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DID A TENGE DEPOSIT OR THREE KAZAKHSTANI SHARES PROTECT SAVINGS FROM INFLATION? REAL RETURNS OF BANK DEPOSITS, KAZATOMPROM, KEGOC AND KASPI.KZ, 2020-2025

Abstract: Between the end of 2019 and the end of 2025, consumer prices in Kazakhstan rose by 88%. This study asks what happened over that period to the savings of a person who kept money in a tenge bank deposit, and compares the deposit with three well-known Kazakhstani shares: Kazatomprom, KEGOC and Kaspi.kz. The deposit is modelled with the average rate that banks paid on new tenge deposits of individuals for 3 to 12 months, as published by the National Bank of Kazakhstan, and the shares with their prices in tenge plus all dividends paid, taken from the companies' own documents. Before seeing the results, I wrote down that I thought the deposit had not fully covered inflation, that Kazatomprom had earned the most and that shares were riskier than the deposit. The deposit grew by 104%, a gain of 9% after inflation, or 2% if the money was placed for 12 months at a time, and in 2022 it lost 7-10% after inflation. Kazatomprom, with dividends, ended with about four times the purchasing power invested at the end of 2019, but its value fell by 36% between October 2021 and May 2022. KEGOC paid dividends of about 9% of its price per year, yet its price was lower at the end of 2025 than at the end of 2019, and after inflation it lost 15%, while the deposit gained. Kaspi.kz could be followed only from its Nasdaq listing in January 2024, and up to the end of 2025 it lost 14% after inflation. With only three companies, the results show how widely single shares can differ from each other and from a deposit, not a general rule for savers.

Keywords: inflation; bank deposits; real returns; dividends; Kazakhstan; Kazatomprom; KEGOC; Kaspi.kz

1. Introduction

Where should savings in tenge be kept so that inflation does not reduce what they can buy? My first study used the World Bank's Global Findex data to compare how different groups in Kazakhstan, including young people, could cope with an unexpected expense [1]. This second study asks that question, which many families face directly. One option is a bank deposit. Another is to buy shares of large Kazakhstani companies. When my mentor offered two topics, one about deposits and inflation and one about shares against deposits, I suggested combining them into one study, because the two topics were connected.

The question matters because inflation in Kazakhstan was high and uneven in recent years. A deposit protects savings only if its interest rate is higher than the rise in prices. Shares can grow faster than prices, but their value can also fall sharply. Research on emerging markets shows that shares do not protect against inflation everywhere: a study that tested the long-run relationship between stock prices and goods prices in emerging market countries found that common stocks were a good long-run hedge against inflation in more than one-third of the cases examined [2]. A study of the Kazakhstan market used quarterly data for 2000-2019 to relate

stock index returns to the interest rate, inflation, the exchange rate and other macroeconomic variables [3]. This paper looks instead at what an ordinary saver would have earned on a deposit and on three individual shares.

The study asks three questions. Did a tenge deposit keep up with inflation between 2020 and 2025? Which of three well-known shares, Kazatomprom, KEGOC and Kaspi.kz, gave the best result after inflation when dividends are included? And how much risk did a saver take for that result?

2. Data and methods

2.1. Data

Inflation is measured with the monthly consumer price index for Kazakhstan published by the International Monetary Fund [4]. The deposit is modelled with the weighted average interest rate that banks paid on tenge term deposits of individuals with terms from 3 months to 1 year, attracted during each month, as published by the National Bank of Kazakhstan [5].

The three companies were suggested by my mentor on 30 September 2026 as examples of well-known Kazakhstani shares; they were not chosen at random. Kazatomprom is a uranium producer, and its global depositary receipts (one receipt equals one share) trade on the London Stock Exchange in US dollars. Its month-end prices and the US dollar to tenge exchange rate were taken from Yahoo Finance [6], and its dividends per share in tenge, with their payment dates, from the company's dividends page [7]. KEGOC, the national electricity grid company, trades on the Kazakhstan Stock Exchange (KASE). I checked what the KASE and Astana International Exchange websites show: the chart on the KEGOC page of the Astana International Exchange offered periods of up to one year, and the KASE archive page offers historical trade data as a separate service, with a sample file that shows only the column format; this service was not used. Instead, the year-end share prices and the dividends per share of KEGOC were taken from the company's annual reports for 2019-2025, which give KASE as the source of their price data [8]. Kaspi.kz, a payments, marketplace and fintech company, was listed on the London Stock Exchange from 2020 [9]; in January 2024 its depositary receipts were renamed American depositary shares and listed on Nasdaq, where they have traded since [10, 11]. Its prices on the London Stock Exchange for 2020-2023 could not be obtained, because Yahoo Finance no longer shows the London line after the move to Nasdaq [6], so Kaspi.kz is followed only from its Nasdaq listing. Its dividends paid before 2024, such as the 750 tenge per receipt proposed for the first quarter of 2023 [9], therefore fall outside the period studied. Its dividends for 2024-2025 were taken from its financial statements for 2025, which list four dividends of 850 tenge per share in 2024 and state that no dividends were declared in 2025 [11].

