

International School of Economics

Aruzhan Nurtaza

Perizat Mazhitova

Zhuldyz Sagidanova

Valuation of Kaspi.kz JSC upon listing on the US Stock Exchange

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Supervisor: Kuralay Rysbekova

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Abstract

Kaspi.kz JSC has conducted an IPO on the US stock exchange at the beginning of the 2024. IPO is a promising decision for the company, which involves increasing shareholder value, publicity and transparency, as well as providing capital opportunities for the realization of the company's strategy. An initial public offering provides insight into how much a company is valued based on the company's past, current and projected macroeconomic and internal factors. Moreover, IPO offers investors access to promising companies seeking to grow and create long-term profit. Therefore, the IPO of Kaspi.kz JSC in the U.S. market opens potential opportunities both for the company itself and for investors.

This study aims to perform an analysis of Kaspi.kz JSC by estimating its intrinsic value in order to detect the true value of the company, compare it with the market's perception and examine the financial performance of the company. For the purposes of company valuation, financial statements for the period of 2021-2023 were taken to calculate the value of Kaspi.kz JSC. Intrinsic value calculation was performed to conduct a comparison with its current market price in the NASDAQ Composite, the stock market index where the company has been listed, and to analyze its financial performance for assessment of the company's ability to generate profits and sustainability in growth. The discounted Cash Flow (DCF) model via Free Cash Flow of Equity determination was used for financial valuation as this method is commonly used for companies that are expected to generate stable returns over the long-term perspective. In addition, this method of valuation provides a more explicit and direct approach to measuring the returns available to investors and is not sensitive to changes in debt and capital structure. The findings of this paper show that Kaspi.kz JSC's intrinsic value is USD 113,26 or KZT 51 170,47 (1 USD = 451,8) which is concluded to be undervalued compared with IPO, which was on January 18, 2024 the price was USD 92,5 or KZT 41 791,5 (1 USD = 451,8). However, this price lies within the band of 40% considering that the lowest price since the IPO was USD 87,02 or KZT 38 906,64 for February 12, 2024 (1 USD = 447,1), and the highest price was USD 135,14 or KZT 60 479,20 for April 3, 2024 (1 USD = 447,53). These implications can be beneficial source to investors,

buyers, suppliers and other related parties of the Kaspi.kz JSC and may be applied in decision-making, analyzing the investment and the company's prospects.

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Introduction

Kaspi.kz JSC, one of Kazakhstan's leading fintech, payments and e-commerce banks. During a presentation of the 1Q2023 financial statement, Kaspi.kz JSC announced plans to begin the process of listing in the United States (Forbes, 2023). Previously, the company practiced IPO in AIX, KASE and on the London Stock Exchange (LSE). IPO, Initial Public Offering, is the process of the first sale of shares. An IPO is one of the ways for a company to raise funds and, as a result, to grow and develop its business. As Kaspi.kz JSC's business covers banking, online retail, online commerce and other aspects beyond banking and plays an essential part in the development of Kazakhstan's economy, the complexity and breadth of the company may require a thorough valuation of the business.

Kaspi.kz JSC's development of an integrated financial e-system to provide services of varying scope and a well-structured underlying value proposition is the company's differentiating feature from other banks (Litvishko et al., 2020). In addition, responding to customer demand through continuous digital development is noted as the main reason for the growth of the company's business. In particular, the concentration of expenses from traditional operating expenses to information technology and marketing expenses is considered to be a favorable business approach for Kaspi.kz JSC. Whereas the study by Kobadilov et al. (2020) indicates that banks in Kazakhstan do not attract external sources of financing. Specifically, as one of the reasons cited is the priority of local banks in granting loans to merchants and direct consumers, which is also one of the ways of Kaspi.kz JSC's revenue generation. The high risk of insolvency on the above-mentioned consumers' side may lead to losses for the company and requires the banks' deliberate analysis of loan and credit provisions to maintain profitability. Thus, Kaspi's day-to-day operations include working with merchants and direct consumers, stepping back from traditional banking and growing towards fintech, which highlights the complexity of Kaspi.kz JSC's business activities. The studies, however, do not examine the financial position, performance or IPO issuance of the company, viewing only the general Kaspi.kz JSC's strategic and operational development. As the current IPO of Kaspi.kz JSC in US Stock Exchange is an event that has recently occurred, scientific articles in this area have yet to be published.

According to the LSE (2020), during its IPO on the LSE in 2020, the company achieved a market capitalization of \$6.5 billion on the first day of the conditional trading at \$33,75, being the second largest IPO on this exchange in 2020. However, according to Global Finance Magazine (2024), a listing on Nasdaq is unlikely to have a significant impact because new shares will not be issued, because the traded shares are already existing shares hold by Vyacheslav Kim, Mikheil Lomtadze and Asia Equity Partners Limited. Thus, listing on a U.S. exchange allows existing shareholders to recover risky investments made in the early stages of Kaspi.kz JSC's business. It is worth noting that the listing on the London Stock Exchange was also done on existing shares and no new shares were issued (Kaspi.kz, 2023). Upon listing on the US Stock Exchange, initial public offerings, as was mentioned above, represented existing shares of 3 shareholders. Kaspi.kz JSC has annualized its listing in LSE after IPO in Nasdaq. The Company commenced listing on the Exchange on January 18, 2024, fixing the price at \$92,5 per share. Nevertheless, listing on the US market offers prospects for the further development of Kaspi.kz JSC and for Kazakhstan and its citizens as the main users of the company's products. Therefore, the current paper can bring value to investors, investment funds and financial analysts to understand and analyze the ongoing performance and position of Kaspi.kz JSC for further decision-making purposes at IPO announcement. The paper also may contribute to the current analysis of Kaspi.kz JSC and presents the results of the valuation, which may be relevant for comparison with the listing in the US.

To extend the existing literature and thus provide implications for financial markets, investment decisions, and policy considerations following objectives were set:

 Perform an in-depth analysis of Kaspi.kz JSC upon its listing on the US Stock Exchanges by analyzing market trends and company's financial performance for the purposes of the company's intrinsic value estimation.

Research questions

In order to fulfil above-mentioned aim, the following questions were set:

1. What will be the share price of Kaspi.kz JSC using the Discounted Cash Flow method?

2.	What are the main internal and external factors that might affect the share price of Kaspi.kz
	JSC?
3.	What is the ongoing financial performance of Kaspi.kz JSC upon listing in US Stock Exchange?

