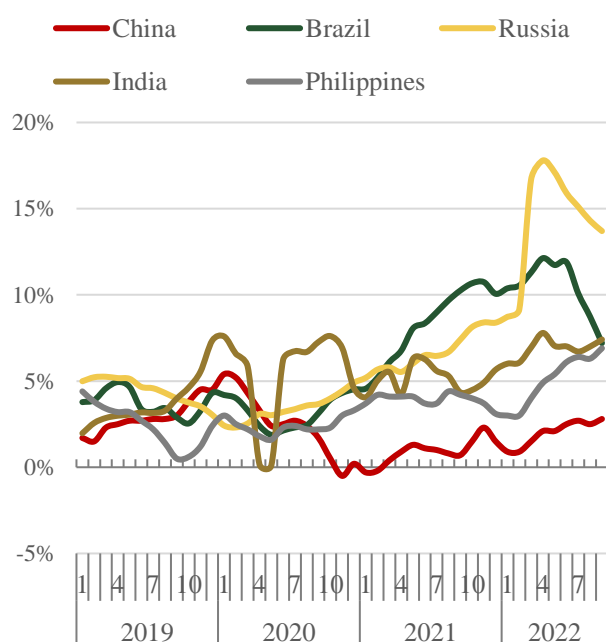
Sanctions against Russia, including import and export bans both decreases foreign revenues of the country and have a downward effect on its trade partners too. Moreover, real estate crisis triggered risks to the domestic banking sector and the country economy and resurgence of COVID-19 in China both exhausts economic activity in the country and slows down economic activity in EMEs.

Inflationary pressures kept rising in the world over the reporting period. Both in AEs and in EMEs actual inflation considerably surpassed central bank targets. Given the above, the IMF in WEO October 2022 revised inflation forecasts up for 2022. Global inflation is

predicted to stand at 8.8% in 2022 – 7.2% in AEs and 9.9% in EMEs (up compared with the July forecast).

Inflation reached highs of recent years in EMEs. Moreover, inflation has slowed down in a number of EMEs (Russia, Brazil, etc.) over recent months. Food products are still the highest contributors to inflation.

Chart 4. Inflation in some EMEs, %.

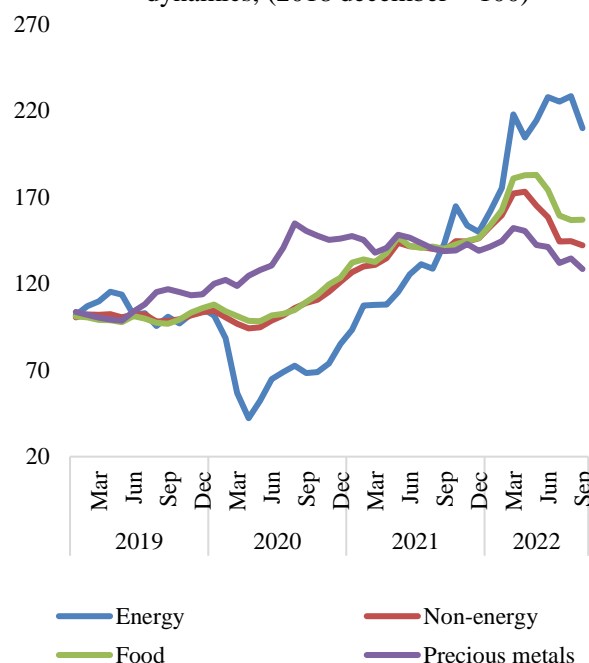


Source: State Statistic offices

Inflationary pressures weigh on global commodity prices as well. According to the World Bank's Commodity Markets Outlook, energy prices hiked by 40% and food prices by 7%. According to the FAO, food prices

Yoy increased by 5.5% despite the drop of recent 6 months of 2022.

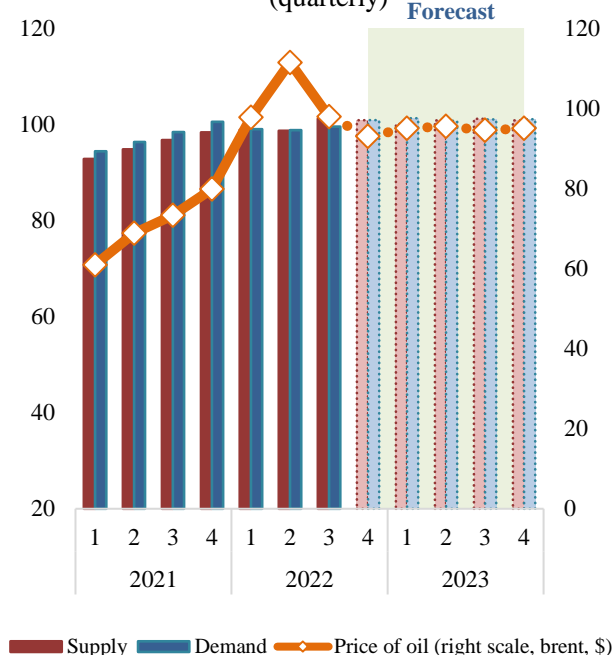
Chart 5. Global commodity index yearly dynamics, (2018 december = 100)



Source: World Bank

Over the reporting period, a higher price hike was on energy products. The average price for the Brent oil was about \$103 over 9 months of 2022 (up by 45% (\$70.9) compared with the average price for 2021). The IMF in its October release forecasts average \$98.2 per barrel in 2022 (\$103.9 in July release), and \$85.5 (\$91 in July release) in 2023.

Chart 6. Dynamics of demand and supply in the global oil market, mln. barrel (quarterly)



Source: US Energy Information Administration (EIA)

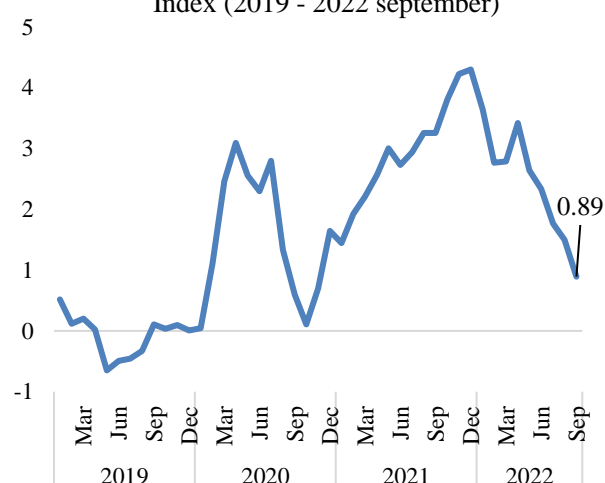
According to the US EIA, oil prices soared in the first half of the year under the effect of geopolitical risks, lower than the quota oil production in OPEC++ countries and higher activity due to gradual removal of pandemic-related restrictions. However, downward revision of global economic growth forecast from the second half of the year caused drops in oil prices too.

Gas prices highly fluctuated over 9 months of 2022. In August, the price exceeded \$3000 per 1000 cubic meters in Europe. However, due to higher underground gas reserves in Europe and

Asia gas prices fell from September onward.

Non-full recovery of supply chain disruptions since the pandemic and persistent geopolitical tension boosted global inflationary pressures through transportation-logistic expenses. While the Global Supply Chain Pressure Index, calculated by the Federal Reserve Bank of New York, has decreased continuously over recent 5 months, it remains high.

Chart 7. Global Supply Chain Pressure Index (2019 - 2022 september)



Source: New York FED

Persistent high inflation and rising inflation expectations caused monetary policy tightening by central banks. 70 central banks have raised, four central banks decreased and 11 central banks have unchanged policy rates since early year. Over the past period of the year, the

US FED has shifted the policy rate from 0-0.25% to three-3.25%, the Bank of England from 0.25% to 2.25%, and the ECB from 0-0.25% to 1.25-1.50%.

According to IMF's recent release, global risks mainly increased due to the tense geopolitical and geoeconomic situation in Europe, higher cost of living due to rising inflationary pressures and slower growth rate stemmed from downturn of the Chinese real estate market. In general, these risks are classified as follows:

- Global inflation rising from high energy prices;
- Slow economic growth amid rising inflation – the stagflation risk;
- Negative translation of tight monetary policy decisions of central banks to economic activity;
- Rising lending cost in EMEs;
- Sharp appreciation of the USD against other currencies;
- Socio-economic hardships amid rising international polarization, climate change, energy prices and food shortage

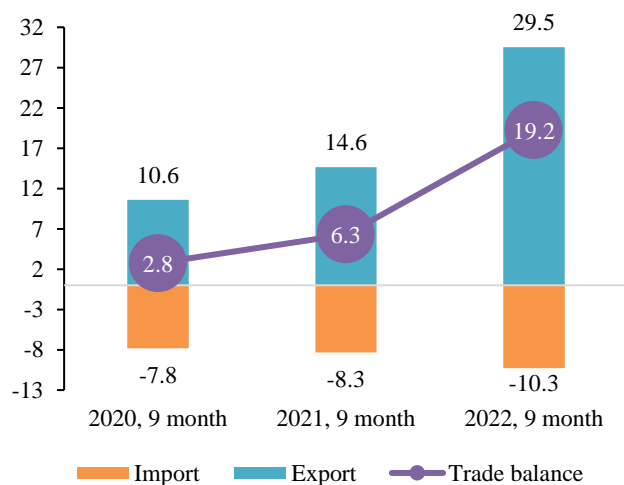
The IMF in its recent release recommends a number of policy proposals. Countries should focus on protection of socially vulnerable population when making policy decisions to fight rising inflation. Monetary tightening should be adjusted to macro prudential policy decisions in light of former's negative effects on capital markets. Structural reforms may contribute to anti-inflation by increasing productivity and easing supply constraints. At the same time, multifaceted cooperation is critical to accelerate transition to green energy and prevent fragmentation of the economy. Moreover, human capital, digitalization, green energy and diversification of the supply chain may make economies more resilient during the next crisis.