2.2. Measures

All values are in tenge. A share priced in US dollars was converted at the Yahoo Finance exchange rate on the same day [6]. In the main deposit model, interest is added to the balance every month at one twelfth of the average rate on new deposits of that month, so the money always earns the current rate. As a check, a second model places the money for a year at a time at the average 3-to-12-month rate of the month the deposit is opened: each calendar year earns the rate of the previous December, and in the shorter period the rates of January 2024 and January 2025 are used. Over 2020-2025 the main model is the more favourable of the two, partly because of its monthly addition of interest.

For each share and each calendar year, the return was calculated as $(P_1 + D) / P_0 - 1$, where P_0 and P_1 are the prices at the end of the previous and the current year and D is the dividend per share paid during the year. This is the formula that KEGOC uses for its total

shareholder return; its additional term for new capital paid in per share is zero for a saver who simply holds the share [8]. Yearly returns were then multiplied together, which assumes that each year's dividends were used to buy more shares at the end of that year. The return after inflation, or real return, was calculated as $(1 + R) / (1 + I) - 1$, where R is the return and I is the rise in prices over the same period.

The main period runs from the end of 2019 to the end of 2025, six full years; it ends in December 2025 because KEGOC's prices are available only as year-end values up to its 2025 annual report. Kaspi.kz is compared with the other three over a shorter period, from the end of January 2024, its first month-end on Nasdaq, to the end of 2025. For KEGOC in this shorter period, the price for January 2024 is the January value of the monthly price chart in its 2024 annual report [8]. Risk was compared in two ways: as the largest fall after inflation from a previous year-end peak, which can be measured for the deposit, Kazatomprom and KEGOC, and as the largest fall after inflation from a previous month-end peak, which can be measured for all except KEGOC. All dividends are before any taxes, and no fees were included.

2.3. Prediction

On 4 October 2026, before seeing any numbers, I wrote down my prediction. I thought that the deposit had not fully covered inflation, because prices in Kazakhstan had risen strongly in recent years; that of the three shares Kazatomprom had earned the most, because demand for uranium is growing with the development of nuclear energy; and that shares are riskier than the deposit.

3. Results

3.1. The deposit and inflation

From the end of 2019 to the end of 2025, consumer prices rose by 87.7%. Over the same period the deposit grew by 103.9%, a real gain of 8.6% (Table 1). With the 12-month deposit the real gain was 2.0%. The deposit kept ahead of inflation in five of the six years, but not in 2022: that year prices rose by 20.4% and the deposit earned 11.7%, a real loss of 7.2% (10.0% with the 12-month deposit). In January and February 2022 the average deposit rate was equal to the rise in prices over the previous twelve months, 8.6% and 8.7%. From March 2022 it was lower, and the gap was widest in February 2023, 13.7% against 21.3% [4, 5]. In real terms the deposit was at its lowest in February 2023, 4.4% below its starting value, and its real value was below the start in 22 of the 72 months. It recovered in 2023, when deposit rates stayed high and inflation slowed.

Table 1. Inflation and returns after inflation by year, %

Year	Inflation	Deposit	Kazatomprom	KEGOC
2020	7.5	2.3	49.4	4.6
2021	8.3	0.7	102.6	11.8
2022	20.4	-7.2	-28.3	-26.4
2023	9.7	4.8	36.4	-5.7
2024	8.6	5.8	3.8	4.9
2025	12.3	2.4	31.7	0.1
2020-2025	87.7	8.6	304.6	-14.7

Note: Inflation is the rise in consumer prices from December to December. The deposit uses the main model. Returns of the shares include dividends. The last row is the whole period from the end of 2019 to the end of 2025. Sources: [4, 5, 6, 7, 8].