Literature Review

This study will perform a valuation of Kaspi.kz JSC to compare the price at which the stock would be offered to the public on a U.S. exchange. The analytical process that quantifies the current fair value of a company is described as business valuation. As of today, there are many methods and techniques of conducting business valuation such as Market-based, Income-based, Asset-based valuation methods and etc. For the current study, the income-based method will be used in the valuation of Kaspi.kz JSC. An income-based approach is suitable for companies that are income-generating and provide sustainably growing returns. This method focuses on expectations and forecasts of the company's ability to produce cash flows, which makes it applicable to Kaspi.kz JSC, as the company demonstrates steadily growing profitability, providing grounds for further forecasting (Bonnitcha and Brewin, 2020). Considering the other listed above methods, the market-based approach is found to be inapplicable due to its reliance on market data since Kaspi.kz JSC began listing on the Nasdaq only at the beginning of 2024 information and sources for the following valuation method are rather limited. Whereas the asset-based method is usually used in the valuation of companies that have significant asset balances which is not the case for Kaspi.kz JSC because as a fintech bank sector company, its asset balances are minimal and thus not useful for application. Thus, an income-based approach is found to be a proper valuation approach for Kaspi.kz JSC.

Discounted Cash Flow (DCF) is the most frequently applied method of evaluating a company which concedes intrinsic value as a present value of forecasted future cash flows of the company. Valuation using the DCF Method is built on forecasts of expected cash flows and time value of money of those expected cash flows. Specifically, the growth rate used for projections and required rate of return for present value calculation are critical parts during DCF method valuation. The first step can be summarized as a forecast of future expected expenses and revenues for each period (Fernández, 2023). Forecasting of Net Income for FCFE calculation is a process requiring analysis of historical returns deviated from financial statements, collection of identifying patterns and forming patterns for annual growth rate identification. It is worth noting that the projection process performed deeming

macroeconomic factors, industry and company specific factors. For that reason, industry, competitive and company analyses are analyzed (Pinto et al, 2020). Followed by adjusting projected Net Income values from also projected non-cash expenses, Net Working Capital, Capital Expenditure and Net New Borrowing for the Net Cash Flow (NCF) determination. The concluding step is to estimate the present value of the projected NCFs using the discounting method, specifically the cost of equity (Bonnitcha and Brewin, 2020). Generally, the DCF model is a fundamental tool in investment research in which the intrinsic value of a firm is perceived as the present value of projected cash flows. According to Damodaran (2012), this approach is considered to be applicable to firms with positive cash flows that can be estimated for future periods and available discount rates for which a proxy for risk can be obtained. Being a mature company with growing returns, which means that the cost of equity and cash flows can be reliably estimated, Kaspi.kz JSC is prone to a valuation using the Free Cash Flow to Equity (FCFE) of the DCF method. Free Cash Flow (FCF) is the remaining amount of the company's cash flows after all necessary expenditures and investments have been made and the withdrawal of which will not cause a loss to the company or harm the generation of future cash flows (Ohara and Gonzales, 2022). As was mentioned above, for the current study, for Kaspi.kz JSC, it is relevant to apply Free Cash Flow to Equity. The FCFE Model is the cash flow remaining after the payment of taxes, debt, operational, and capital expenditures, which shows the amount that differentiates returns available to its shareholders (Pinto et al, 2020). Since Kaspi.kz JSC maintains a stable performance, its free cash flows align with its profitability and allow the estimation of future flows. The FCFE model uses the cost of equity as the discount rate. Specifically, as is commonly used in practice, historical beta, historical market risk premium, and the risk-free rate will be used to determine the cost of equity.

There are alternative methods to evaluate a company like the Dividend Discount Model (DDM) and FCFF of DCF method. However, for the application of the DDM method Kaspi.kz JSC does not have stable dividend payments. Whereas for the inquiring FCFF of DCF method assumptions on constant debt levels and capital structures. Kaspi.kz JSC is a growing company which does not have stable debt financing, for this reason the above assumption on stability of debt structure is a visible

limitation for the Kaspi.kz JSC case. Thus, FCFE of DCF method concluded to be a suitable model to apply to Kaspi.kz JSC, because of its relevant assumptions on consistent performance, forecasting of future cash flows and expected returns.

Research Methodology

The research approach used to determine Kaspi.kz JSC's value upon its listing on the US Stock Exchange is carefully crafted to yield a thorough and reliable study. In order to determine the intrinsic worth of Kaspi.kz JSC and provide analysts and potential investors with a more nuanced viewpoint, this study employs a combination of income-based valuation techniques and a rigorous data analysis approach. This study focuses on the valuation of Kaspi.kz based on short-term and long-term forecasts determined as listed below:

- For short-term projections, financial data for the past three years will be used to project the free
 cash flow of the subsequent five years, followed by determining the Terminal Value of the
 company.
- Long-term prognosis will be based on general market and industry overview via analyses such
 as Industry analysis, Competitors analysis, SWOT and PESTEL analysis.

To give a thorough picture of Kaspi.kz JSC's financial performance during the listing period, this approach considers current trends, macroeconomic conditions and company-specific aspects.

The foundation of this research is income-based valuation methods, underscoring the significance of comprehending the intrinsic worth of Kaspi.kz JSC. These approaches, as previously stated, are based on analyzing the financial performance of the last three years and projecting the future cash flows of the next five years, followed by discounting the projected cash flows (DCF). It was decided to use historical performance from 2021 because the reporting formats in 2020 and earlier years differed from the reporting format of recognition of revenues and expenses of the following years. Using financial data from the last three years (2021–2023), the free cash flow (FCF) forecasts for Kaspi.kz JSC focuses on the company's immediate financial trajectory. Further, the outcomes of the analysis of the preceding three years will be applied to forecast the subsequent five years. Five years is the projection horizon of free cash flow, which provides a strategic view of sustainable financial performance of Kaspi.kz JSC in the near future. Using this method, the study aims to reveal the

underlying financial dynamics of the complex business activities of Kaspi.kz JSC. Another fundamental component of the valuation quality is the cost of equity. The cost of equity calculated by using the CAPM model is a crucial indicator that shows the rate of return that a business will give its investors for their investment. One of the core ideas in financial valuation is calculating the Terminal Value. It is employed to calculate a company's worth_after the stated prediction term.