1.2. External sector developments of the Azerbaijani economy

Over 9 months of 2022 external sector indicators of Azerbaijan improved substantially year over year.

According to the SCC, foreign trade turnover amounted to \$39.8B – export \$29.5B (74.1%), import \$10.3B (25.9%). Foreign trade surplus made up \$19.2B, yoy up by 3.1 times.

Chart 8. Trade balance, \$ billion

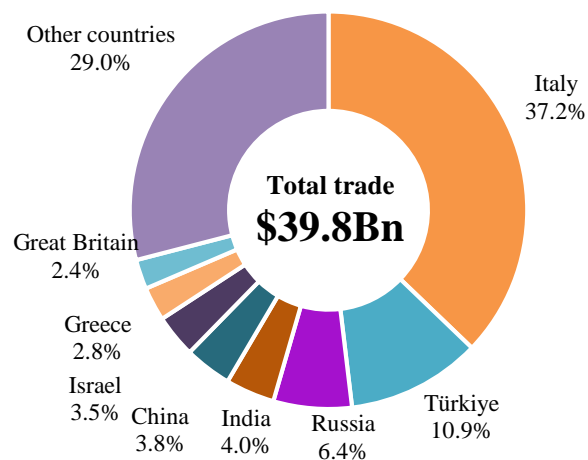


Source: SCC

Azerbaijan traded with 178 countries over the period.

Italy, Turkey, Russia, India, China, Israel, Greece, Great Britain and Germany accounted for over half of trade turnover. Italy's share was the highest.

Chart 9. The main countries in trade (%), 2022, 9 month



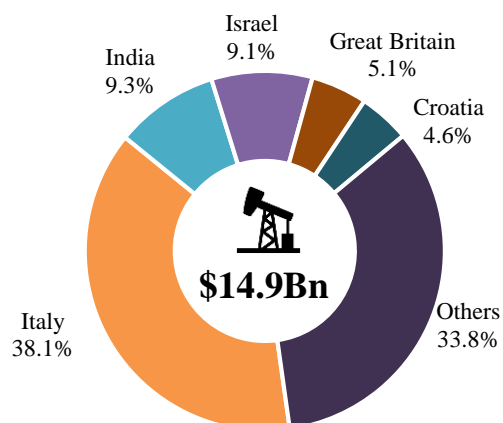
Source: SCC

The share of trade turnover with Italy yoy increased by 11.2 pp to 37.2%.

Export increased by two times, and non-oil export increased by 17%. The value of export increased by 60% on crude oil and by 4.1 times on natural gas. 38.1% of crude oil and oil products was exported to Italy, 9.3% to India, 9.1% to Israel, 5.1% to Great Britain and 4.6% to Croatia.

Over the period export increased on chemical products, tea, cement, aluminum and products, alcoholic and non-alcoholic beverages, ferrous metals and products, vegetables, plant and animal fats.

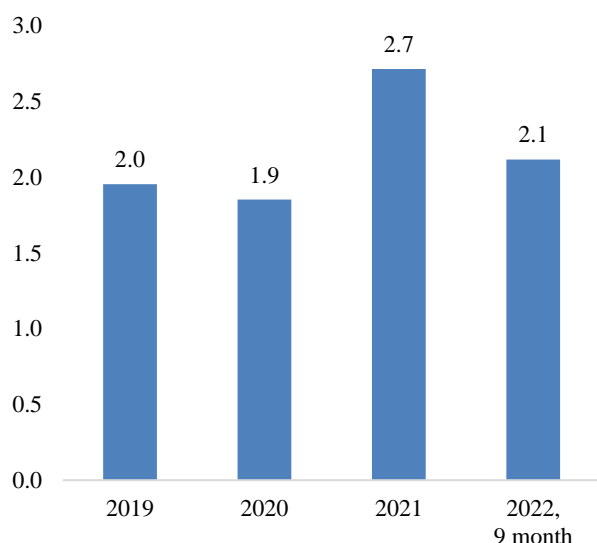
Chart 10. Countries to which crude oil and oil products are exported (%)



Source: SCC

The value of export increased by 2.4 times on chemical products, by 44% on cement and by 38% on aluminum.

Chart 11. Import dynamics in the non-oil sector, \$ billion

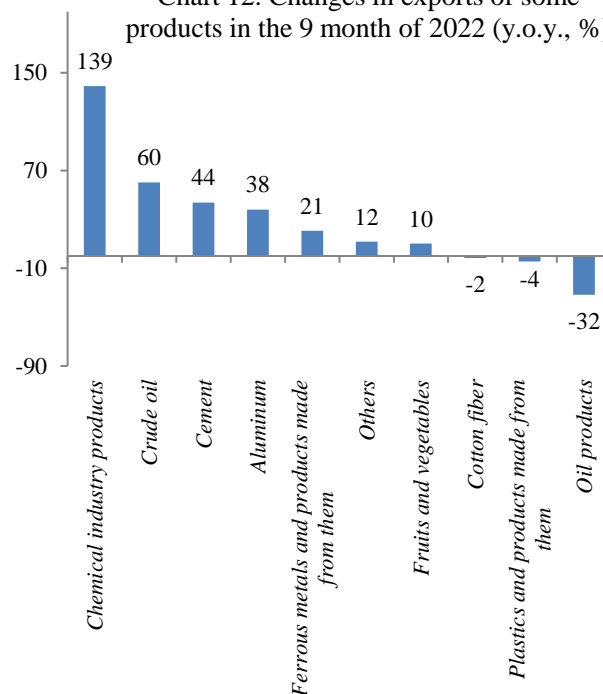


Source: SCC

In general, main export partners were Italy (49.4%), Turkey (9.2%), India

(4.8%), Israel (4.6%), Greece (3.6%) and the UK (2.6%).

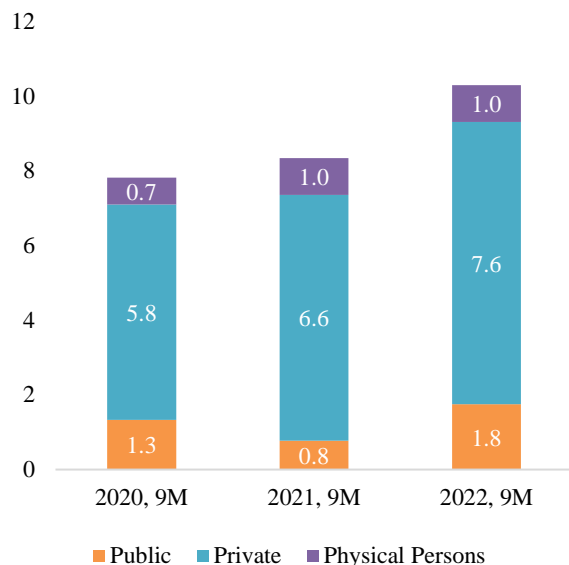
Chart 12. Changes in exports of some products in the 9 month of 2022 (y.o.y., %)



Source: SCC

Commodity import yoy increased by 23.4%; commodity import increased by 2.3 times to \$1.8B on the public sector, by 14.8% to \$7.6B on the private sector and decreased by 0.4% to \$1B on individuals.

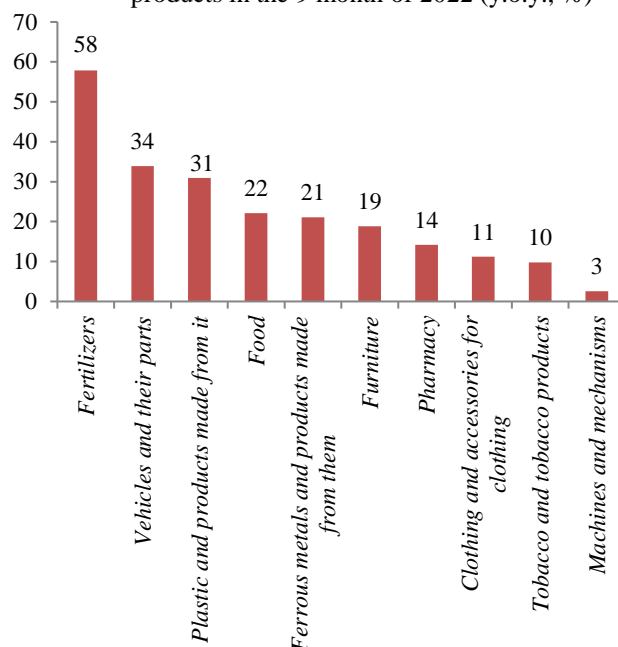
Chart 13. Dynamics of imports by sectors, billion \$



Source: SCC

Import increased by 58% on fertilizers, by 34% on vehicles and spare parts, by 31% on plastics and products, by 22.1% on food products, by 21.1% on ferrous metals and products, by 19% on wood and wood ware, by 17.6% on furniture and its parts, by 14.2% on pharmaceuticals, by 11.2% on clothing accessories, by 9.8% on tobacco and products, and by 2.5% on machinery and mechanisms.

