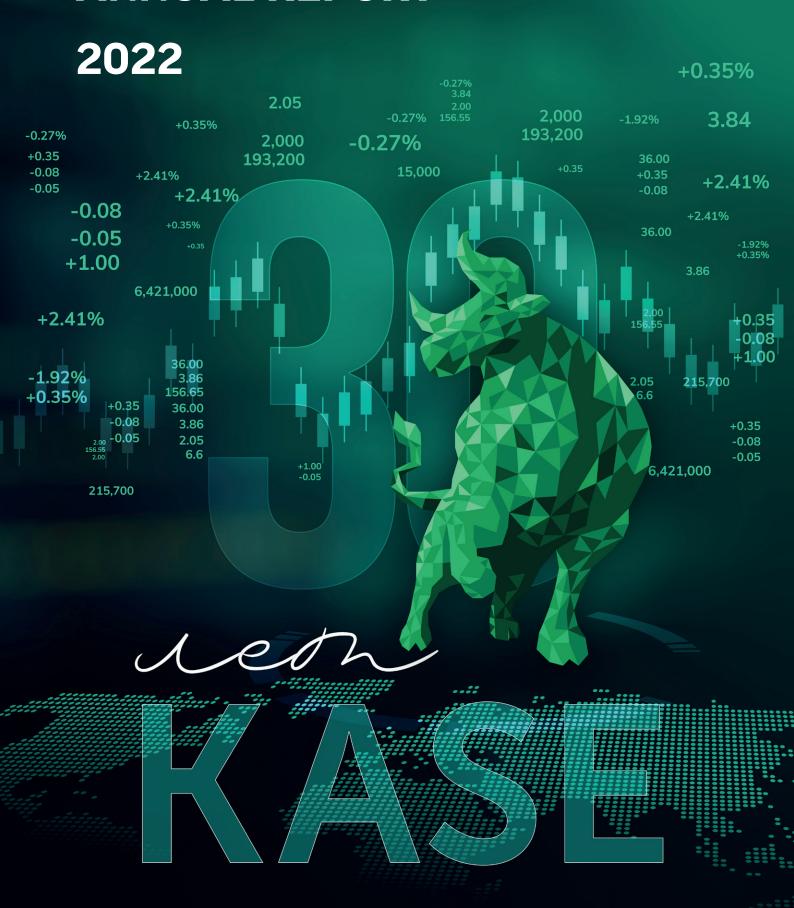
ANNUAL REPORT



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ADDRESS OF THE CHAIRPERSON OF THE BOARD OF DIRECTORS



Dear shareholders, clients and partners!

On behalf of the Board of Directors, I am glad to have an opportunity to welcome you on pages of the 2022 Annual Report of the Kazakhstan Stock Exchange.

Throughout 2022, the influence of 3 factors prevailed on global financial markets. These are persistently high inflation, tightening of monetary policy by the majority of central banks, and economic consequences caused by the escalation of the geopolitical situation.

Thanks to diversification of financial instruments and the risk management system of the central counterparty, the Exchange has demonstrated stability and professionalism during the implementation of stress scenarios. The Exchange consistently continues to enhance its position as a high-tech financial institution, retains its top position, and also firmly holds the title of the largest and most reliable infrastructure organization in Kazakhstan.

In 2022, the Exchange launched its 2022-2024 Development Strategy. Development directions of the Exchange are formulated given deep and sustainable trends of the global exchange market development, which include a focus on technology development, coverage of new asset classes, development and commercialization of Market Data, improvement of operational efficiency, as well as a special emphasis on ESG projects, including development of 'green' financing.

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Priority areas identified by the Exchange within the Strategy have a long-term and fundamental nature, and their relevance persists depending on geopolitical events and related market volatility.

In particular, the issue of increasing the liquidity on the exchange markets of KASE remains relevant, within which tasks are set to expand the SME segment of issuers on the stock market, to expand the product line, to build up the base of retail, foreign and institutional investors, and to develop ESG financing.

A separate emphasis should be made in this regard on that the Exchange continues its active efforts with the SME financing program using stock market instruments together with DAMU Development Institute, Agency for Regulation and Development of the Financial Market, as well as with the Ministry of National Economy of the Republic of Kazakhstan.

Currently, amendments have already been made to the 2030 SME Development Concept of the Republic of Kazakhstan and the 2021-2025 National Entrepreneurship Development Project, which, as extra measures of government support, envisage provision of bond guarantees. The Exchange has already prepared a list of potential issuers and thrashes over the possibility for some companies to enter the stock market.

Given the ongoing boom of retail investors on the stock market both globally and in Kazakhstan, the Exchange continues its efforts to attract individuals to the stock market.

In order to improve financial literacy, the Exchange has developed and introduced a separate program that provides for the placement of video tutorials, webinars on specific topics of interest for novice and operating investors, a training course on compiling an investment portfolio, and the arrangement of a contest for retail investors

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The Exchange consistently continues to enhance its position as a high-tech financial institution, retains its top position, and also firmly holds the title of the largest and most reliable infrastructure organization in the country.

Another relevant and important direction of the Exchange's development is further improvement of services of the central counterparty as a key infrastructure element of the exchange market. If at the initial stage we have confronted the task of launching CCP services on all markets, today, when the CCP successfully operates on the stock, money, currency and derivatives markets, we face the task of bringing its services in line with the best international practices and standards, that is detachment of its functionality into a separate subsidiary, building a risk management system, business processes, obtaining international recognition.

Moreover, as it was emphasized above, on the modern exchange market, the introduction of technological innovations is a global and continuous trend. Therefore, it is of particular importance for the Exchange to introduce advanced technological solutions that comply with the best world practices, both in provision of services to clients and in internal business processes. We plan to continue automating our services, bringing our information technology and information security in line with international standards.

Another principal direction of KASE's work is promotion of ESG standards in Kazakhstan. Competent and consistent management of ESG issues in today's environment is vital.