Methodological Decision-Making

After considering their combined effect on the Company valuation, it was decided to apply both long- and short-term free cash flow projections as were mentioned above. While long-term predictions offer a more strategic and forward-looking view that is essential for stakeholders evaluating Kaspi.kz JSC's potential for sustained growth, short-term projections offer an instant snapshot that captures recent performance patterns. As a result, the income-based methodology chosen for the valuation of Kaspi.kz JSC combines both long-term and short-term forecasting techniques, supported by calculation of cost of equity using the CAPM model and Terminal Value. The objective of this methodology is to comprehensively evaluate Kaspi.kz JSC's intrinsic value during its listing on the US Stock Exchange by capturing the company's dynamic financial landscape.

Method Justification

In order to accurately provide insights into the fundamental value of the firm, the financial valuation of Kaspi.kz JSC during its listing on the US Stock Exchange requires an unbiased assessment. Its capacity to provide a thorough and targeted examination of the business's financial performance is the foundation for the decision to choose an income-based approach as the exclusive technique.

Accuracy of financial valuation. Focusing on forecasting future cash flows and discounted cash flows (DCF) methods, the income-based approach was determined to be the most suitable for accurate estimation of the intrinsic value of Kaspi.kz JSC. As mentioned above, this is due to the fact that the market-based approach requires more market data, and for the asset-based method Kaspi.kz JSC has insufficient asset balances. Meanwhile, the income-based method is suitable for a company showing steadily growing income like Kaspi.kz JSC. This approach offers a detailed viewpoint that is vital for

stakeholders looking for a thorough grasp of the financial landscape because it focuses on the company's earnings potential.

A Thorough Analysis of Cash Flow Stability. The stability of cash flow estimates can be thoroughly examined using the following method, which is essential for precise valuation. Through the exclusive use of income-based techniques, the study is able to thoroughly examine past cash flow patterns and evaluate their consistency over an extended period of time, providing stakeholders with an unambiguous view of the company's financial standing.

Reducing the Effect of Market Volatility. The choice to only employ an income-based strategy takes into account how market volatility may affect valuation outcomes. The research attempts to reduce outer influences that could misinterpret the accurate portrayal of Kaspi.kz JSC's intrinsic value by excluding market-based volatility, which could create variability in calculations.

Limitations and Assumptions Recognition. Acknowledging the assumptions and limits that come with income-based techniques is crucial, even as we recognize their effectiveness. The consistency of cash flow estimates, the dependability of discount rates, and precise terminal value computations are among the assumptions. It is imperative to acknowledge that fluctuations in the market and unpredictability in foreseeing future cash flows may lead to variations in the value outcomes. The assumptions used for valuation were stated in more detail in the valuation section.

Data Collection

Reports from Kaspi.kz JSC 2021–2023 will be used as secondary data to analyze the company's current financial performance and value financial ratios.

Discussion

Industry analysis

Introduction to the Industry. The financial services industry in Kazakhstan has undergone significant transformation and growth in recent years. Traditional models in the banking sector are being modified by fintech companies, due to changing preferences among consumers, as well as the development and innovation of technology. In turn, Kaspi.kz JSC has become a key player in this dynamic sector, providing a full range of financial services through its Super App platform.

Company Overview. Kaspi.kz JSC is a leading fintech company in Kazakhstan, which started as a small financial institution in 1999. With a mission to improve the lives of its customers through technology, the company has built a strong reputation for improving efficiency, positioning itself as a customer-centric company, and showing a receptivity to innovation. Combining multiple financial services including e-commerce, payments and lending, customers receive a comfortable user experience through the Super App platform. For this purpose, Kaspi.kz JSC application was created in 2017, which today has become a Super App combining various types of services in addition to banking services, through the continuous implementation of innovations over several years and up to nowadays.

Market Trends and Dynamics of the Industry.

- Digital modernization: The financial services sector in Kazakhstan is experiencing a digital
 boom as more and more citizens use and prefer mobile and online banking services. The digital
 services available on one platform in the Super App are being utilized by Kaspi.kz JSC to tap
 into this trend.
- The rise of fintech: Kaspi.kz JSC is launching the latest products and services to meet the needs of consumers. This approach gives them a competitive advantage, as the use of data analytics and technology gives customers the opportunity to solve their problems through the company's provision of customized financial solutions. Thus, the face of the financial services industry is undergoing a change due to the fintech sector.

Data-driven decision making: Using consumer data, the company has made extensive use of
data analytics and artificial intelligence, allowing Kaspi.kz JSC to better personalize services,
increase operational efficiency and effectively manage risk. This approach enables the company
to provide a pleasant customer experience and stay ahead of the competition.

Competitive Position. Kaspi.kz JSC performs a strong competitive position within the financial services industry in Kazakhstan, supported by the following factors:

- Integrated platform: The Super App platform offers a wide range of financial services, in turn
 providing simplicity and ease of use for customers. Kaspi.kz JSC consumers are more likely to
 remain loyal to the integrated platform and less likely to switch to competitors.
- Exclusive data and analytics: Providing customized solutions for customers through the use of
 innovation and data insights is one of the core strategies of Kaspi.kz JSC. These broad
 capabilities are an asset to the company.
- Operational efficiency: The high percentage of loan approvals, the ability to complete
 transactions in seconds indicates the customer-centricity and operational competence of
 Kaspi.kz JSC. Thus, the company pays attention to centralization, automation and risk
 management, in turn reducing operational risks and increasing efficiency.

Financial Performance. Solid increase was seen in a number of important financial measures in 2022 for Kaspi.kz JSC, indicating the company's solid position in the market and successful strategic initiative implementation. The company's Super App platform's increasing prevalence contributed to a notable increase in overall income. The active aspiration of the company to improve its goods and services in accordance with the wishes of customers, is confirmed by the fact of participation of more than 200 000 customers in feedback programs from Kaspi.kz JSC. It should be considered, that Kaspi.kz JSC's adjusted net income margin was steady at 47,1% in 2022, demonstrating profitable and effective cost control. The company's cash-generative and low-capex business strategy enabled it to accomplish three repurchase programs worth around USD 180 million and pay dividends equal to KZT

500 per Global Depositary Receipts (GDR) and KZT 600 per GDR, respectively. Kaspi.kz JSC's stability and profitability are highlighted by these financial measures, which also position the company well for future development and value generation in Kazakhstan's fintech industry (Kaspi.kz, 2022).