Chart 14. Changes in imports of some products in the 9 month of 2022 (y.o.y., %)

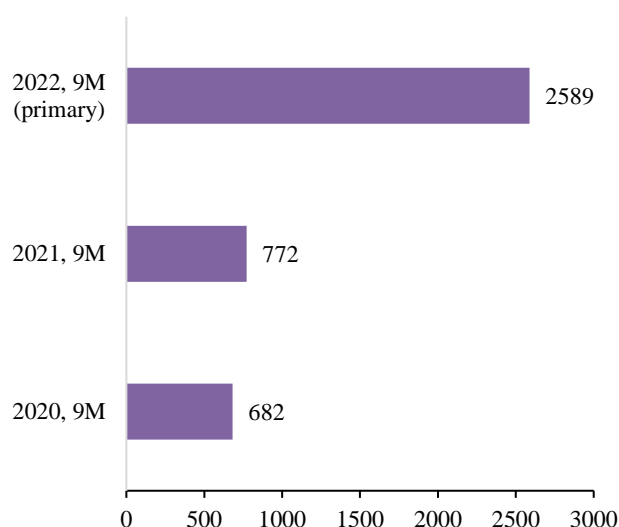


Source: SCC

Russia accounts for 18.6%, Turkey for 15.8%, China for 14.4%, Germany for 4.4%, the USA for 3.5%, Kazakhstan for 3.5%, Iran for 3.3%, Turkmenistan for 2.8%, Italy for 2.2% and Japan for 2.1% of imported products.

According to preliminary data, money remittances to the country yoy increased by about 3.4 times to \$2.6B.

Chart 15. Inflow of remittances, mln.\$

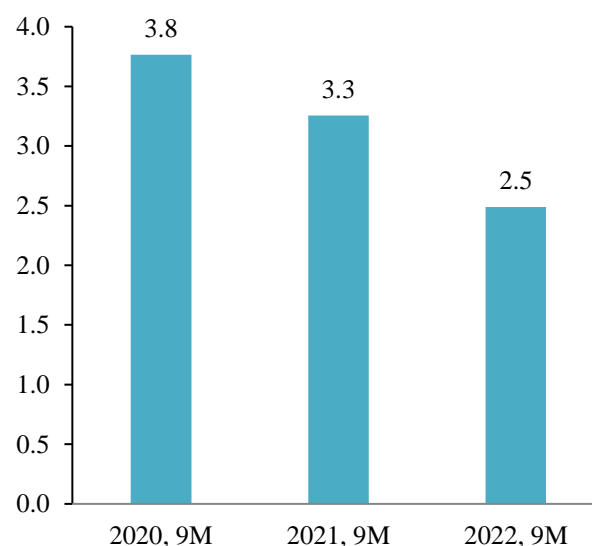


Source: CBA

Capital inflows from foreign enterprises and organizations continued over the reporting period. According to the SSC, FDIs amounted to AZN2.5B (24.5% of total investments).

Funds of investors from the UK, the USA, Switzerland, Turkey, Norway, Russia, Iran, India and France accounted for 93.8% of total FDIs.

Chart 16. Capital investments from foreign sources, billion manat



Source: CBA

Strategic FX reserves still exceed internationally accepted adequacy norms. As of 30 September 2022, strategic FX reserves sufficed for 35-month import of goods and services (taking import of goods and services for H1 2022). Strategic reserves exceeded broad money supply in manat (M2) by 3.4 times (M2 as of 01.10.2022).

II. MACROECONOMIC DEVELOPMENTS IN AZERBAIJAN

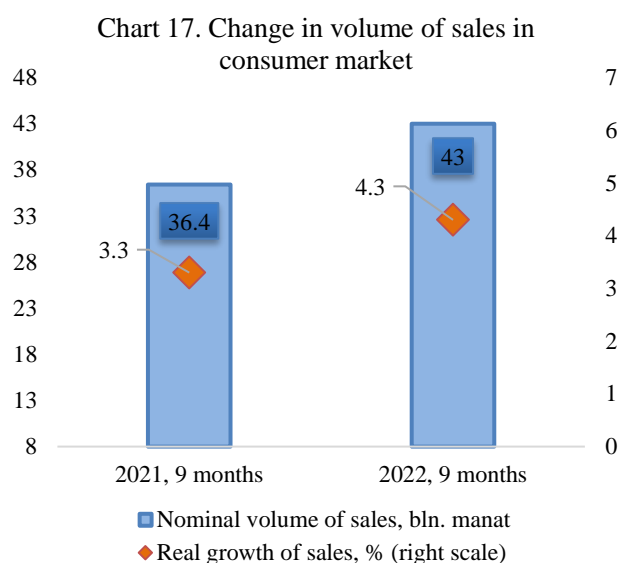
2.1. Aggregate demand

In January-September 2022 aggregate demand kept expanding.

Consumption expenditures kept increasing. According to the SSC, the value of commodities and services sold in the consumer market exceeded the year over year level both in nominal and real terms.

Goods and services sold in the market to meet consumer demand increased by 4.3% in real terms to AZN43B on a yoy basis. The private sector accounts for 96.4% of goods sold and services supplied by economic agents (46.7% individual entrepreneurs).

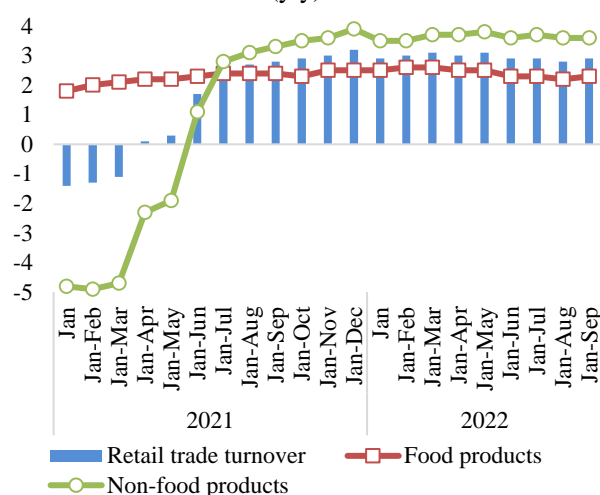
Every consumer spent on average AZN475.3 in the consumer market (yoy up by AZN71.6).



Source: SSC

Retail trade turnover has been growing steadily since early year. In January-March 2022, retail trade turnover yoy increased by 2.9% in real terms to AZN35.6B. Retail commodity turnover on food products, beverages and tobacco products increased by 2.3%, and non-food trade turnover increased by 3.6%.

Chart 18. Growth in retail trade turnover, (y/y) %



Source: SSC

Consumers spent over half of their funds, i.e. 56.3% of their funds on food, beverages and tobacco products in retail trade outlets. Persistent high inflation triggered further rise in the share of these expenses. Expenses increased year over year on food products, beverages and tobacco products, computers and telecommunication equipment, pharmaceuticals and medicals.

Table 1. The share of spending items in trade outlets, %

Spending item	Share, %	
	2021 9 months	2022 9 months
<i>Food, beverage and tobacco</i>	54.1	56.3
<i>Textile products, apparel and shoes</i>	15	13.5
<i>Electric appliances and furniture</i>	5.5	5.2

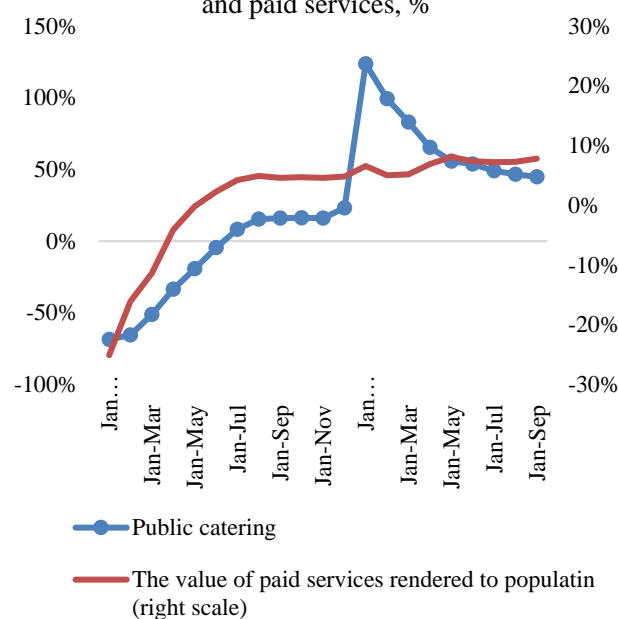
<i>Computers, telecommunication devices and others</i>	0.9	1
<i>Pharmaceuticals and medicals</i>	2.2	2.3
<i>Fuel</i>	6	5.7
<i>Other non-food staff</i>	16.3	16

Source: SSC

Every consumer purchased on average AZN392.7 worth of goods (Yoy up by AZN55.9 in nominal terms) in retail trade – AZN221.1 on food, beverages and tobacco products, and AZN171.6 on non-food staff.

Catering turnover yoy increased by 44.8% in real terms. Paid services to the population increased by 7.8% in real terms to AZN6.4B. Per capita paid services consumption yoy increased by AZN89.1 to AZN560.9 on average in nominal terms in January-September.