Last year, all necessary regulatory environment for 'green' financing was formed in Kazakhstan. Thus, a new Environmental Code was adopted, within which a Taxonomy of 'green' projects was introduced which is designed to improve the efficiency of using existing natural resources, mitigate a negative effect on the environment, improve energy efficiency, energy conservation, mitigate consequences of climate change and adapt to it. At the legislative level, concepts of 'green' financing are established, including 'green' bonds, 'green' loans and other financial instruments. Since this year, questions of issuing and verifying ESG bonds have been legally regulated.'

Thus far, as a result of these efforts we have eleven issues of such bonds which raised over 76.9 billion KZT.

These are ambitious tasks that will require support of professional participants of the exchange market and close cooperation with financial regulators. Last year, KASE demonstrated high professional potential, its ability to find effective and fruitful solutions in stressful situations. I would like to express my deep gratitude to the staff of the Kazakhstan Stock Exchange for their well-coordinated, highly professional work, and to the shareholders and clients for their trust, support and effective cooperation.

Aliya Moldabekova Chairperson of the Board of Directors

ADDRESS OF THE CHAIRPERSON OF THE MANAGEMENT BOARD



Dear shareholders, clients and partners!

Summing up and evaluating the past period, I can say with confidence that despite global challenges, volatility on foreign markets, increase in base rates by global regulators and acceleration of the inflation, the Kazakhstan Stock Exchange persistently and successfully implemented strategic tasks, ensured quality and uninterrupted provision of its services.

2022 was a year for Kazakhstan to adapt its markets to rapidly changing conditions amid tightening monetary policy, speeding inflation, as well as negative impacts on international markets.

In these conditions, the Exchange demonstrated stability and resilience to downturns, which was facilitated by the possibility of carrying out operations on the Exchange on four markets, a broad range of financial instruments, modern trading and clearing systems of the Exchange, the ability to trade in different modes, as well as the well-constructed risk management of the central counterparty.

2022 was a record year for the Exchange in terms of the total trading volume, the number of accounts opened by private investors, as well as the number of financial instruments available for trading. Thus, the total trading volume for 2022 made **261.6 trillion KZT**, showing a **50%** surge by **87.2** trillion KZT. As of January 1, 2023, trading lists contained 1,433 instruments, including 927 securities, 241 instruments in the T+

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As of January 01, 2023, the Central Securities Depository (CSD) had nearly 547 thousand personal accounts opened by 513 thousand individuals, as well as 413 thousand omnibus accounts, meanwhile as of January 1 last year - around 218 thousand personal accounts opened by individuals.

In 2022, the Exchange launched its Development Strategy for a new three-year period and set new goals and objectives. The Exchange not only retained its high stability as a financial institution of the country, but also entered a new technological stage of development. This allowed the Exchange to enhance its leading positions in the exchange space of Kazakhstan and Central Asia. KASE is recognized as the best stock exchange in Central Asia in 2022 according to the international CFI.co Awards 2022.

Within its 2022–2024 Development Strategy, the Exchange introduced new indices and indicators of the government securities market, implemented an updated browser version of IRIS Finance information product, surveillance system Scila Surveillance, as well as the ability to trade on the repo market with a new instrument – clearing participation certificates.

We consider the initial public offering of common shares of National Company KazMunayGas ISC to be inspiring. As a result of KMG's IPO, **137.5 billion KZT were raised** in KASE trading system, which is 89% of the total volume of satisfied investor applications within this IPO. Results of the KASE placement demonstrate that individuals accounted for 51.0 % of the participants, legal entities - 8.8%, institutional investors -40.2%.

Offering of KMG shares turned out to be a record in the Republic of Kazakhstan in terms of the amount of investments attracted from local investors and the number of participating investors. Thus, for example, within the 'People's IPO' program, 27.9 billion KZT were raised in 2012 when offering shares of KazTransOil JSC, and 13.1 billion KZT in 2014 for shares of KEGOC JSC.

Due to an intensive development of the range of exchangetraded instruments, as well as extensive efforts to raise public awareness, the segment of private investors grows on KASE. The Exchange actively works to improve financial literacy together with professional participants of the exchange market and mass media. We use various forms of work – speeches and publications in newspapers and social networks, TV programs, seminars, webinars on various aspects of the stock market. These efforts also go under the Global Money Week project, which is designed to improve financial literacy of school pupils and students. We also traditionally, since 2008, have been holding the Stock Exchange Simulator competition, which in 2022 brought together 4,789 students from more than 100 universities in Kazakhstan.

Another principal direction of KASE's efforts is promotion of ESG standards in Kazakhstan. During 2022, the Exchange created an ESG infrastructure, determined minimum listing fees, signed agreements with a number of companies to verify bonds for compliance with ESG criteria. In 2022, KEGOC raised 16.1 billion KZT through the placement of 15-year green bonds with a margin of 3.00% to the TONIA interest rate. The Asian Development Bank attracted 3.4 billion KZT through the placement of 2-year 'green' bonds at 14.50% per annum and 14.0 billion KZT through the placement of 9-year social bonds at 11.00% per annum.

During recent years, the green finance market has expanded several times and become more complex due to a variety of financing instruments and purposes. Therefore, market participants highlight the need for extra clarifications with respect to ESG practices on the capital market, as well as international sustainable development standards. We see that companies still need time to adapt and switch to such standards. We will continue this perspective work. We also scrutinize issues of creating new products and services in the field of sustainable development and their application on the financial market of Kazakhstan, as well as the possibility of introducing a 'green indicator' that would reflect the level of compliance of companies with ESG criteria. We believe that emergence of the Sustainability Index will encourage more companies to disclose information under the ESG criteria.

On November 16, KASE held an international conference 'ESG a new paradigm of development of the financial market' within the framework of the X Congress of Kazakhstan Financiers. The Conference, which is a discussion platform for financial market experts in Kazakhstan and countries of the former USSR and beyond, raised an issue of implementation of ESG principles: global trends in financing sustainable development projects, development of regulation, corporate ESG strategies and business transformation, as well as best practices in the field of disclosure of ESG information, available green finance tools. ESG projects in Central Asia and Kazakhstan and other relevant topics. Moreover, the Exchange held a two-day training session with participation of experts covering the structure of ESG bond issues.