Future Outlook. The future vision of Kaspi.kz JSC is based on further digitalization and modernization of Kazakhstan's economy. Through the extensive use of Kaspi Pay Super App and Kaspi.kz, the company can contribute to the digitalization of the fintech services sector. Thus, as of 2022, 83% of transactions in Kazakhstan were digital payments (Kaspi.kz, 2022). Despite the company's already dominant position in providing digital services, Kaspi.kz JSC sees more opportunities to introduce digital payments in the banking sector as well as in retail. From which will follow the transformation of Kaspi.kz JSC's specialized product designed for B2B payments. Improving the product, being receptive to innovations in technology and providing a unique, comfortable experience for consumers is Kaspi.kz JSC's vision for future outlook.

PESTEL analysis

Political:

- Government Support for Digital
 Transformation: The expansion of
 Kaspi.kz JSC is facilitated by the
 government of Kazakhstan's programs
 to advance financial inclusion and the
 digital economy.
- Political Stability: The business

 climate of Kaspi.kz JSC is impacted

 by Kazakhstan's political environment,

 which is essential for long-term

 economic growth and customer

 confidence. For example, "January

Economic:

- Economic Growth: Kaspi.kz JSC's banking services and e-commerce platform are in high demand due to consumer spending and a robust economy.
- Interest Rate Environment:
 Kaspi.kz JSC's profitability and loan
 repayments may be impacted by
 changes in interest rates.
- Exchange rates: Changes in exchange rates may have an effect on the value of foreign currency-

Events" in 2022 business activities of Kaspi.kz JSC were paused due to political situations in the country.

 Regulation of Fintech and Ecommerce: Kaspi.kz JSC's activities may need to adjust to changing laws pertaining to consumer protection,

data privacy, and financial services.

denominated assets and liabilities held by Kaspi.kz JSC.

Social:

- Tech-Savvy Consumer Base: A
 rising segment of Kazakhstan's
 population is tech-savvy and open to
 online shopping and digital financial
 services, with a preference for
 Kaspi.kz JSC's products.
- Changing Customer demands:
 Kaspi.kz JSC faces possibilities as
 well as problems due to evolving
 consumer demands for convenience,
 security, and tailored experiences.
- Financial inclusion: With a major emphasis on the underbanked population in past, the firm became a major force for financial inclusion in Kazakhstan. Kaspi.kz JSC continues

Technological:

- Advancements in Fintech: The risk
 management, product development,
 and user experience of Kaspi.kz JSC
 may be improved by emerging
 technologies including big data,
 blockchain, and artificial intelligence.
- Cybersecurity Risks: Kaspi.kz JSC
 must continually invest in
 cybersecurity measures due to the
 growing sophistication of
 cyberattacks.
- Data security and transparency:
 must be given top priority by Kaspi.kz
 JSC due to growing customer
 concerns around data privacy.

 Proactive actions in reducing related risks should be taken by the company.

to benefit from the continued social	
adoption of digital banking.	
Environmental:	Legal:
• Sustainability concerns: Rising	Data Privacy Regulations: The data
environmental concerns may have an	collecting and management
impact on their purchasing decisions	procedures of Kaspi.kz JSC may be
and raise the demand for	impacted by data privacy requirements
environmentally friendly financial	such as the Law "On Personal Data
goods.	and Their Protection" of Republic of
	Kazakhstan (Kaspi.kz, 2022).
	Consumer Protection Laws: As
	consumer protection laws change,
	Kaspi.kz JSC may need to modify its

operations to guarantee that
consumers are treated fairly.
• Intellectual Property Rights: To
keep a competitive edge, a firm must
safeguard the intellectual property
rights pertaining to its technology and
platform.

As a result of this analysis, taking into account of all above-mentioned risks, it can be concluded that Kaspi.kz JSC is mainly exposed to economic risks. Despite the fact that Kaspi.kz App is in high demand among the citizens, its revenue is affected by changes in the interest rate risks, currency risk and market price risk, since the issuance of loans, interest revenues are one of the main sources of its income.

SWOT Analysis of Kaspi.kz (based on 2022 information)

Strengths:

- Dominant position and strong brand recognition in Kazakhstan, associated with reliability and innovation.
- The integrated platform provides a user-friendly experience with various banking and shopping services.
- Data-driven approach, as the company applies machine learning and big data to monitor the provision of personalized offers, fraud prevention and credit risk.
- Fast and efficient decision making through automated and centralized procedures.
- Integrated ecosystem, as part of its Super App Kaspi.kz JSC, increasing convenience and customer loyalty.
- Effective credit risk management, the company uses an efficient system including data analytics,
 collection tactics and credit rating.

 Large and engaged user base, due to the high engagement of Super App users, contributing to network effects and increased profitability.

Weaknesses:

- Dependence on technology, making it vulnerable to outages, cyberattacks and technological obsolescence due to its reliance on data infrastructure and technology. Any disruption could jeopardize operational efficiency and customer trust.
- Limited geographical coverage, as Kaspi.kz JSC currently serves mainly the Kazakhstan market.
- Dependence on the Kazakhstan market, as fluctuations in the country's economy can have a
 great impact on the company's functioning.

Opportunities:

- To start expansion outside of Kazakhstan's market, leveraging its platform and expertise.
- To grow in fintech services and e-commerce, so Kaspi.kz JSC can expand its line of financial
 products. Expanding the range of services, the company has the opportunity to expand its range
 of products and services and enter new markets in the financial services sector (wealth
 management, insurance and investment products).

Threats:

- Increased competition, as new and existing fintech companies like ForteBank JSC and Halyk
 Bank JSC (which will be discussed in detail below in the Competitor's Analysis), may pose a
 threat to Kaspi.kz JSC's competitive position in the market.
- Changes in legislation, as it may be necessary to modify and transform business procedures in response to changing regulations. For example, amendments made by the National Bank of the Republic of Kazakhstan to the established minimum reserve requirement ratios.
- Cybersecurity risks, as Kaspi.kz JSC manages confidential financial data of consumers.
- Fluctuations in interest rates and currency values may affect the profitability and maturity of loans.

 Economic uncertainty, such as consumer spending, investment behavior and general attitudes towards the company may be adversely affected by an economic downturn.