Chart 19. Dynamics of public catering and paid services, %



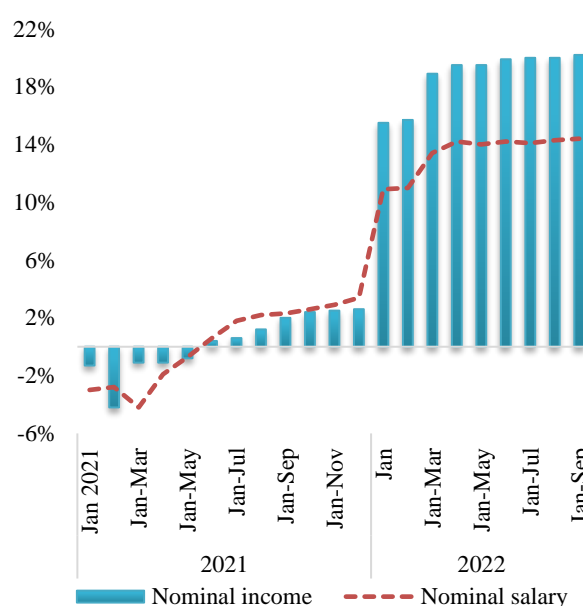
Source: SSC

Growth behavior of nominal income of the population continued in January-September 2022. Nominal growth rate of income of the population exceeded the average inflation growth rate, attributable to growth of income in real terms.

According to the SSC, money income of the population increased by 20.2% to AZN50.9B in nominal terms. Per capita money income made AZN5.1 thousand. Population's disposable income increased by 20.4% to AZN45.5B. Average monthly nominal

salary of hired labor yoy increased by 14.4% to AZN827.4. Over 9 months the salary fund increased by 16% (17% on the public and 15% on the private sectors)².

Chart 20. Growth dynamics of incomes and salaries, (y/y) %



Source: SSC

Lending activity also weighed on the consumer demand. Loans to households as of end-September increased by 23.9% compared to the early year to AZN10.7B.

Growth in the real sector and in consumer demand weighed on consumer expectations as well. In Q3 the CCI

² The Ministry of Labor and Social Protection of the Population

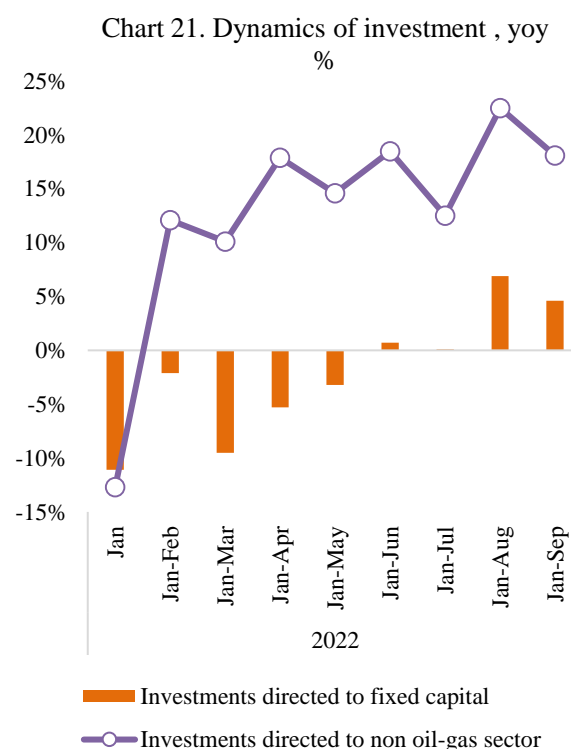
estimations based on findings of the survey ‘Households financial behavior and intentions’ bettered compared to the previous quarter. Note that, this indicator rests upon ‘Family’s financial condition expectation’, ‘Expectation on country’s economic standing’, ‘Savings probability’ and ‘Unemployment expectations’ surveys among various income households. Each of relevant indicators changed positively, weighing on slight improvement of the index last quarter compared with the previous one

Government spending was critical in supporting domestic demand. State budget expenditures amounted to AZN20.5B (yoy up by 15.6%).³

Social spending (compensation for employees, pension and social allowances, medicine and food) accounted for 41.2% of actual state budget expenditures (AZN8.4B), yoy up by AZN786.9M or 10.3%.

Investment expenditures. According to the SSC, over the period funds invested to the economy yoy

increased by 4.6% in real terms to AZN10.2B. Investment to the non-oil and gas sector yoy increased by 18.1%.



Source: SSC

AZN897.7M (8.8% of total investments) worth funds were channeled to the non-oil and gas industry. The public sector accounts for 46.7% and the private sector for 53.3% of total investments.

75.5% of investments stemmed from internal and 24.5% from foreign sources.

³ <http://www.maliyye.gov.az>

Table 2. Investment sources, %

Sources	2021 9 months	2022 9 months
<i>Funds of enterprises and organizations</i>	56.9	51.9
<i>Bank loans</i>	6.3	3
<i>Budget funds</i>	22.3	32.8
<i>Population's personal funds</i>	7.1	8
<i>Other funds</i>	7.4	4.3

Source: SSC

Funds of enterprises and organizations prevailed in total investments (51.9%).

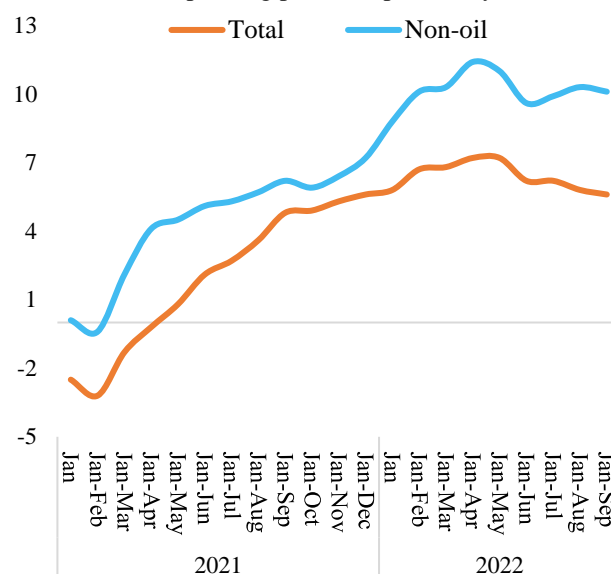
2.2. Aggregate supply and employment

Over the reporting period real sector continued to keep pace with domestic demand. High economic activity supported rising trend of employment.

Economic growth. According to the SSC, GDP yoy increased by 5.6% in real terms to nominal AZN98.1B. Per capita GDP amounted to AZN9748.9.

Oil and gas value added decreased by 2.5% to nominal AZN47.8B (48.7% of GDP). 24.4 million/ton crude oil (yoy down by 5.4%) and 25.7 billion cubic meters natural gas (yoy up by 9.8%) was extracted over the period. Total cost of production in oil products yoy decreased by 9.1% in real terms.

Chart 22. Economic growth, in comparison to corresponding period of previous year, %



decreased by 24.1%, production of beverages by 5.2%, production of knitwear by 31.1%. Reconstruction in liberated areas had an upward effect on rise in construction materials production.

Yoy growth in agriculture was 3% – 2.9% animal and 3% plant products.

Services posted growth. Freight and passenger transport yoy increased by 12.3% and 38.9% respectively, information and communication increased by 15.5%. Tourism grew by 74% due to removal of pandemic-related restrictions.

Table 3. GDP structure, weight, %

Sectors	2021 9 months	2022 9 months
Industry	40.1	52.2
Construction	5.2	4
Agriculture, forestry and fishery	6.9	5.2
Trade, repair of vehicles	10.3	7.8
Transport and warehousing	7.1	6
Tourism and catering	1.1	1.5
Information communication	1.8	1.3
Other	18.4	14.2
Net taxes on products and import	9.1	7.8

Source: SSC

CBA's real sector survey findings confirm that the economic activity

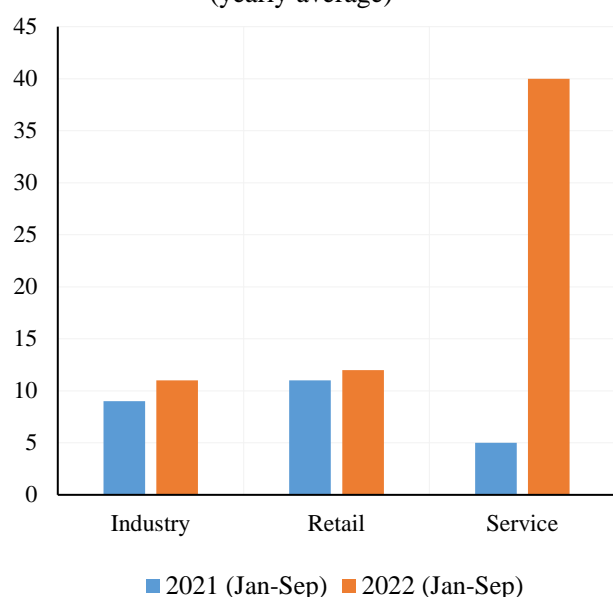
elevated. The BCI was mainly positive across sectors.

The BCI in the industry was positively zoned, driven by the chemical industry, knitwear, food products and beverages sub-sectors. The BCI was negatively zoned in machinery, metallurgy, construction and plastic products sub-sectors.

The trade BCI was positively zoned in Q3 in particular in production of electric appliances and household goods. The BCI was negatively zoned in the automobile sub-sector.