In 2023–2024, we plan to proactively develop technological solutions of access to market, exchange services and exchange information that will allow investors to maintain their portfolios, test investment hypotheses, and try their strength as players on the exchange market.

Introduction of advanced technological solutions subject to the best global practices has particular importance for the Exchange as one of the key infrastructure elements of the financial market. For this reason, we plan to continue automating our services, to bring our information technology and information security in line with international standards.

This is a serious claim for the future. And, expressing my deep gratitude to our colleagues, partners, shareholders for our wellcoordinated and effective work in 2022. I am sure that we will cope with the tasks set. I believe that our stable partnership, vast experience, including anti-crisis experience, will serve as a guarantee of further progress in development of not only the Kazakhstan Stock Exchange, but the entire stock market of the

Alina Aldambergen

Chairperson of the Management Board

MAIN EVENTS





The Exchange demonstrated stability and resilience to downturns, which was facilitated by the possibility of carrying out operations at the Exchange on four markets, a broad range of financial instruments, modern trading and clearing systems of the Exchange, the ability to trade in different modes as well as the built-in risk management of the central counterparty.



On January 29, 2022, the Exchange held a webinar for novice retail investors 'Fundamentals of Investment Literacy.' During the webinar, Exchange employees talked about what you need to know before investing, about basic investment concepts that investors need to know as well as about the risks of investment fraud.



On February 10, 2022, a closing ceremony of the 13th annual KASE contest 'Exchange Simulator' was held. As a result of the contest, 13 winners from eight universities were announced. Total volume of trading within the project exceeded 5.1 billion KZT. KASE is implementing the Stock Exchange Simulator project within its efforts to improve financial literacy among students.



On March 4, 2022, the Exchange, together with the IFC, held the annual Ring the Bell for Gender Equality trading opening ceremony, which included Gender Inclusion and Sustainable Development conference. Opening ceremony of the Ring the Bell for Gender Equality trading is intended to draw attention of the global community to prospects of development of gender inclusiveness and the support of gender equality in the context of sustainable development policies, ESG principles and green finance.

On March 15, 2022, KASE received the Best Stock Exchange Central Asia 2022 award according to the international CFI. co Awards 2022. The award was established by the British edition of Capital Finance International, which presents news in finance, economics and business. In its awards program, CFI.co annually picks companies and individuals that offer the highest quality services and have the greatest impact on development of the industry. Geography of the international award ranges from countries of Europe, North and Latin America, Africa, Southeast Asia. to the Middle East, and covers such areas as IT technologies, ESG, innovations and more.

Starting from March 09, 2022, the Exchange calculates and posts a series of indices of the government securities market of the Republic of Kazakhstan (GS). GS indices are an extra tool to track yield and prices of Kazakhstan's risk-free securities over different periods.



On April 11, 2022, KASE and Ernst & Young signed a memorandum of cooperation intended to develop and implement principles of sustainable development on the stock market of Kazakhstan. Cooperation is designed to achieve shared goals and create initiatives. These include introduction of a methodology for disclosure of non-financial information, stimulation of issue of sustainable development bonds (green, social and other) by Kazakhstan's issuers, formulation of requirements for listing sustainable development bonds and their verification, training and provision of an advice on implementation standards in order to attract financing through the issue of sustainable development bonds, interaction on issues related to information disclosure while they are in the KASE official list.

MAY

On May 26, 2022, the Exchange held the webinar 'Venture capital market in 2021: \$60+ million investments.' The webinar covered such topics as key events and figures in the startup ecosystem of the country, as well as forecasts for the current year.

On May 20, 2022, the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, together with KASE and international financial organizations, held an online conference that covered the possibilities of attracting 'green' financing by Kazakhstan-based issuers. Representatives of international organizations shared information about their initiatives in the field of development of sustainable financing, as well as the possibilities of their involvement as investors in projects of Kazakhstan-based issuers.



On June 21-22, 2022, a 2-day training was held for Kazakhstan-based issuers. The training covered the issuance of environmental, social and sustainable bonds (Deep Dive Green, Social, and Sustainability (GSS) Bonds Issuance Process). The event took place within the Agreement on cooperation in joint development of ESG standards and the development of 'green' financing in Kazakhstan, signed in April 2022 between the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market and the IFC.



Since June 20, 2022, updates have been introduced to ASTS+TCS, which enable trading by subscription. Advantages of these updates include the ability to choose subscription with or without the use of CCP services with settlements in KZT or USD, as well as to submit orders through the trading system and own

systems of the trading participant with the use of the standard protocol for connecting to the Exchange's TS ASTS Bridge.

In July 2022, the surveillance system Scila Surveillance was introduced. Scila AB is a leading independent market surveillance, anti-money laundering and risk management technology provider that offers tools to detect abuse on financial markets.

On July 11, 2022, KASE launched a browser-based version of IRIS Finance information product. The following features and functions are available in the new version. These are live trading data broadcast; a glass of stock quotes updated in real time; historical information about orders and deals on KASE; stock indices and indicators with handy visualization.



On August 16, 2022, KASE and a delegation of representatives of the financial sector of the Republic of Turkmenistan led by Nurgeldi Meredov, CEO of the Ashgabat Stock Exchange, held a series of working meetings to get acquainted with the detailed information on organization of trading on various markets, clearing, listing, etc.

On August 22, 2022, KASE launched a new version of the ASTS+ trading and clearing system, which provides for the possibility of making repo transactions with a central counterparty (CCP) with clearing participation certificates. This product offered new opportunities for Exchange participants and their clients. On August 24-26, 2022, KASE made a working visit to the Istanbul Stock Exchange Borsa Istanbul (Turkey) where it got acquainted with the capital market and activities of the Exchange.



From September 18 to September 22, 2022, KASE hosted a 'FEAS on-site training' for FEAS members. Purpose of the training was to exchange experience in organizing the work on stock markets between exchange specialists.