Overall, PESTEL and SWOT analysis shows that the convenience and functionality of the Kaspi.kz App is its main strength, which has allowed it to become one of the main drivers of digital banking adoption and its expansion in Kazakhstan. Moreover, the opportunity to enter the foreign market will allow Kaspi.kz JSC not only to increase its income and the customer base, but it will also give the advantage to not depend on the economic and political situation of one country, as it was mentioned in the PESTEL analysis.

Competitors analysis

Competitor analysis provides valuable insights for analyzing the industry and reviewing the present position of the company itself and its competitors in the industry.

At the current moment, the main participants of the banking industry do not confine their business exclusively with banking activities. As was analyzed above, Kaspi.kz JSC in addition to commercial banking activities is also growing rapidly in the direction of fintech, payments and marketplace (i.e. e-grocery, e-commerce) (Kaspi.kz, 2023). As of now, a similar business model of growth has also been observed in other banking companies in Kazakhstan. For the purpose of competitor analysis within Kazakhstan, Halyk Bank (2022) and ForteBank (2022) were selected based on the similarity of their market offerings, products and services, and target audience:

Description/Compa nies	Kaspi.kz JSC	ForteBank JSC	Halyk Bank JSC	
Product or services:				
			Homebank - super-app for retail banking services.	
			_	

		of banking and other products.	Digital loans and instalment loans for retail and corporate companies.
		Working capital and investment lending.	Digital bank tender guarantees.
Non-banking services			Halyk Market - a tool for online purchases.
		ForteLeasing - equipment and real estate leasing.	Halyk Invest - a brokerage service.
	e-grocery - digital food shopping tool.		Halyk Travel - an app for search, purchase of air-/railway tickets, online hotel booking.
	GovTech - place to access the government services.		Kino.kz - a service for search, purchase of tickets to various events.
	Kaspi Postomat - a tool for delivery services.		Online auto insurance portal. Online government services.
Target audience	Retail customers, SMEs, corporate entities.	corporate entities.	Retail customers, SMEs, corporate entities.
Total assets, 2022	9,70%	6,50%	31,10%
Net income, 2022	32,00%	44,20%	34,70%
Business strategy	increasing consumers' and merchants' usage of	becoming one of the three largest private banks in Kazakhstan in terms of assets through advance product and service	Domestic strategy: growing by rising the customer demand for digitalization, expanding the bank's ecosystem and strengthening the customer experience.
			Global strategy: cross- border expansion with goal of increasing

	profitability and
	efficiency

Judging by the analysis above, banks represent a high level of competition for each other.

According to the table, the customer orientation of all three above-mentioned banks is aimed at small and medium-sized enterprises, legal entities and retail customers. Thus, all three banks compete with each other due to a similar range of potential customers. A wide range of financial products and services, such as digital payments, lending, as well as including trading platforms and travel services, that is non-bank services, are provided by all three banks, with minor differences in offers which means positioning competition in the previously described areas for market share. According to the data from the analysis, ForteBank JSC demonstrates the highest profitability among the compared banks at 44,20%, in turn, Halyk Bank JSC occupies the first place in the total volume of assets amounting to 31,10%. However, the net profit of this bank is slightly lower compared to ForteBank JSC, which may inform investors slightly below the profitability of Halyk Bank JSC. In turn, Kaspi.kz JSC demonstrates fairly stable positions in terms of total assets and net profit. The strategic goals of banks, with a slight difference, strive for expansion and growth, which means an active desire to cover a large market share. However, Kaspi.kz JSC has a more diversified number of digital banking services. Comparingly, the most of these products and services were established by its competitors like Halyk Bank JSC and ForteBank JSC after the success of the Kaspi.kz JSC in this sector. It follows that despite the competitiveness of these two banks, the probability of displacement of Kaspi.kz JSC from the leading positions is low.

Porter's "Five Forces" framework of Kaspi.kz JCS

This framework provides a valuable tool for analyzing the competitive environment in an industry. Under the following framework five determinants were analyzed:

• Competition in the industry. According to the table above it can be seen that Kaspi.kz JSC's competitors result in a similar business model, financial results and strategic direction. There are a small number of participants in the sector with a relatively large market share which leads to a

- high concentration within the industry and thus high competition in the industry. Thus, the Company should concentrate on bringing value and gaining competitive strength in industry.
- Potential of new entrants into the industry. The financial services sector is known for having strong entry barriers because of capital needs, regulatory requirements, and the demand for proven credibility and trust. Further obstacles to entry are created for potential competitors by the company's vast network, proprietary data, and integrated services. Furthermore, Kaspi.kz JSC's emphasis on innovation and technology enhances its competitive position and makes it difficult for rivals to imitate its services by being first to market with next-generation products and services.
- Power of Suppliers. In the financial services sector, suppliers are mostly regulatory agencies, technology, data and analytics companies. In case of Kaspi.kz JSC, its size and market share suggest that it has built solid ties with its suppliers. But because of its reliance on data infrastructure and technology, the business may be vulnerable to possible supplier price hikes or interruptions. However, Kaspi.kz JSC may have considerable negotiating leverage due to its market dominance and strategic alliances, which would somewhat lessen the supplier's impact.
- Power of Buyers. Kaspi.kz JSC's services and products are provided to a variety of customers ranging from retail customers to large legal entities. The company has a large market share and strategy development is directed towards improving services and products for all types of customers. The number of consumers was equal to 6,1 M, which is 19,0% higher than last year's results (Kaspi.kz, 2022). It should also be taken into account that the Kaspi Store remains the market leader with a share of 77.1%, while the share of marketplaces is Halyk Market and Forte Market 0.5% each (Bekezhanov, 2024). So, the Kaspi Store has a major share of the market, which in turn means that the strength of customers is low. In other words, the company has a diversified customer base compared with competitors, in which each individual buyer has less leverage and influence on the revenue of the marketplace. In turn, this gives Kaspi.kz JSC more control over the conditions and pricing on the site.

Threat of Substitutes. Since consumers have a variety of alternatives for banking, payments, and other financial requirements, there is a moderate to high risk of replacements in the financial services sector. Alternative digital platforms, fintech companies, and traditional banks can offer similar services to those provided by Kaspi.kz JSC as were shown in a table above. However, Kaspi.kz JSC's strong market position, and innovation-focused approach, and powerful brand recognition help set it apart from rivals and lessen the threat of replacements to some level. To keep its competitive advantage, the business shall continue coming up with new ideas and adjust to shifting customer demands.