The services BCI yoy increased dramatically. Except for healthcare, the BCI was higher year over year. Except for the postal service, the BCI was positively zoned in other sub-sectors.

Chart 23. Business confidence index, (yearly average)



Source: RSM findings based CBA estimations⁴

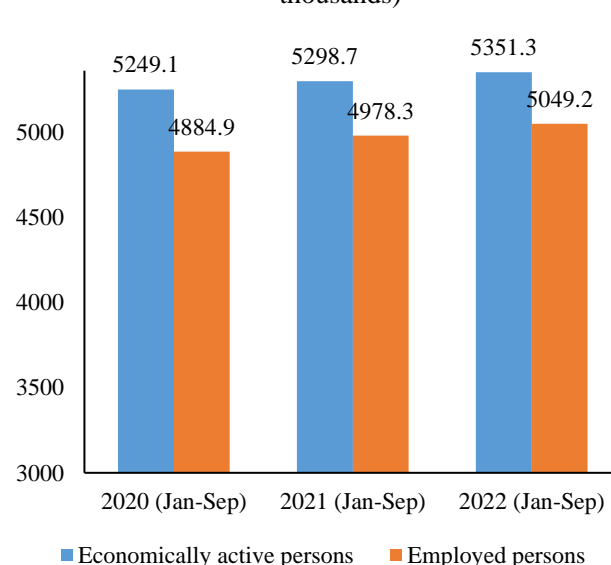
Employment. As of 1 October 2022 total labor force was 5351.3 thousand persons, yoy up by 52.6 thousand persons. Hired labor numbered 5049.2 thousand persons, yoy up by 70.9 thousand persons. The number of employed population increased due to tourism, agriculture, construction and trade.

Hired labor yoy increased by 1.8% to 1714.5 thousand persons as of 1 September 2022 – 894.5 thousand persons were engaged in the public and

820 thousand persons in the non-public sectors.

23.7% of the hired labor in enterprises and organizations was involved in production: 7.5% in construction, 7.4% in processing, 3.5% in

Chart 24. Dynamics of economically active and employed persons (in thousands)



Source: SSC

agriculture, forestry and fishery, 1.9% in mining, 1.9% in water supply and waste management, 1.5% in electricity, gas and steam production, distribution and supply.

⁴ Industrial BCI = (output – final goods inventory + production expectations)/3

Services BCI = (business condition + actual demand + demand expectation)/3

Trade BCI = (actual sale – changes in goods inventory + sale expectations)/3

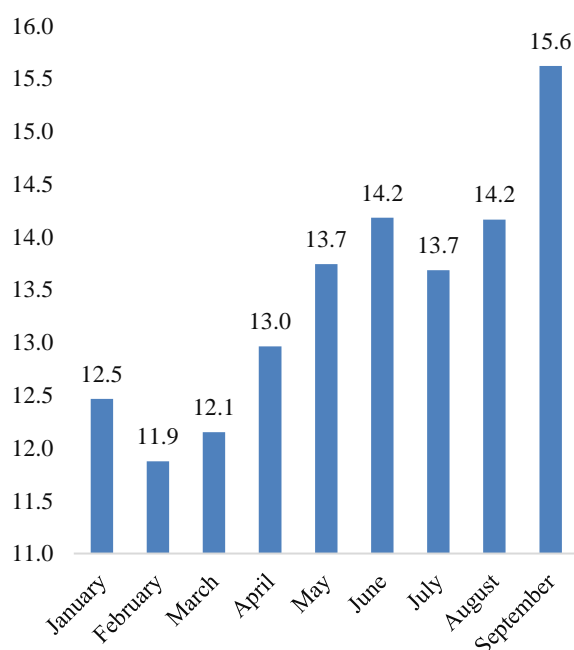
2.3. Inflation

Persistently rising inflationary pressures in main trade partners over the reporting period weighed on domestic inflation developments and expectations.

Consumer Price Index (CPI).

According to the SSC, in September 2022 annual inflation stood at 15.6% (September 2022 vs September 2021).

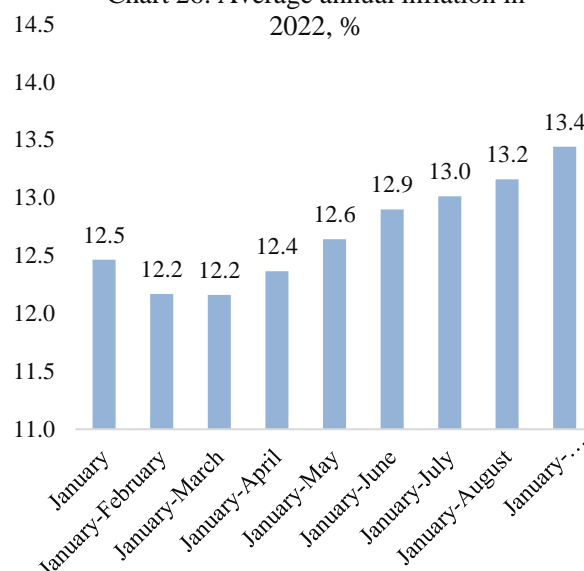
Chart 25. 12-month inflation in 2022, %



Source: SSC

In January-September average annual inflation was 13.4%.

Chart 26. Average annual inflation in 2022, %



Source: SSC

Over the reporting period total inflation was mainly driven by price hike for food products. In September annual food inflation was 21.8%, average annual food inflation was 19.3%.

Table 4. Annual change in the food price index across product groups, yoy

	July	August	September
<i>Bread, bakery products and cereals</i>	19.8%	22.8%	26.2%
<i>Meat and meat products</i>	10.1%	11.5%	15.1%
<i>Fish and fish products</i>	15.3%	14.7%	14.7%
<i>Milk and dairy products, eggs</i>	12.0%	14.0%	15.9%
<i>Butter and vegetable oils</i>	16.9%	17.9%	18.8%
<i>Fruits</i>	23.9%	21.9%	19.6%
<i>Vegetables</i>	61.7%	58.5%	53.9%
<i>Sugar, jam, honey, chocolate and candies</i>	13.0%	13.8%	15.2%
<i>Food products not included to other categories</i>	14.0%	15.5%	16.8%
<i>Mineral waters, soft drinks and juices</i>	11.1%	11.3%	11.4%
<i>Beer</i>	9.6%	9.7%	9.7%
<i>Tobacco products</i>	6.6%	6.6%	6.7%

Source: SSC

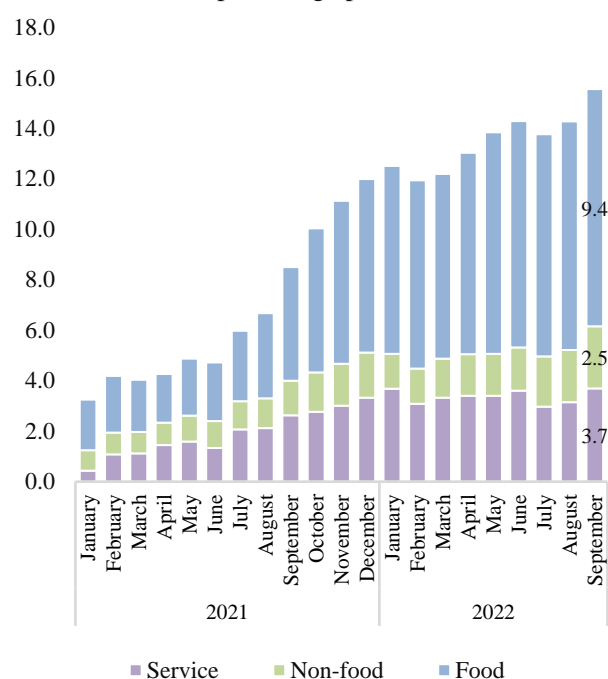
Non-food prices increased by 10.5% on annual and by 7.6% on average annual. The highest increase was in stationery and photo accessories (45.1%), fabrics (18.2%) and construction materials (12%).

Prices for services hiked yoy by 11.4%. Average annual service inflation was 10.2%. Prices for postal services rose by 58%, natural gas supply by 42%, passenger transportation by air by 43.7%, catering services by 21.7%, rent fees by 13.3% and healthcare services by 8.2%.

In general, in September food prices made 9.4 pp, non-food prices 2.5 pp and changes in prices and tariffs of services 3.7 pp to annual inflation.

The share of food products in overall annual inflation increased from 53% in September 2021 to 60% in September 2022.

Chart 27. Contributions to CPI, in percentage points



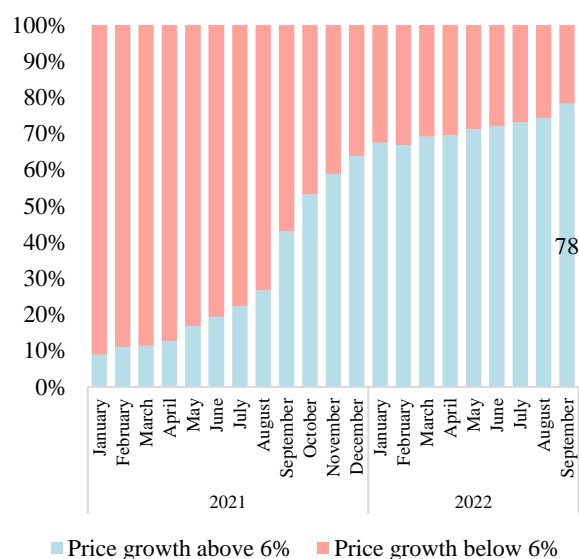
Source: SSC, CBA

The diffusion index – a measure of the change in dynamics pertaining to the number of goods and services with rising and falling prices in the consumer basket⁵ have increased recent month.