On September 7-8, 2022, a delegation of Tehran Stock Exchange Technology Management Co (TSETMC) visited KASE. This visit pursued exchange of information on technological solutions of the Exchanges.

From September 16, 2022, representatives of Samruk-Kazyna Fund, NC KazMunayGas JSC, Kazpost JSC, Kazakhstan's stock exchanges KASE and AIX, as well as brokerage and dealer organizations launched the Non-deal roadshow – an information and explanatory campaign for IPO.



OCTOBER

On October 4, 2022, under the auspices of the International Organization of Securities Commissions, the International Investor Week was held worldwide. KASE, joining this information campaign, conducted a number of projects in support of financial literacy.

On October 7, 2022, in support of the World Investor Week 2022 annual program of the World Federation of Stock Exchanges, KASE held a fair of Kazakhstan's brokers 'KASE FEST.'

On October 10-13, 2022, KASE made an official visit to Dubai (UAE) and Doha (Qatar) to exchange experience and information on activities of the Exchanges.

On October 16-19, 2022, KASE took part in the 15th World Financial Information Conference (WFIC) organized by The Financial Information Services Division (FISD) in Prague (Czech Republic).



NOVEMBER

On November 15, 2022, Alina Aldambergen, Chairperson of KASE Management Board, spoke at the X Congress of Kazakhstan Financiers. The event was arranged by the National Bank of the Republic of Kazakhstan and the Agency for Regulation and Development of the Financial Market.

On November 16, 2022, KASE held an international conference 'ESG – a new paradigm of development of the financial market' within the X Congress of Kazakhstan Financiers. The Conference, which was a discussion platform for financial market experts in Kazakhstan and countries of the former USSR and beyond, raised an issue of implementation of ESG principles. These principles included global trends in financing sustainable development projects, development of regulation, corporate ESG strategies and business transformation, as well as the best practices in disclosure of ESG information, available green finance tools, ESG projects in Central Asia and Kazakhstan and other relevant topics.

On November 17, 2022, a delegation of the Baku Stock Exchange (BSE) and investment companies being BSE members visited KASE. The purpose of the visit was to get acquainted with activities of the Kazakhstan Stock Exchange.



DECEMBER

On December 8, an official opening ceremony of trading in shares of NC KazMunayGas JSC took place. Within the event, a teleconference was held between the KASE and AIX exchanges, during which participants of the ceremony started trading at the same time.

On December 12-13, meetings of the General Assembly, Council and Working Committee of FEAS were held at the site of the Egyptian Exchange in Cairo (Egypt).

MISSION, VISION AND OBJECTIVE



Mission

To facilitate the economic growth of the Republic of Kazakhstan through:

- » nprovision of a wide range of instruments for domestic issuers to attract financing;
- » provision of a platform for redistribution of liquidity in the financial system;
- **»** provision of a transparent investment environment for local and foreign investors.

Vision

KASE is a high-tech trading platform providing a full range of exchange services, available to domestic issuers and open to local and international investors.

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Objective

To achieve and maintain the status of the leading stock exchange in the region and to increase the value of KASE for its stakeholders.

ABOUT EXCHANGE

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The Exchange is a full member of international exchange associations such as WFE, FEAS and MAE CIS, which confirms compliance of key aspects of activities of the Kazakhstan's trading platform with international standards and best world practice.

The Kazakhstan Stock Exchange (KASE or Exchange) was established in 1993 two days after the introduction of the national currency, tenge. The exchange has evolved for 29 years from voice trading to a full-fledged modern well-established trading, clearing and settlement infrastructure that meets international standards. Currently, the Exchange has a diversified business, having been built for 29 years, thanks to the operation of four main markets: foreign exchange, stock (securities), money (repo and swap transactions) and derivatives market. Versatility of the KASE platform gives trading participants and their clients the opportunity to actively conduct transactions on several markets with various types of financial instruments, which allows them to provide the best conditions for liquidity management and to implement investment strategies.

The Exchange is a full member of international exchange associations such as WFE, FEAS and MAE CIS, which confirms compliance of key aspects of activities of the Kazakhstan's trading platform with international standards and the best world practice.

The Exchange carries out the following types of activities based on licenses from the authorized body for regulation and development of the financial market:

- activities to arrange trading with securities and other financial instruments (License No. 4.2.3/1 dated July 19, 2012);
- clearing activities for transactions with financial instruments on the securities market (License No. 4.2.3/1 dated July 19, 2012);
- **3.** conduct of banking operations in national and foreign currencies (License No. 4.3.8 dated January 30, 2020).

The Exchange provides a full range of services: membership, listing, trading and post-trading services (clearing, settlements, CCP), distribution of market information, as well as calculation and maintenance of indices and indicators.

As of January 01, 2023, members of the Exchange included 52 professional participants. These are all licensed banks and brokerage organizations of the Republic of Kazakhstan, four foreign participants, two international financial organizations.

The official list of the Exchange is divided into several platforms: 'Main', 'Alternative', 'Mixed' and 'Private placement.'

The 'Main' platform is intended for large companies with a history of development, the 'Alternative' platform is designed for companies with small and medium capitalization and it has more simplified requirements compared to the 'Main' platform. List division in this way enables both large companies and small and medium-sized businesses to raise funds on the stock market.

The 'Mixed' platform trades in such financial instruments as Islamic securities, derivatives, as well as government securities and securities of international financial organizations, which can be denominated both in the national and foreign currencies.

The 'Private Placement' platform was created in 2021 and is intended for listing for non-government securities subject to private placement. Private placement is a non-public placement of non-government bonds among a limited number of qualified investors, terms and conditions for issuance of such securities are determined in a private memorandum.