As a result of this analysis of Porter's "Five Forces", it can be concluded that in the financial services industry Kaspi.kz JSC has a position of high competitiveness. This stable position is also supported by innovative opportunities, strategic actions and a reliable business model. The company's long-term success and market dominance are facilitated by their high customer orientation and proactive approach to solving problems such as intense competition and the threat of substitutes. In general, Kaspi.kz JSC has the potential for sustainable development and value generation, which positions the bank as an attractive investment opportunity. It is also worth considering that Kaspi.kz JSC leading position is due to the fact that the company enters the market with new products and services ahead of its competitors which is consistent with its business strategy of innovation and best-in-class execution (Kaspi.kz, 2022). This was the case with products such as the Kaspi Store, Kaspi Postomat and collaboration with its eGov. In turn, competitors like Halyk Bank JSC and ForteBank JSC historically begin to implement those services and products after Kaspi.kz JSC has gathered its stable and large customer share in the market, which makes it difficult for competitors to overtake position of Kaspi.kz JSC.

Analysis of financial reports

Based on Annual Reports of Kaspi.kz JSC (2021-2023), financial performance analysis performed by calculating liquidity, profitability and solvency ratios.

Liquidity. The current ratio has increased from 0,15 in 2022 to 0,17 in 2022. The sharp increase in the current assets by 60,6% from 2021 to 2022, while current liabilities had slower increased by 41,5%. Specifically, cash and cash equivalents have doubled. As current assets comprise 80-90,0% of cash and cash equivalents, it is important to take this balance under control for the purposes of liquidity. This increase in cash balance was helped by incentivizing customers to prepay and by effectively managing the consumer payment period (Kaspi.kz, 2020). From 2022 to 2023 cash balances have decreased in growth from 79,8% to 33,3% resulting in a slight decrease both in current and cash ratio. Overall, Kaspi.kz JSC is able to cover its short-term obligations, and the value of current assets and current ratio being close to zero may not be representative of assuming the existence of liquidity problems because of the nature of banking sector business and balance sheet structure differentiations from non-financial companies.

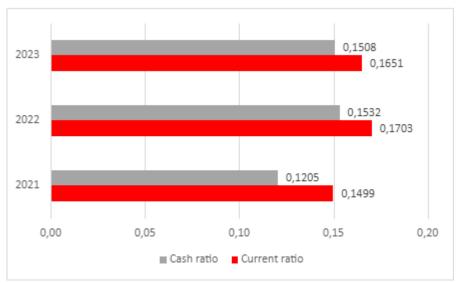
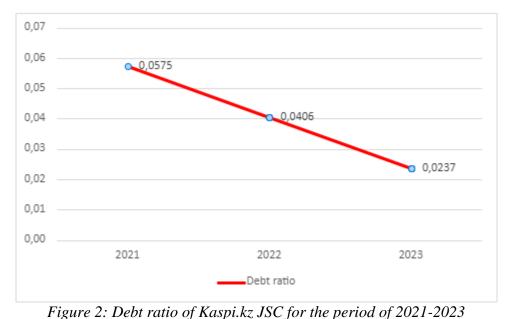


Figure 1: Current and cash ratios of Kaspi.kz JSC for the period of 2021-2023 **Gearing.** The debt ratio is a financial ratio that gives an indication of a company's leverage and

is estimated by dividing total debt by total assets. Over the three years, the figure below shows a decreasing trend of debt to assets ratio. As was stated in the annual report of Kaspi.kz JSC (2022), the company repaid its outstanding debt, lowering the debt and debt components in the balance sheet. Debt repaid is stated to be debt component of preference shares related to the subsidiary - Kaspi Bank. The debt ratio gradually decreased from 0,06 in 2021 to 0,02 in 2023 showing that the company reduced its reliance on debt financing.



Profitability. From Kaspi.kz JSC's letter to Shareholders (Kaspi.kz, 2023), profitability growth

was performed in various company's sectors. Specifically, revenues were increased in sectors like ecommerce and Kaspi Delivery. The company has also released new products like e-Grocery, Kaspi Travel, GovTech services and Kaspi Postomat from 2023 that are still in the process of developing and building market strength and profitability growth for the company. In other words, although the profitability of the company is noticed in their already established and developed products and services, the new launches of the company do not yet show a distinguishable return for the company and therefore the profitability in respect of expenses and equity may not be very outstanding in the consolidated financial statements. However, from the company's financial results, it can be understood that rather than concentrating on bringing high profitability the company is aiming to innovate and expand in different areas focusing on stable growth. In general, such a business model is common for fintech companies that focus on technological innovation while maintaining profitability to finance new projects. Therefore, Kaspi.kz JSC's new products and services launched in 2023 and 2024 may have a negative impact on consolidated earnings but are highly likely to be profitable in the following periods, as the letter to Shareholders highlights an increase in the use of these newly launched products. Return on Assets (ROA) profits from the use of its assets have increased from 0,121 in 2021 and 0,115 in 2022 to 0,124 in 2023. However, the results seem to be relatively similar. In 2022, ROA gives comparingly lower results due to a rapid increase in Assets from KZT 3 607 924 to KZT 5 121 647, whereas revenue has shown stable results. It is worth noting that Assets growth relates to an increase in financial assets (specifically, Bonds of Ministry of Finance, Discount Notes of NBRK) and gross loans to customers that were restructured from 2022 by extending repayment schedule. Overall, the company has been able to show stable results in its ability to generate returns on its assets over the three years.



Figure 3: ROA of Kaspi.kz JSC from 2021 to 2023

In the graph below it can be seen that from 2021 to 2023 the Return on Equity has a similar trend to ROA. ROE in 2021 has a higher value in comparison with later years due to the small amount of equity which increased by 63,6% in 2022. In 2022, equity has increased due to the Long-Term Incentive Plan (LTIP) program which allowed Kaspi.kz JSC share options to 110 senior executives and other key personnel. However, in 2023 ROE increased from 0,71 to 0,77 because of increase in net income from KZT 588 844 in 2022 to KZT 848 770 in 2023. These indicators show that the company is taking under control the use of equity in generating profit.



Figure 4: ROE of Kaspi.kz JSC from 2021 to 2023

Regarding the Gross Profit margin and Net Profit Margin of Kaspi.kz JSC, the decrease in ratios can be observed. The reason the number of graduates decreased is due to a high increase in the interest expenses, cost of goods and services and technology & product development expenses over the years. Interest expenses have risen, as was previously mentioned, due to growth in financial assets like Bonds of Ministry of Finance and Discount Notes of NBRK. Moreover, the cost of goods sold, and technology & product development have risen due to the implementation of new projects like Kaspi Postomat and e-grocery. For example, costs and operating expenses have risen by 62,0% from 2022 to 2023, whereas revenue increased only by 50,5% from 2022 to 2023.