Prices for 78% of goods and services included to the consumer basket increased over 6% on annual.

⁵ The index is calculated as (increasing-decreasing)/(decreasing+unchanged).

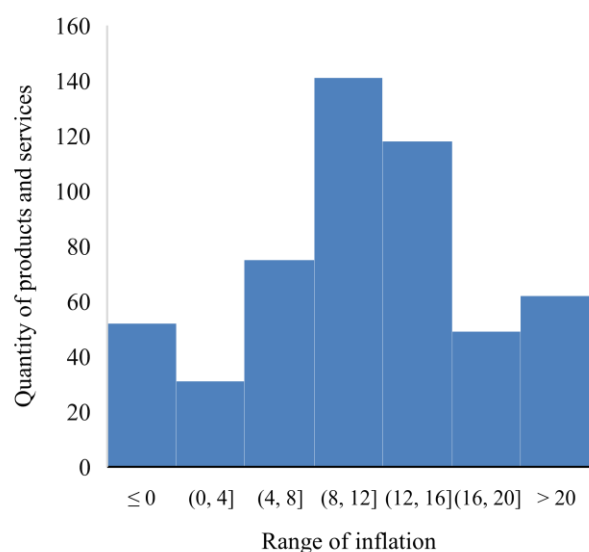
Chart 28. Share of product and services in consumer basket by annual price growth rate, %



Source: SSC data based estimations of the CBA

However, prices for 10.9% of goods and services in the basket either decreased or unchanged.

Chart 29. Distribution of annual inflation in terms of the number of goods and services in the consumer basket



Source: SSC, CBA

Average annual core inflation calculated by excluding swings in regulated prices and prices for seasonal agricultural products was 10.7%. Annual core inflation was 14.2% in September.

Chart 30. Change of core annual average inflation, in %



Source: SSC

Dynamics of actual inflation weigh on inflation expectations as well. According to September surveys on Q3 2022, 80% of households expect inflation upcoming 12 months. 20% expect the inflation rate to be higher. However, the share of households that expect higher inflation dropped by two pp compared with the previous quarter.

Analysis of inflationary factors suggests that over half of direct and

indirect price hike relates to factors of foreign origin. High import prices (22.7% in August) are attributable to surge in global commodity prices amid global geopolitical tensions, rising transportation-logistic expenses and high inflation in Azerbaijani trade partners. Average weighted inflation (import weighted) across main partners is estimated to shift from 11.9% in December 2021 to 25.3% in September 2022.

The monetary condition evolved in response to the balance of payments surplus, the FX market stability, the appreciated NEER, monetary policy decisions, the new operational framework introduced in September, and anti-inflationary measures by the government had a downward effect on inflation.

According to updated forecasts, inflation is forecast to drop to a one-digit rate gradually in the medium run because of slowdown in foreign factors of inflation and concerted anti-inflationary measures with the government.

Producer Price Index. According to the SSC, in September the APPI yoy

increased by 17.1%. Prices yoy increased by 16.5% on animal products and by 17.5% on plant growing products. In addition, the PPI on forestry decreased by 0.3% and increased by 2.7% on fish and other fishery products.

Table 5. Annual change in the PPI across main sectors

	July	August	September
<i>Oil and gas sector</i>	2.4 times	2.3 times	2 times
<i>Non-oil and gas sector</i>	18.4%	16.5%	16.1%
<i>Plant growing products</i>	22.8%	21.9%	17.5%
<i>Animal products</i>	13.5%	16.8%	16.5%
<i>Forestry</i>	5.0%	4.3%	-0.3%
<i>Fish and other fishery products</i>	2.6%	2.6%	2.7%
<i>Cargo transportation</i>	0.4%	0.2%	0.9%
<i>Passenger transport</i>	12.8%	19.9%	26.0%
<i>Warehouse and ancillary transport services</i>	6.1%	1.9%	1.9%
<i>Postal and courier services</i>	50.5%	50.4%	50.4%
<i>Communication services</i>	0.0%	0.0%	0.0%
<i>ICT services</i>	9.0%	10.0%	10.0%
<i>Advertising services</i>	2.9%	2.9%	2.7%

Source: SSC

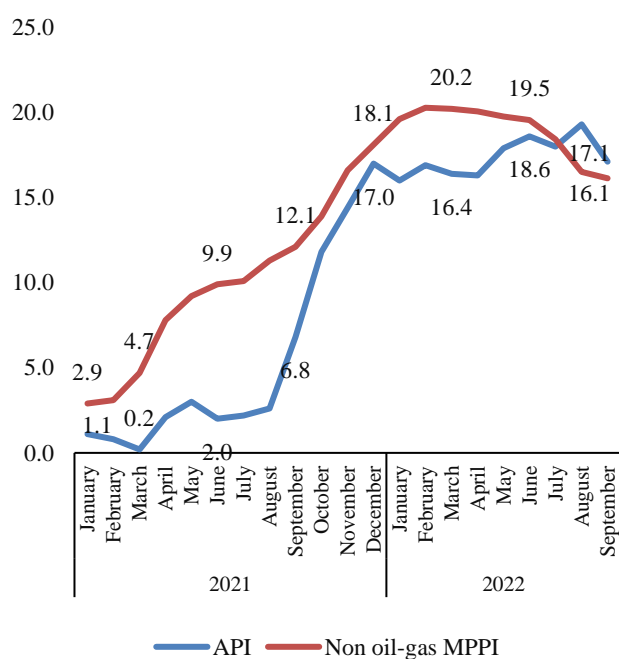
In September, the IPPI increased by 81% annually, mostly due to the mining industry (up by two times). The IPPI grew by 2 times on oil-gas products, and by 16.1% on nonoil products. Price hike in the mining industry mainly relates to the surge in the world oil prices.

The PPI in processing yoy increased by 21.5%. The highest price hike was in production of oil products

(33%), in knitwear (28%), production of beverages (24%) and wood processing and production of wood ware (23%). On the backdrop of persistently high APPI, price index on food production increased by 21%, which contributed to rise in food prices compared to early year.

However, agricultural prices and non-oil industry indices decreased year over year in the last quarter.

Chart 31. Annual change of PPI at the current year, %



Source: SSC

In September 2022 prices for transport and warehousing yoy increased by 2.8%. Cost of freight transportation increased by 0.9% and passenger transportation by 26%. Increase in prices

for passenger transportation related to price hike in air transportation in CIS countries (78.7%). The warehousing price index increased by 2.8%. Postal and courier service prices yoy increased by 50.4%, due to 58.6% price hike for postal services.

In September prices for ICT services yoy increased by 10%, advertising services by 2.7%.

Real estate prices. According to the SSC, in January-September 2022 average annual price index in the housing market yoy increased by 5.1%. The price index increased by 5.7% in the primary housing market and by 5.1% in the secondary housing market.

III. THE MONETARY AND EXCHANGE RATE POLICY

3.1. The FX market and the exchange rate of the manat

Over the past period of 2022 the exchange rate of the manat responded to supply and demand in the FX market. Huge balance of payments surplus had a positive effect on FX market equilibrium, supporting the main price stability anchor – exchange rate stability.

Over the reporting period, transactions in the FX market increased across all segments of the market.

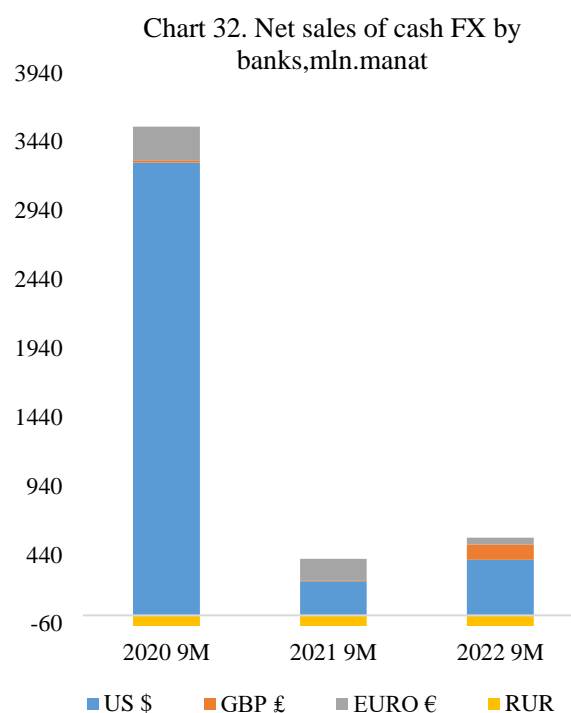
Cashless transactions in the FX market yoy increased by 16.3% to \$22.3B equivalent⁶: 84.5% in USD and 15.5% in other currencies. The Interbank FX market accounted for 29.6%, the Intrabank FX market for 70.4% of operations.

Interbank FX market operations yoy increased by 19.9% (\$6.6B equivalent). 99.1% of transactions were conducted in the USD. Currency operations in the

Interbank FX market were mainly conducted over the Bloomberg platform.

Intrabank FX market operations made \$15.7B (yoy up by 14.8%) (78.3% in USD). Legal entities accounted for 93% of Intrabank FX market operations.