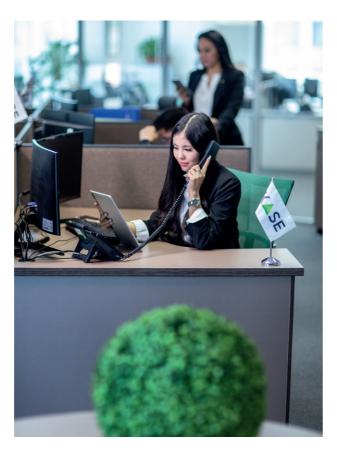
KASE Global sector of the 'Mixed' platform, created in 2021, is intended for trading in the most liquid securities of foreign issuers. Only shares that had passed the listing on the main platform of the New York Stock Exchange — NYSE Equity and the platform of the NASDAQ exchange — NASDAQ Global Select, as well as Euronext Paris and Euronext Amsterdam and only shares that are included in the Standard & Poor's 500, NASDAQ 100 and Euronext 100 are eligible to be traded within the new sector.

The Exchange on its own calculates and accompanies a number of stock and money market indicators. The stock market of Kazakhstan is represented by indices and indicators reflecting the stock and bond market of the Exchange. To characterize the stock market, the Exchange calculates the main indicator – the KASE Index, which currently de facto acts as a main indicator of the national stock market. Moreover, the Exchange calculates and publishes the total capitalization of the share market – the total market value of all companies shares of which are admitted to circulation on KASE.

The KASE index reflects the change of the total market value of the most liquid shares of the Exchange's official list issued by the largest and financially stable resident companies of the Republic of Kazakhstan.

In order to analyze the bond market, the Exchange has determined a number of indices, one for the main market KASE_BM* and another one for the alternative market KASE_BA*, which demonstrate a change in 'net' prices and yield indicators of the most liquid issues of bonds of Kazakhstan-based companies. In the first quarter of this year, the Exchange plans to additionally introduce a number of indicators of the government securities market of the Republic of Kazakhstan.

The government securities market is represented by a series of indices and indicators that reflect 'clean' and 'dirty' price indices, as well as yield indicators for different maturity periods.



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Indices and indicators reflecting the repo market are represented by the following indicators: TONIA – the main risk-free benchmark on the money market, moreover, the repo market is additionally represented by such indicators as TRION, TWINA, TCI, TCR_1m, TCR_3m, TCR_6m. For the currency swap market, the Exchange calculates such indicators as SWAP-1D, SWAP-2D, as well as the composite repo and currency swap market index – MM Index.

KASE provides a broad range of information products, including real-time exchange information, archival and reference data.

Key advantages of KASE are:



universality of the market, since business diversification helps sustainably pass through fluctuations in the economic cycle, at different phases of which market participants demand different classes of financial instruments;



KASE ranks the second among the CIS stock exchanges in terms of trading volume and it ranks the third in terms of equity market capitalization, third among FEAS exchanges in equity market capitalization, 40th in equity market capitalization among WFE member exchanges;



quantitative parameters of trading on KASE are used when shares are included in the FTSE and MSCI emerging market share indices, as well as for rating the share market of Kazakhstan;



KASE acts as a source of market data for foreign investors and interacts with key providers of market information on international financial markets: Bloomberg, Refinitiv and others;



KASE has modern technologies, a well-established trading and settlement infrastructure, provides CCP services, has a full-fledged T + 2 mode, repo market;



availability of a T+2 trading and clearing cycle, which facilitates an access to the market for foreign investors;



availability of its own correspondent network to make money settlements in exchange markets;



KASE Index is a key indicator of the Kazakhstan stock market for the international community;



the possibility of expanding the geography of investors through participation in activities of international exchange associations, being a key source of information on the capital market of Kazakhstan;



KASE members are all banks and broker-dealer organizations of Kazakhstan.

KEY FACTS, TRENDS ON THE SECURITIES MARKET



Total trading volume for 2022 made 261.6 trillion KZT, a surge of 50.0 % by 87.2 trillion KZT.

+50% 261,6 trillion KZT

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231,8 trillion +51,9%

Strong growth of the trading volume was reported on the money market, at the end of the year it soared by 51.9 % to 231.8 trillion KZT. On the foreign exchange market, the expansion was 33.6 % reaching 20.8 trillion KZT.

6 trillion +67,9%

On the stock market, a solid growth was reported in the government securities sector, a 67.9 % increase compared to 2021 reaching **6.0 trillion KZT**. Volume of secondary trading in the government securities sector rose 2.1 times, reaching 1.9 trillion KZT. The government debt at par value, being traded on KASE, reached **21.5 trillion KZT**, up by 20.9 % in relation to 2021. Non-residents accounted for 6.9 % in the gross turnover of trades on the secondary market.

2,5 trillion +25,6%

The volume of corporate debt in circulation in 2022 shrank by **6.3** % to **14.4 trillion KZT**. The total volume of trading in corporate bonds for 2022 stood at 2.5 trillion KZT, an increase of 508.1 billion KZT or by 25.6 %. The volume of trading on the secondary bond market compared to 2021 went up by 19.1 % or 159.6 billion KZT to 996.7 billion KZT.

In 2022, securities of 23 new issuers passed the listing procedure: four in the shares sector, eight in the KASE Global sector, ten in the corporate bonds sector and one in the investment funds securities sector.

denominations

As of January 01, 2023, KASE trading lists contained non-government securities of 584 names of 230 issuers.

personal

As of January 01, 2023, Central Securities Depository (CSD) had about **547 thousand personal accounts** opened by 513 thousand individuals, while as of January o1 last year – around 218 thousand personal accounts opened by individuals.

accounts

In 2022, individuals opened more than 340 thousand accounts, where nearly 14 thousand accounts made at least one transaction after opening the account, while during 2021 individuals opened a little more than 87 thousand accounts in CSD.

individual participant

In 2022, individuals opened over

413 thousand individual participant codes recorded through omnibus accounts, while more than 78 thousand of them made at least one transaction during 2022.