3.2. Kazatomprom

Kazatomprom's price in tenge rose 5.6 times from the end of 2019 to the end of 2025, and with dividends 7.6 times. After inflation, a saver who bought it at the end of 2019 ended 2025 with about four times the purchasing power invested (a real gain of 304.6%). Dividends made a large part of this result: over the six years the company paid 5,089 tenge per share [7], more than the price of one share at the end of 2019, about 4,934 tenge. The dividend each year was between 5.5% and 7.7% of the price at the start of the year. If each dividend is reinvested in the month it was paid instead of at the end of the year, the real gain is 330.4%.

The risk was also large. In 2022 Kazatomprom lost 28.3% after inflation, its largest fall between year-ends (Table 2). With monthly values, it fell in 34 of the 72 months, and from its peak at the end of October 2021 it lost 36% by May 2022; after inflation, the fall from that peak reached 49% by May 2023. A saver who had bought at the October 2021 peak and sold in May 2022 would have lost 36% of the money, or 26% if selling at the end of 2022, while a saver who bought at the end of 2019 was still well ahead (Figure 1).

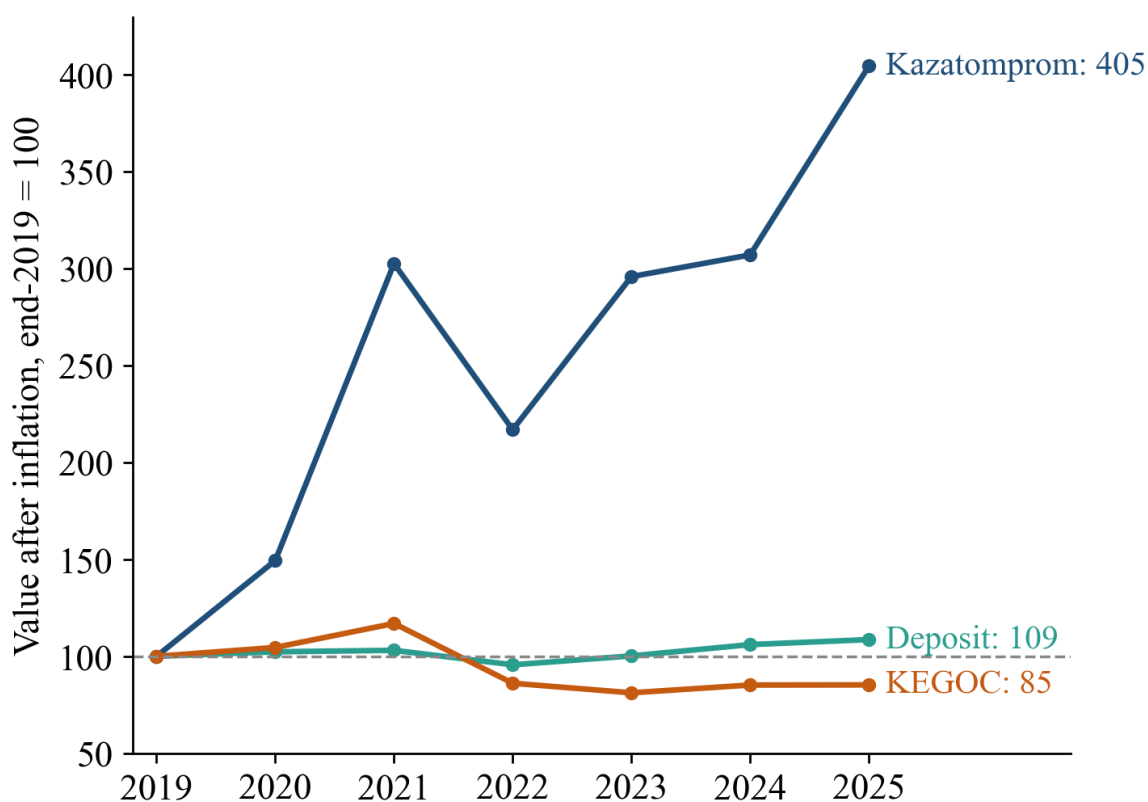


Figure 1. Value after inflation of 100 tenge placed at the end of 2019, at the end of each year. The dashed line marks 100, no gain after inflation. The deposit uses the main model; the shares include dividends. Sources: [4, 5, 6, 7, 8].