Cash currency traded by banks yoy increased by 46.9% to \$3.9B (87.2% in USD). Net foreign currency sale yoy increased by 48.1% due to high sales in Q1. However, the situation changed in April and banks' currency buy operations exceeded sell-operations.



Source: CBA

Note: Positive zone stands for sell, negative zone for buy operations.

⁶ Including transactions with the the USD, the euro, the pound, the Russian ruble

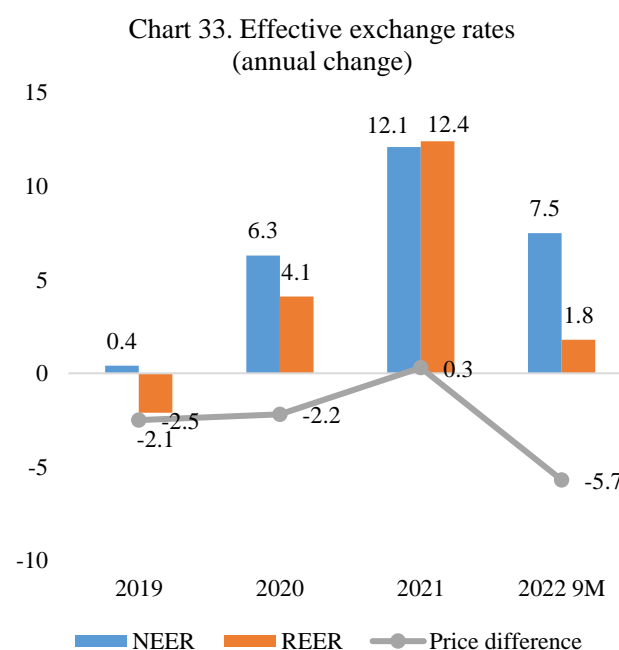
The CBA continued currency auctions to arrange the sale of foreign currency provided by the State Oil Fund of Azerbaijan Republic (SOFAZ). The Bank held total 74 currency auctions over the reporting period. \$3857.7M worth funds of the SOFAZ were sold at auctions. The CBA's intervention in the FX market was purchase-oriented and amounted to \$835.2M.

The official exchange rate of the manat based upon the average exchange rate on interbank transactions over the period (both auction and over-the-counter on the Bloomberg platform). The average official AZN/USD exchange rate was AZN1.7 over 9 months. Buy-sell exchange rates set by banks were close to the official one. Commercial banks' average buy/sell rate was 1.6972/1.7023.

The exchange rate of the manat mainly strengthened against currencies of trade partners. The manat appreciated against the euro, the Turkish lira, the English pound, the Kazakh tenge, the Japanese yen, the Swiss franc and the Ukrainian hryvnia, and depreciated

against the Russian ruble and the Georgian lari.

The dynamics of bilateral exchange rates influenced that of effective exchange rates. In general, total trade weighted non-oil NEER of the manat appreciated 7.5% and the REER by 1.8%. As inflation in Azerbaijan is lower than the average inflation in partner countries, it had a reducing effect on the REER.



Source: CBA

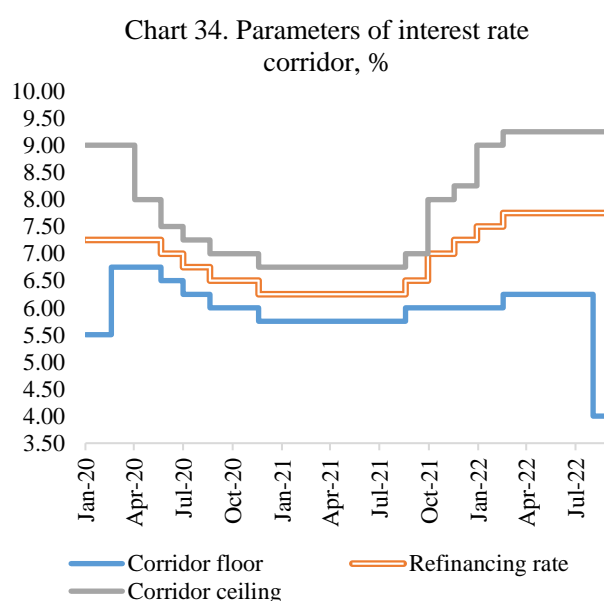
A stronger NEER of the manat was one of the factors to contain the inflation import.

3.2. Monetary policy tools

Over the past period of 2022 the monetary policy of the CBA was oriented towards containing inflationary pressures through the adequate monetary condition. The Bank took a number of decisions to improve the monetary policy operational framework and started to apply monetary policy tools in a new configuration.

The CBA took decisions on interest rate corridor parameters on liquidity operations, considering developments in the global and national economies, the level of realization of foreign and domestic risks and updated macroeconomic forecasts. The Management Board of the CBA discussed interest rate corridor parameters 7 times over the reporting period in January-September 2022. The refinancing rate was decided to be shifted from 7.25% to 7.75%, the ceiling of the corridor from 8.25% to 9.25%. The floor of the interest rate corridor was shifted to 4% from 6.25% with the application of monetary policy tools in a new configuration from 1 September 2022.

Lowering of the floor of the interest rate corridor was expanded by sterilization of excess liquidity in the banking sector under favorable conditions and creation of options for formation of balanced interest rates in the interbank money market. At the same time, the aim of this decision is to avoid dramatic fluctuation in yield on government securities. The CBA publicly announced interest rate related decisions with relevant analytical comments.



Source: CBA

In September the CBA commissioned standing facilities as part of application of monetary policy tools in a new configuration and increased the range of open market operations. One-

day liquidity absorbing deposit and one-day liquidity providing reverse repo operations will be used as standing facilities. The Bank found it expedient to conduct 7-day repo auctions, if necessary, along with 1, 3, 6 and 9-month notes for liquidity absorption to improve open market operations. The CBA is planning to conduct 7-day reverse repo auctions, if necessary, as a liquidity providing open market operations.⁷

The aim of the new operational framework is to boost pass through of monetary policy decisions to inflation through the interest rate channel. The new operational framework serves to the formation of an alternate anchor of the monetary policy and activation of interbank market operations.

Over the reporting period demand for CBA's sterilization tools, in particular for standing deposit facility introduced in September was high on the backdrop of excess liquidity in the banking system. In September average daily volume of one-day deposit operations was AZN424.7M.

In January-September 2022 the CBA held 42 note auctions for effective management of liquidity. In general, total outstanding amount of sterilization via notes was AZN510M as of end-September.

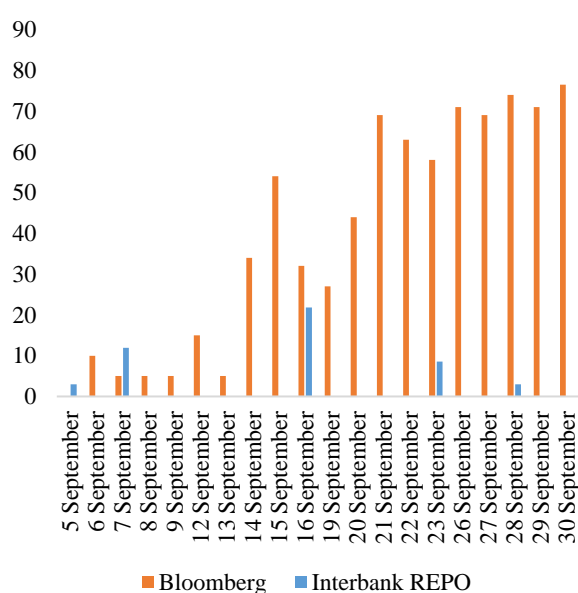
Return at recent auctions was 2.92% on 84-day, 3.5% on 168-day, 3.78% on 252-day notes. Return on 28-day notes was close to the floor of the interest rate corridor. Yield on CBA notes is critical in terms of formation of a yield curve affecting interest rates of other financial tools.

To allow an effective application of the new operational framework the Bank took efforts to activate the interbank money market. An alternative operational platform was offered to activate the interbank money market. A new collective agreement on concluding manat denominated interbank unsecured loan transactions through the Bloomberg trade system took effect for the purpose.

⁷ (for more details please go to www.cbar.az 'Monetary Policy: Operational Framework Explanatory Document')

In September AZN787.5M worth 69 transactions were concluded in the Bloomberg platform. One-day transactions accounted for 73% of these transactions.

Chart 35. The volume of interbank operations in September, mln. AZN



Source: CBA

Notes issued by the CBA are used as collateral in the REPO market and have a positive effect on the activation of the money market. Out of AZN1.7B worth 573 transactions concluded in the interbank REPO market AZN1.2B worth 240 transactions were CBA notes based.

Applied on an average basis, the reserve requirement allowed banks to flexibly manage liquidity. On September 15 banks began to maintain reserve

requirements under new norms (4% on deposits in the national currency and precious metals and 5% on foreign currency denominated deposits). Monitoring findings display that banks' cumulative balances on correspondent accounts with the CBA exceeded total funds to be maintained as required reserves.