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STRATEGIC REPORT



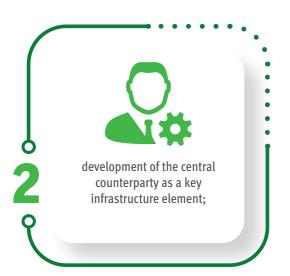


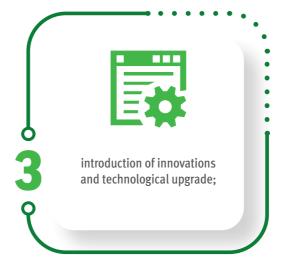
In 2022, the Exchange launched its 2022-2024 Development Strategy, which was developed as a continuation and promotion of the initiatives laid down in the previous three-year period. When developing the strategy, KASE was guided by global and local macroeconomic trends and the best international practices in development of stock exchanges.

Implementation of the 2022–2024 Development Strategy

The 2022-2024 KASE Development Strategy defines four key areas:









Strategic direction 1.

Increase of liquidity on exchange markets

This strategic area is divided into several main directions: to expand the range of financial instruments and services, to establish trading and clearing links with partner exchanges, to expand the range of issuers and investors.

In order to attract local and foreign investors, it is planned to introduce new instruments: foreign currency repo, ESG instruments, clearing participation certificates, ETF for KASE instruments, activation of short sales and securities lending, introduction of trading and clearing links.

The Exchange continues to work on creating conditions for small and medium-sized businesses to enter the stock market. With support of the Ministry of National Economy of the Republic of Kazakhstan, amendments were introduced to the 2021-2025 National Project for Development of Entrepreneurship, which provides for subsidizing the coupon rate and bond guarantees (optional). In order to attract issuers under this program in 2022, meetings were held with more than 70 potential issuers.

Another important focus of development is made to attract retail investors through the implementation of sponsored market-making programs, financial literacy programs, and the development of a mobile application. Moreover, the possibility of introducing new digital products based on the blockchain technology is being explored.

The work is underway to further develop the foreign securities sector of KASE Global by increasing the range of instruments, improving trading and settlement conditions in this sector.

The Exchange as one of conductors of the ESG policy on the corporate market of Kazakhstan, consistently promotes ESG standards among its companies, and also creates opportunities to finance green, social projects on its site. Works are continued to create new products and services in the field of responsible investment and their application on the financial market of Kazakhstan. Events are held among issuers and potential issuers of the Exchange in order to promote sustainable development issues and to develop interest in ESG tools.



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Introduction of indices and indicators of the government securities market

Since March 09, 2022, KASE has started calculating and releasing a series of indices of the government securities market of the Republic of Kazakhstan. GS indices are an extra tool to track the yield and prices of Kazakhstan's risk-free securities over different periods.

When determining the methodology of new GS indices, the Exchange took into account a generally accepted practice of determining bond indices of the European Bond Commission and the European Federation of Financial Analysts Societies.

Indices values are calculated once a day after trading on the government securities market is over and are posted on the official Internet resource of the Exchange. Non-indexed government securities of the Republic of Kazakhstan, which are included in the KASE official list, are used as a representative list for these indices. Government securities have a fixed coupon rate and are denominated in KZT. The representative list of indices is segmented by maturity. That is, less than one year (s), from one year to five years (m), from five years and more (l).

Launch of an updated browser version of the IRIS Finance information product

In general, the importance of information on a rapidly changing market can hardly be overestimated, and the speed of its updating, completeness and accessibility are one of the most important factors for successful activity of stock market participants. Such systematic work on information support of stock market participants is carried out by the Exchange.

By now, KASE has not only introduced and improved a full range of standard information products provided by world exchanges, but also created and has been developing its own data distribution channels for the convenience of retail and corporate consumers using KASE information in their activities.

Within the upgrade of its information products, in 2022 the Exchange launched an updated version of the IRIS Finance information product. It took into account relevant UI/UX solutions designed for a user-friendly interface and also added new functions that allow to quickly receive and interpret market information, including the real-time glass of stock quotes.



Implementation of clearing participation certificates

On August 22, 2022, the Exchange launched a brand new product on the stock market – clearing participation certificates. It has no comparable counterparts previously created in Kazakhstan. This product provides new opportunities for Exchange participants and their clients. Clearing Participation Certificates (CPCs) are non-issue collateralized perpetual securities issued by the Exchange on bail (of securities, money) – a property pool provided by trading participants to the Exchange as the central counterparty for repo transactions with CPCs. Issued CPCs are transferred to bidders which had provided assets to the property pool. Money in KZT and USD, as well as securities, can be used as contributions to the property pool of CPC issue. A current list of assets allowed to be included in the property pool is posted daily on the KASE Internet resource. CPC can be used by its holder as a collateral for repo transactions, as well as a collateral for exchange transactions with other securities.

Use of the CPC as a subject of repo transactions provides trading participants with the following benefits:

- >> the ability to effectively manage the collateral and replace the property previously entered into the pool before expiration of the repo transaction;
- when making repo transactions with CPCs, property pool is kept in a separate section on account of the trading participant with the Central Securities Depository, and dividend and coupon payments on its securities are received directly by the trading participant;
- >> trading participants do not need to evaluate on their own the collateral for repo transactions with CPC, the collateral is evaluated by the Exchange as the central counterparty.

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In the history of the stock market of Kazakhstan, initial public offering of shares of National Company KazMunayGas JSC is the largest local IPO with listing only on stock exchanges of Kazakhstan. Key success factor of this IPO was a large-scale work conducted by Samruk-Kazyna National Wellbeing Fund JSC, Kazakhstan Stock Exchange, brokerage organizations, as well as the development of digital technologies in the financial sector, which significantly facilitated submission of applications by individuals.

Appearance of shares of a larger number of national companies in free float on the exchange market is intended to significantly boost activities on the local stock market. The market has an opportunity to provide citizens of Kazakhstan with a broader range of financial instruments for investment.

The process of preparing the Exchange for the IPO included a tremendous job to determine the awareness-raising program for the population. In particular, the Exchange conducted seven broadcasts of KASE Talks with brokerage organizations, two webinars: 'PRO IPO: what you need to know and how to participate' in the Russian and Kazakh languages, a comprehensive training program 'My Portfolio' on KASE, which includes six topics, as well as open days for retail investors were held in the cities of Almaty and Astana on the basis of universities — KASE FEST, which was attended by more than 2,000 people.