3.3. KEGOC

KEGOC's price was 1,613.5 tenge at the end of 2019 and 1,555 tenge at the end of 2025, 3.6% lower [8]. All of its gain came from dividends: the company paid 854 tenge per share over the six years, more than half of the 2019 price, and the dividend was 8.9% of the price at the start of each year on average. The yearly figure ranged from 2.7% in 2022 to 12.0% in 2023, mainly because the dividend for the first half of 2022 was paid in January 2023 rather than in 2022 [8]. With dividends, KEGOC grew by 60.0%. Because prices rose by 87.7% at the same time, this is a real loss of 14.7%, while the deposit gained 8.6%. KEGOC lost value after

inflation in 2022 and 2023, gained 4.9% in 2024 and 0.1% in 2025, and ended 14.7% below its starting value (Table 1). Its largest fall after inflation between year-ends, from the end of 2021 to the end of 2023, was 30.6% (Table 2). My yearly returns for 2023 and 2024 equal the shareholder returns that KEGOC itself reports, 3.44% and 13.96%; for 2022 the company reports -10.7% against -11.4% here, because its calculation starts from a 2021 price of about 1,869 tenge rather than the 1,885 tenge it states for 31 December 2021, and for 2025 it reports 12.8% against 12.4% here, a difference I could not explain [8].

KEGOC paid generous dividends, about 9% of the price a year, but this was not enough, because the share price itself rose little and then fell noticeably. In 2022 the share fell from 1,885 to 1,620 tenge, by the end of 2023 it was 1,482 tenge, and at the end of 2024 still only 1,527 tenge. Part of the dividends therefore only made up for the fall in price. Over 2020-2025 the deposit grew by 103.9% and KEGOC with dividends by 60.0%, while prices rose by 87.7%, so the steady interest on the deposit gave the better result.

3.4. Kaspi.kz

From the end of January 2024 to the end of 2025, Kaspi.kz fell from 91.45 to 78.13 US dollars per share. In tenge the fall was smaller, 4.3%, because the tenge weakened from 445.9 to 499.6 per dollar. With the four dividends of 2024 the return was 4.1%, and after inflation of 21.0% over the same months it was a loss of 14.0%. Measured on month-end prices in tenge without dividends, its largest fall from a previous peak in this period was 37.9%, or 46.4% after inflation, and its lowest month-end price was the last one, at the end of 2025, so the result depends on where the period ends. Kaspi.kz paid no dividends in 2025, so a saver received no income from it that year, although the company returned money to shareholders by buying back its own shares [11], which this calculation does not count. Over the same months the deposit earned 8.0% after inflation (6.4% with the 12-month deposit), Kazatomprom 39.0% and KEGOC 7.6% (Table 2), so in this shorter period KEGOC and the deposit were close.

Table 2. Returns after inflation over the two periods and the largest falls after inflation, %

Saving	2020-2025	2024-2025	Fall, yearly	Fall, monthly
Deposit	8.6	8.0	-7.2	-7.3
Kazatomprom	304.6	39.0	-28.3	-48.7
KEGOC	-14.7	7.6	-30.6	n/a
Kaspi.kz	n/a	-14.0	n/a	-46.4
Inflation	87.7	21.0		

Note: 2020-2025 is the end of 2019 to the end of 2025; 2024-2025 is the end of January 2024 to the end of 2025. Returns of the shares include dividends. The deposit uses the main model; with the 12-month deposit its returns are 2.0% and 6.4%. The falls are measured from a previous year-end or month-end peak; for Kaspi.kz the monthly fall covers 2024-2025 and uses prices without dividends. n/a: not available.

4. Discussion

My first prediction was that the deposit did not fully cover inflation. Over the six years as a whole this was wrong: the deposit gained 8.6% after inflation with the main model and 2.0% with the 12-month model, so it stayed only slightly ahead of prices. It did lose to inflation in one year, 2022. I think the deposit lost in 2022 because prices were rising too fast and banks

did not raise their deposit rates in time: prices rose by about 20%, while the deposit brought only about 12%, so the saved money could buy less than before. The data fit this explanation, although they do not prove it: from March 2022 the average deposit rate rose every month but stayed below inflation, and the deposit caught up only in 2023. For a saver, this means that over 2020-2025 a deposit roughly kept savings level with prices, but not in every year.