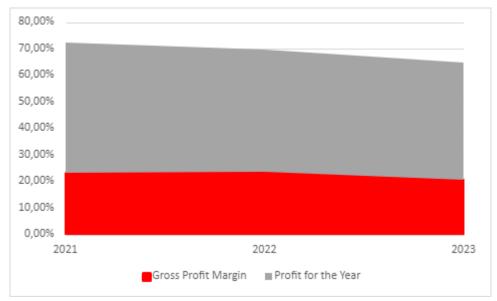


Figure 5: Gross Profit Margin and Net Profit Margin of Kaspi.kz JSC from 2021 to 2023 Valuation

Valuation of Kaspi.kz JSC was estimated using DCF method, where

Equity Value = PV of FCFE + PV of Terminal Value of Equity equation was used.

Moreover, Terminal Value of Equity was calculated using following formula:

Terminal Value = $FCFE_n / (r_e - g_{TV})$.

PV of Terminal Value of Equity. The calculation of historical performance was used in order to determine the forecast of the company's subsequent performance (over the next five years) and to ascertain the cash flow potential using following <u>assumptions</u>:

- 1. It was decided to use historical performance from 2021 because the reporting formats in 2020 and earlier years differed from the reporting format of recognition of revenues and expenses of the following years. This difference made finding accurate calculation results challenging.
- 2. Since the company has consistently demonstrated stable growth in profitability, the expected growth rate was calculated using the following formula (Zappa, 2023):

g = b * ROE where,

- b earnings retained from the company's profit for the year (Retained Earnings / Net Income); ROE – Return on Equity (Net Income / Total Equity).
- 3. The banking sector is affected by changes in real GDP and global headline inflation. Insofar as, according to IMF (2024a), in 2023 real GDP of Kazakhstan was 4,8%, and in 2024 is projected to be 3,1% with a sharp increase in 2025 to 5,7%. In turn, global headline inflation is expected to decrease from 5,8% in 2024 to 4,4% in 2025, with a further decline subsequently (IMF, 2024b). Thus, 4,0% was chosen as a Terminal Value growth rate in PV of Terminal Value of Equity calculation.
- 4. Upon Net Income projections, forecasts for the balance "Other gains (losses)" were not performed as this balance shows foreign exchange and currency gains (losses) that may be erroneous to predict.
- 5. The balance "Income tax" was assumed to be 20% of total Operating Income as per current tax rate.

Under above-mentioned assumptions, Net Income projections are following:

in millions of KZT	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Year ended 31 December 2024	Year ended 31 December 2025	Year ended 31 December 2026	Year ended 31 December 2027	Year ended 31 December 2028
REVENUE	884 822	1 270 592	1 913 490	2 195 143	2 518 763	2 890 602	3 317 844	3 808 746
Net fee revenue	467 493	679 782	987 967	1 135 174	1 304 315	1 498 658	1 721 958	1 978 530
Interest revenue	422 075	574 426	833 516	957 710	1 100 409	1 264 370	1 452 761	1 669 222
Retail revenue			68 807	79 059	90 839	104 374	119 926	137 795
Other gains (losses)	-4 746	16 384	23 200	23 200	23 200	23 200	23 200	23 200
COST OF REVENUE	-244862	-383611	-671836	-771939,564	-886958,559	-1019115,384	-1170963,577	-1345437,15
Interest expenses	-171 491	-278 676	-478 010	-549 233	-631 069	-725 099	-833 138	-957 276

Transaction expenses	-16 542	-22 188	-27 470	-31 563	-36 266	-41 670	-47 878	-55 012
Operating expenses	-56 829	-82 747	-166 356	-191 143	-219 623	-252 347	-289 947	-333 149
TOTAL NET REVENUE	639960	886981	1241654	1423203,646	1631804,189	1871486,213	2146880,859	2463309,307
Technology & product development	-44 388	-60 807	-88 657	-101 867	-117 045	-134 485	-154 523	-177 547
Sales & marketing	-8 702	-25 618	-21 891	-25 153	-28 901	-33 207	-38 154	-43 840
General & administrative expenses	-23 685	-24 772	-29 468	-33 859	-38 904	-44 700	-51 361	-59 013
Provision expenses	-34 383	-55 210	-79 634	-91 499	-105 133	-120 798	-138 797	-159 477
OPERATING INCOME	528802	720574	1022004	1170825,796	1341822,04	1538296,724	1764046,135	2023432,209
Income tax	-93 588	-131 730	-173 234	-439 029	-503 753	-578 120	-663 569	-761 749
NET INCOME	435 214	588 844	848 770	731 797	838 069	960 176	1 100 477	1 261 683

Figure 6: Net Income projections for the period of 2024-2028

Based on the previously mentioned assumptions, FCFE was calculated and projected for the next 5 years from 2024 to 2028. FCFE was calculated using the formula below:

FCFE = NI - CapEx - Change in Net Working Capital + Net borrowing

in millions of KZT	2024	2025	202	26	2027	2028
Net income		731 797	838 069	960 176	1 100 477	1 261 683
Less: Net Working Capital	-	-215 780	-5 834 691	-457 799	-476 111	-495 155
Less: Investment in Fixed Capital		88 478	115 021	149 528	194 386	252 702
Plus: New borrowing		-10 532	-9 847	-9 206	-8 607	-8 047
Free Cash Flow to the Equity		848 567	6 547 893	1 259 242	1 373 595	1 496 090

Figure 7: Estimation of FCFE for the period of 2024-2028

From the table above, it is worth noting that Net Working Capital was calculated by subtracting Current Assets, excluding Cash balances, and Current Liabilities, excluding Debt. According to financial statements of Kaspi.kz JSC "Due from Banks" as Current Assets, "Due to Banks" and "Customer Accounts" as Current Liabilities were applied in NWC calculation. In addition, Investment in Fixed Capital calculation was adjusted for Depreciation balances. New net borrowing was calculated by subtracting Ending balance of Long-term debt and Beginning balance of Long-term debt. The historical performance demonstrates that the Long-term debt is decreasing year by year, and projections were made in line with this trend.