In order to improve financial literacy, the Exchange created a section on the Exchange website dedicated to IPO, where investors could get acquainted with such topics as how to make money on an IPO, how the IPO process goes, how to participate in an IPO. Moreover, this section contains podcasts on relevant topics.

For the successful coverage of KMG's IPO among the population of Kazakhstan, NWF Samruk-Kazyna JSC, together with KASE and AIX, as well as brokerage organizations conducted a large-scale Non-deal roadshow — an information and explanatory campaign on IPO about mechanisms and risks of investing on the securities market. 17 cities, 3 cities of republican status, 38 single-industry towns and settlements were visited in terms of the Non-deal roadshow, over 100 thousand participants participated in it.

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From February 03, 2023, common shares of National Company KazMunayGas JSC were included in the representative list of shares for calculating the KASE Index

Since July 01, 2022, the Exchange put in force amendments to its by-laws which enabled trading by subscription in ASTS+ TCS. The advantage is the ability to choose to conduct a subscription with or without using CCP services with settlements in KZT or USD. Along with that, in case of conducting a subscription with the CCP, trades are added to the general clearing and settled on a single position with other trades. Updates in the ASTS+ TCS allow placing orders through the trading system and own systems of the trading participant using the standard protocol for connecting to the ASTS Bridge TS.

Investing requires a competent approach, and KASE provides all necessary tools to this end, a well-formed and well-built infrastructure with modern technologies for the independent order book formation, which allows covering a larger number of investors.

Thus, according to results of the IPO of common shares of National Company KazMunayGas JSC, 137.5 billion KZT were raised through the subscription to them in the KASE trading system, which is 89% of the total volume of satisfied investor applications within this IPO. During the subscription to common shares KMG received 121,770 bids from investors on KASE for a total of 141.8 billion KZT. The selling shareholder represented by NWF Samruk-Kazyna JSC decided to satisfy 121,770 bids on KASE for a total volume of 137.5 billion KZT. At the same time, all active applications submitted by individuals and legal entities were satisfied in full, applications of institutional investors were partially satisfied. As a result of the placement, accounts of individuals received securities in the amount of 70.1 billion KZT

(51.0% of the placement volume on KASE), of legal entities – in the amount of 12.1 billion KZT (8.8% of the placement volume), the volume of satisfied applications submitted by institutional investors amounted to 55.3 billion KZT (40.2% of the placement volume).

Placement of KMG shares became a record in Kazakhstan in terms of the amount of investments raised from local investors and the number of participating investors. Thus, for example, within the 'People's IPO' program, when shares of KazTransOil JSC were placed in 2012, the volume of attraction amounted to 27.9 billion KZT, in 2014 shares of KEGOC JSC made 13.1 billion KZT.

On December o8, 2022, an official opening ceremony of trading in KMG shares on the secondary market was held concurrently on the KASE and AIX platforms in the mode of mutual broadcasting. The ceremony was attended by the Prime Minister of the Republic of Kazakhstan Alikhan Smailov, Chairman of Management Board of National Wealth Fund Samruk-Kazyna JSC Almasadam Satkaliyev, AIFC Governor Kairat Kelimbetov, heads of KASE, AIX and KMG, as well as representatives of regulatory authorities and financial organizations.

KMG's IPO once again confirmed the status of KASE, able to allocate the maximum number of investors and investments and to offer trading participants modern trading methods – only in the KASE trading system, transactions within the IPO were guaranteed by the KASE central counterparty.

Since the opening of secondary trading, investors have received a full range of KASE instruments for investing in KMG securities – the opportunity to make transactions with deferred settlements and partial collateral with a guarantee of execution from the central counterparty and the opportunity to use these securities as a high-quality collateral for transactions with other instruments, the access to the repo market and collateral pool of clearing participation certificates.

Since February 03, 2023, common shares of National Company KazMunayGas JSC were included in the representative list of shares for calculating the KASE Index

Trading using omnibus accounts

The possibility of trading with the use of omnibus accounts became available to market participants in July 2021. By late 2022, out of **963,000 accounts** opened in the accounting system of the central depository, **413,000 (42.9 %)** were omnibus accounts.

Booming popularity of omnibus accounts is attributed to the fact that the work with them makes settlements and accounting for securities for the Central Depository's depositors cheaper, easier and faster, and also stimulates exchange trading of retail investors, increasing their number.

In 2022, gross trading volume of the secondary market with the use of omnibus accounts on the Kazakhstan Stock Exchange stood at **143.0 billion KZT**. KASE members in the stock category, in particular Freedom Finance Global PLC, Halyk Savings Bank of Kazakhstan JSC, Bank CenterCredit JSC and First Heartland Jusan Invest JSC actively use trading on the stock market using omnibus accounts. Overall, more than **157,000 transactions** were made from omnibus accounts of these participants using 31,000 unique codes.

In terms of securities, debt securities accounted for a major volume of trades using omnibus accounts – **79.8 billion KZT** or **55.8** % of the total volume of trades. On the stock market, the volume of trades using omnibus accounts amounted to **62.6 billion KZT**, in the **KASE Global sector – 0.4 billion KZT**, on the government securities market – **0.1 billion KZT**. Depositary receipts, valuable investment funds and international financial organizations also accounted for minor volumes.



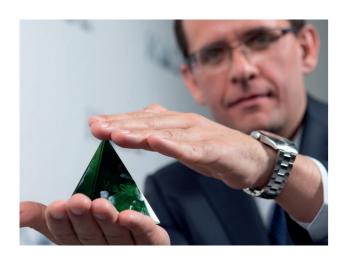
Platform for private placements of bonds

Since July 01, 2021, the Exchange has also introduced a new product for bond issuers — private placement. For private placement, a separate platform was created in the structure of the official list of the Exchange. Private placement is a non-public placement of non-government bonds among a limited number of qualified investors. Conditions for issue of such securities are determined by a private memorandum, after the registration of which the issuer can go through the listing procedure on KASE.