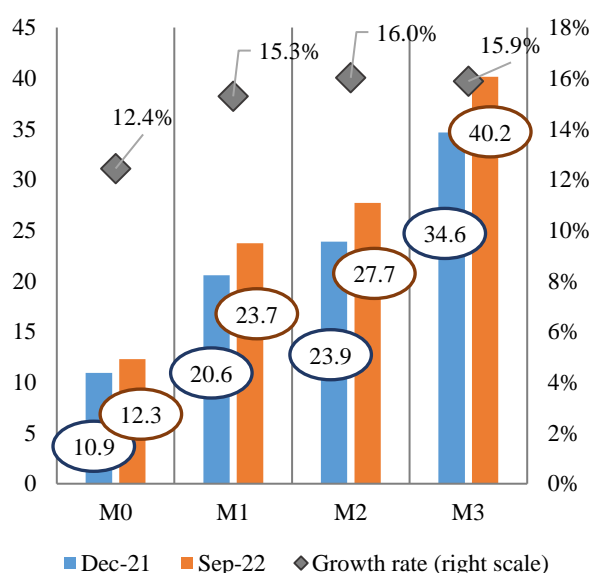
3.3. Money supply

Over 9 months of 2022 money supply in manat was managed in response to demand of the economy.

Money base in manat decreased by 10% to AZN16.1B as of end-period. Excluding term deposit operations with certain systemically important banks at the end of last year, money base increased by 3.7%.

Change in the balance of single treasury account, CBA's standing deposit facilities and open market operations translated to money base.

Chart 36. Money aggregates (bln. azn)



Source: CBA

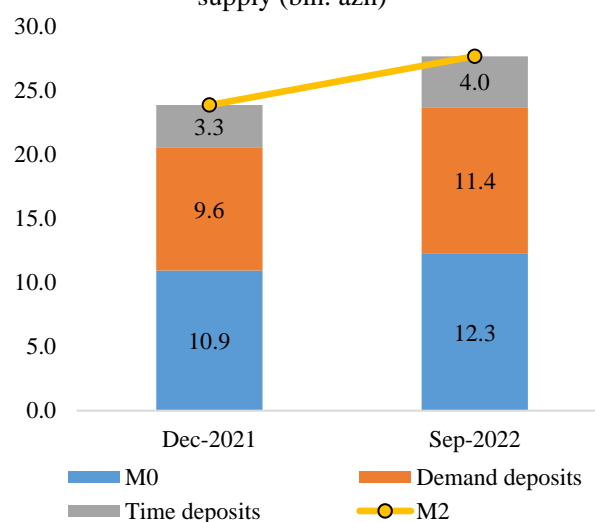
⁸ Cash money outside the banking system, cash in bank ATMs and cash offices

Cash in circulation, a structural element of base money in manat ⁸ increased by 11%, and stock of correspondent accounts in manat decreased by 56% (excluding term deposit operations in certain systemically important banks, down by 24%).

Money multiplier in manat (broad money supply in manat to money base in manat) has increased by 28.9% since early year to 1.72.

Broad money supply in manat (M2) increased by 16% to AZN27.7B.

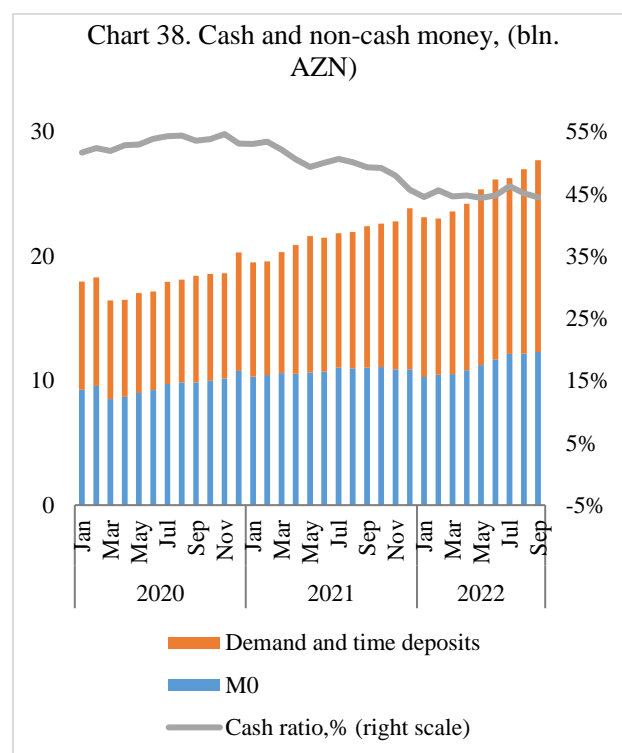
Chart 37. Dynamics of broad money supply (bln. azn)



Source: CBA

Structural elements of M2 money aggregate performed differently.

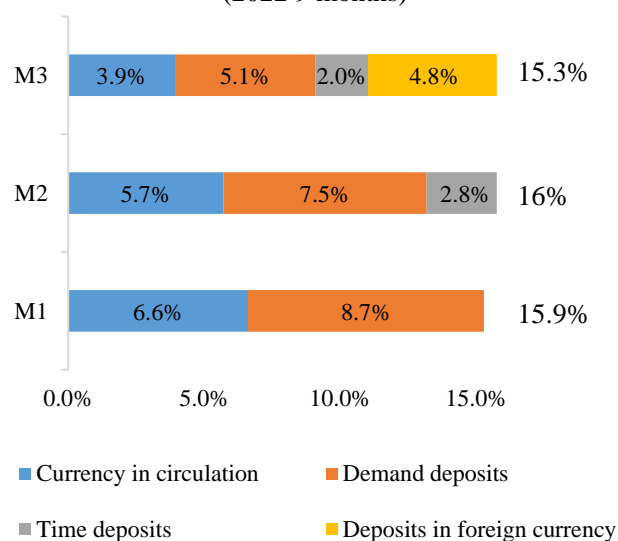
M0 cash money supply increased by 12.4%, demand savings and deposits increased by 18.5% (41.2% of M2), and term savings and deposits increased by 20.6% (14.4% of M2). Hence, encashment (M0/M2) has decreased by 1.4% since early year to 44.4% as of the end-period, because savings and deposits outstripped cash.



Source: CBA

In H1 2022 demand savings and deposits were the key contributor to M2 money supply (47%), due to higher digitalization in the country.

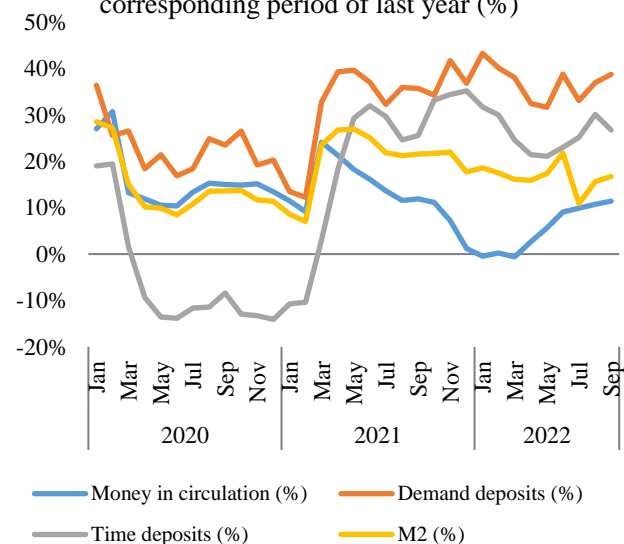
Chart 39. Contribution to the change in monetary aggregates components (%) (2022 9 months)



Source: CBA

In general, in the long-run, demand savings and deposits grew faster year over year.

Chart 40. Dynamics of M2 and its components compared to the corresponding period of last year (%)

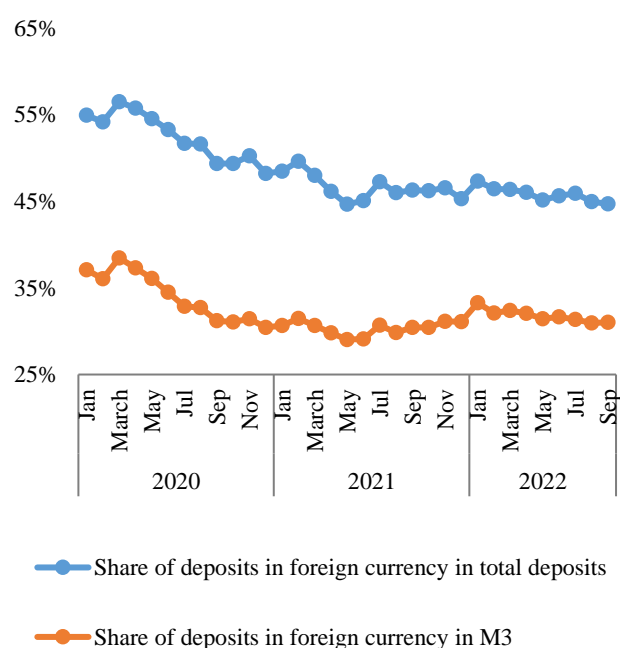


Source: CBA

Broad money supply (M3) increased by 15.9% to AZN40.1B as of end-period. Both NFAs (up by 10.4%) and NDAs (up by 23.5%) had an upward effect on M3 money supply.

Dollarization kept decreasing. Over 9 months of 2022 foreign currency denominated savings and deposits increased by 15.6%, and slightly decreased to 45% in total savings and deposits. The share of savings and deposits in foreign currency in M3 money aggregate followed the same trend and slightly decreased since early year to 31% as of end-period.

Chart 41. Dollarization (%)



Source: CBA

The share of foreign currency in deposits of legal entities made 53.2%. Dollarization of savings of individuals was 39.2%. Dollarization of savings of households decreased by 4.7 pp to 35.9% as of end-period, less savings of non-resident individuals.

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