Further, the cost of equity was used to discount the projected future cash flows. Cost of equity was calculated by using Capital Asset Pricing Model (CAPM) model. Capital Asset Pricing Model (CAPM) is the financial model that provides methodology to measure the expectation on the rate of

return on the capital investment using investment's Beta, Risk free rate and Equity risk premium (Pinto et al, 2020). The formula of CAPM is as follows:

$$\mathbf{E}(\mathbf{r}) = \mathbf{R}_{f} + \beta * (\mathbf{E}(\mathbf{R}_{m}) - \mathbf{E}(\mathbf{R}_{f}))$$
, where

R_f – Risk free rate;

 β – Beta value of company;

 $E(R_m)$ - $E(R_f)$ – Market risk premium;

10-year Government securities with a yield of 12.50% issued by the Ministry of Finance of the Republic of Kazakhstan were used as risk-free rate. Beta value published on Yahoo. Finance website of Kaspi.kz JSC was equal to 1,09 and was chosen for calculation provided below. The Market Equity Risk premium for Kazakhstan published in Damodaran website was chosen as Risk premium for CAPM model.

Beta (Yahoo.Finance)	1,09
Risk free rate (RoK 10-y GS)	12,150%
Market Equity risk premium (Damodaran, for RoK)	7,38%
Cost of equity	20,19%

Figure 8: Cost of equity calculation

$$E(r) = 12,50\% + 1,09*7,78\% = 20,19\%$$

By using the formula and rates described above the cost of equity of 20,19% was determined to further discounting of forecasted values.

Equity value was calculated by direct discounting of forecasted FCFE for the period of 2024-2028 at the required rate of return for equity shown above. Since Kaspi.kz JSC shows stable financial results for revenues and expenses and since the company's strategy is committed to stable growth as were analyzed above, Equity Value estimation was performed assuming continuation of this stable growth trend. Thus, the following formula was used to compute present value (2023) of forecasted FCFE:

Equity Value =
$$\sum_{t=1}^{n} \frac{FCFE_t}{(1+r)^t} + \frac{FCFE_{n+1} * (1+g)}{(r-g)}$$

This formula could be divided into three steps. Firstly, the projected FCFEs were discounted using the previously calculated Cost of Equity (Figure 8). Secondly, the Terminal Value was derived and discounted using the formula below:

Terminal Value =
$$\frac{FCFE_{n+1} * (1 + g)}{(r - g)}$$

Finally, all discounted values were summarized to calculate the price per share.

in millions KZT	2024	2025	2026	2027	2028	Terminal Value
Undiscounted FCFE	848 567	6 547 893	1 259 242	1 373 595	1 496 090	11 104 055
Discounted FCFE	587 380	3 770 952	603 358	547 572	496 200	3 682 820

Figure 9: Calculation of discounted FCFE for the period 2024-2028

To calculate the price per share further, as can be seen in figure 9, the total PV of FCFE equal to

KZT 9 688 282 375 536,94 (9 688 282 mln KZT) was indicated. Followingly, the amount was converted to USD 21 443 741 424,38 to compare the price per share with the issued IPO price per share. In 2023, the number of shares outstanding was equal to 189 333 465 as per information given by Yahoo.Finance. The PV of FCFE in USD amount was divided by the shares outstanding for intrinsic value per share computation. On the IPO date, 18 January 2024 (forex per NB RK, USD 1= KZT 451,8) intrinsic value appeared to be equal to USD 113,26 or KZT 51 170,47. On the day of the IPO the price per share was stated in Nasdaq as USD 92,5 or KZT 41 791,5 as can be seen in a table below:



Figure 10: Kaspi.kz JSC closing stock prices for the period of January and April of 2024, Nasdaq

Compared with the computed intrinsic value, 22,44% difference from the forecasted price is stated. As we could see in Figure 10, the calculated price lies in the band of closing price for 18 January 2024, USD 92,5 or KZT 41 791,5 and the closing price for 19 April 2024, USD 115,72 or KZT 51 773,13 (As per NB RK, USD 1 = KZT 447,4). It can be observed that at the IPO date the stock price was undervalued but later exceeded the intrinsic value looking at recent dates. Thus, upon listing on the US Stock Exchange, the intrinsic value of Kaspi.kz JSC was higher than the published stock price, proceeding with a buy recommendation. Thus, it can be concluded that the valuation proposed in this paper is consistent with the actual current market prices reported on Nasdaq, as the latest market prices converge with the calculated intrinsic value, which confirms the findings of this paper.

Conclusion

This work was designed to evaluate Kaspi.kz JSC. Kazakhstan's banking and financial services industry has been experiencing modernization and growth for a number of years, driven by improvements in the fintech industry, innovations in technology and changing consumer preferences. Kaspi.kz JSC has become one of the key players in this sector, holding a dominant position by providing a wide range of financial services through its Super App platform. Operational efficiency, the approach to data through machine learning and large data, platform integration and high brand awareness are the driving factors helping to strengthen the company's competitive position. Favorable trends, as well as stable growth prospects are revealed through the assessment of Kaspi.kz JSC's financial indicators, namely profitability, solvency and liquidity ratios. As a result, the valuation of Kaspi.kz JSC indicates that upon US listing its issuance price per share was undervalued, presenting an attractive investment opportunity for potential investors.

Limitations of the study. Although this study contributes to a better understanding of the company's performance through analysis and valuation, several limitations should be noted. Trends in the international and Kazakhstan economies may have a substantial impact on the company's performance and projections may not be appropriate in predicting the future financial performance of Kaspi.kz JSC due to limited information as listing in US Stock Exchange has happened relatively recently. For this reason, it is recommended to take into account the specifics and characteristics of the business environment of Kaspi.kz JSC to obtain more accurate assessment. In addition, analysis of the average growth of the company's balances may differ due to the selected period of values and changes in the balances of the financial statements in previous periods up to 2021.

Implications of a study. For further research, we recommend applying other research methods. In the future it is better to make more emphasis on qualitative research and on the exploration of the banking sphere in Kazakhstan, as well as to conduct interviews with people from this industry.

It should also be mentioned that for more profound and comprehensive analysis of Kaspi.kz JSC performance other valuation methods can be implemented. For example, when other domestic banks

start their listing on the US Stock Exchange, it could be possible to compare two domestic companies from similar industry using a Market-Based valuation method.

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