My second prediction, that Kazatomprom earned the most, was correct, and by a large margin. I expected this because demand for uranium is growing with nuclear energy. This study does not test that reason: it only shows what a shareholder earned, not why the price rose. The result also depended on dividends, which over six years added up to more than the 2019 price of the share.

My third prediction, that shares are riskier than a deposit, was also correct for all three. Between year-ends, the largest fall after inflation was 7.2% for the deposit, 28.3% for Kazatomprom and 30.6% for KEGOC; between month-ends it was 7.3% for the deposit, 48.7% for Kazatomprom and 46.4% for Kaspi.kz. The risk ended differently, however. Kazatomprom recovered and ended far ahead, while KEGOC, despite high dividends, ended below the start after inflation, because its price did not grow while consumer prices rose by 88%. Over 2020-2025 Kazatomprom beat the deposit by far and KEGOC fell behind it, and over 2024-2025 Kaspi.kz lost to it. With only three companies, this shows how widely single shares can differ, not a general rule. It is in line with the finding that shares were a good long-run hedge against inflation in only some emerging markets [2], although that study tested how stock and goods price indices move together over decades, not what a saver earned over six years.

5. Limitations

The three companies were suggested by my mentor as well-known Kazakhstani shares, not chosen at random, and Kazatomprom may be well known partly because its price rose, so the selection may favour companies that did well. They are not a sample of the whole market, and no market index was used for comparison. KEGOC prices are year-end values reported in the company's annual reports, not prices taken directly from KASE, so its risk could only be measured between year-ends; monthly prices could be requested from KASE. KEGOC shares trade rarely, and each yearly result rests on one closing price: on the Astana International Exchange the price in mid-December 2025 was around 1,370-1,380 tenge, and if the year-end price had been 1,450 tenge instead of 1,555, the real loss over 2020-2025 would be 20.0% instead of 14.7%. The 2021 annual report gives two different prices for the end of 2021, 1,885 and 1,869 tenge; the dated value, 1,885, was used, which changes the split between 2021 and 2022 but not the result for the whole period. Kazatomprom was followed through its receipts in London, so its tenge value also depends on the exchange rate, and the exchange rate used is the market rate from Yahoo Finance, not the official rate of the National Bank. Kaspi.kz could be followed for less than two years. Dividends are counted before taxes, and broker fees and currency conversion costs were not included. The deposit uses the average rate of all banks, which is not the rate any single saver received, and the result depends on how often the money is placed again, as the two deposit models show. Finally, these are past results for one period and cannot predict future returns.

6. Conclusion

From the end of 2019 to the end of 2025, a tenge deposit stayed slightly ahead of inflation, gaining 2-9% after inflation depending on how the money was placed, and it lost 7-10% in 2022, when inflation reached about 20%. Kazatomprom, with dividends, ended with about four times the purchasing power invested, but with large falls along the way. KEGOC, despite dividends

of about 9% a year, lost 14.7% after inflation because its price did not grow, and Kaspi.kz lost 14.0% after inflation from January 2024 to the end of 2025. Of the four savings studied, the deposit had the smallest falls, while the shares gave results ranging from a large gain to a loss depending on the company.

Data availability

All data are publicly available from the International Monetary Fund [4], the National Bank of Kazakhstan [5], Yahoo Finance [6] and the companies' own documents [7, 8, 11]. The script that calculates every number in this paper is available from the author or her mentor on request.

AI and tools disclosure

I suggested combining the two proposed topics into one study, wrote my prediction before seeing any results, checked which KEGOC data the KASE and Astana International Exchange websites show, and wrote, in Russian, the explanations of why the deposit lost to inflation in 2022 and why KEGOC lost value after inflation despite its dividends. My mentor collected the data, wrote the code for the calculations with the help of generative AI tools and prepared the figure. The English text was drafted by my mentor with the help of generative AI tools, based on the results and on my own written answers, and I reviewed and approved it. No data, results or citations were generated by AI: all numbers come from the sources listed below, and all cited sources were checked against the originals. I take full responsibility for the final manuscript.

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Conflicts of interest

The author declares no conflicts of interest.

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