Features of listing and placement of securities, admitted to the 'Private Placement' platform of the KASE official list, are minimum listing requirements for securities and their issuers, a reduced package of documents, a shortened listing procedure period (seven working days), reduced listing fees, as well as no necessity for availability of a financial advisor.

The placement of bonds in private placement will be carried out by subscription, meanwhile, the maximum number of investors must not exceed 50, a minimum order volume is 100,000 KZT.

In 2022, 14 issues of 11 issuers were included in the Private Placement platform. The total volume of bonds issued on this site as of January 01, 2023 was 1.5 trillion KZT, of which 1.4 trillion KZT was placed.



KASE Global

On November 15, 2021, in order to expand the range of financial instruments available for trading, the Exchange launched a new KASE Global sector, in which the most liquid foreign shares floating on foreign exchanges are eligible to be traded.

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At the first stage, shares and ETFs listed on the main platform of the New York Stock Exchange — NYSE Equity, and the platform of the NASDAQ exchange — NASDAQ Global Select, and/or included in the Standard & Poor's 500 and NASDAQ 100 stock indices were admitted to trading in the new sector. At the second stage, shares and ETFs that have been listed on the Euronext Paris, Euronext Amsterdam or are in the list of Euronext 100 indices are admitted to trading in the new sector.

Trades in the KASE Global sector are held from 11:20 a.m. to 10:00 p.m. (Nur-Sultan time) in USD on T+2 terms with CCP participation. As market liquidity goes up, an increase in trading times will be considered. The listing procedure on KASE Global was simplified, and tariffs for inclusion and maintenance of securities in the lists for issuers of the new sector were canceled. In the new sector, trade participants are given an opportunity to make short sales and repo transactions. Short sales and repo transactions will be suspended for the duration of the dividend payment to avoid tax consequences on the transfer of dividends.

The first full-fledged year of operation of the KASE GLOBAL foreign shares sector coincided with one of the largest corrections in the history of the world stock market. At the end of 2022, the Standard & Poor's 500 index, the most liquid shares of which make up the bulk of securities on the KASE Global platform, plunged by 19.44%, having recorded the worst result since 2008. Despite the negative external background, the sector demonstrated good results and high interest of the population in trading of foreign shares on the KASE platform.

As of the end of December 2022, the KASE GLOBAL sector had 46 shares and 6 ETFs of foreign issuers. Of these, 10 stocks and 2 ETFs were included in lists of the first liquidity class. In 2022, over 28,000 deals were made with securities from the KASE Global sector for a total of 25.8 billion KZT.

Strategic direction 2.

Development of the CCP as a key infrastructure element

Institution of the central counterparty has been introduced at KASE facilities and it effectively operates on all markets: stock, money and derivatives markets. The launch and development of central counterparty services on all exchange markets of KASE ensures the reduction of participants' credit risk, guarantees completion of settlements on transactions, and reduces transaction costs of participants due to cross-margining and netting

The next step, which is reflected in the new strategy, is to bring its services in line with the best international practices and standards: detaching its functionality into a separate subsidiary, building a risk management system, business processes, and gaining international recognition.

In 2022, works were launched to separate functionality of the central counterparty into a separate organization. The Board of Directors of the Exchange took a decision to establish KASE Clearing Center JSC by reorganizing 100 % of the Exchange's subsidiary eTrade.kz LLP.

On June 21, 2022 KASE Clearing Center JSC was incorporated.

By decision of the KASE Board of Directors dated November 30, 2022, the composition of the KCC Board of Directors was determined and included **Aldambergen A.U., Sarzhakov Zh.N., Tashmetov M.Zh.** (independent director).

On December 23, 2022 KCC Board of Directors elected **Aldambergen A. U.** as the Chairman. Sarzhakov Zh.N. was entitled to replace the Chairman of Board of Directors of the KCC in case of her absence.

KCC Management Board was elected for three years (since January 04, 2023) in the following composition:

- **Sabitov I.M.** Chairman of Management Board;
- » Lee A.V. Deputy Chairman of Management Board;
- » Syzdykov E.S. Deputy Chairman of Management Board.

V.T. Yun was elected as KCC Corporate Secretary for a period of one year.



In 2023, it is planned to obtain licenses for clearing activities and for certain types of KCC banking operations to be performed, to transfer employees and assets, to develop and approve of internal regulatory documents. The launch of the KCC as an independent organization is scheduled for the third quarter of 2023.

Moreover, the Exchange plans to improve risk management in line with the best international practices to establish links with international CCPs and depositories, to develop the CCP correspondent network, and to gain international recognition.

Strategic direction 3.

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Introduction of innovations and technological upgrade

For the Exchange, as a high-tech trading platform, the introduction of advanced technological solutions in line with the best global practices is of particular importance. Within the new Strategy, information technologies and information security continue to be brought into line with international standards, the achievement of high fault tolerance of the IT infrastructure is being ensured, and advanced technologies are being used in supervising the behavior of bidders.

It is planned to implement pilot projects based on blockchain technology and other promising digital technologies. The modernization of the internal infrastructure will be carried out through the introduction of a new back office system using a microservice architecture on a modern java platform.

As part of the development of IT products, it is planned to introduce new market data products. The focus will be enhanced on individual corporate subscribers (including NDU, derivative information, customized access to information).

Pilot projects on introduction of digital financial instruments

Today, cryptocurrencies rapidly gain momentum worldwide. Derivative financial instruments based on cryptocurrencies are vigorously traded on stock markets of a number of countries.

Kazakhstan's investors also do not stay away from the global growth in demand for crypto assets and demonstrate keen interest in investing in digital instruments.

In 2022, a new pilot project between banks of Kazakhstan and crypto exchanges licensed in the AIFC was officially launched at the AIFC facilities. Registered crypto exchanges will deal exclusively with the cryptocurrency market.

The global practice demonstrates that more and more traditional stock and commodity exchanges introduce digital financial instruments, instruments with cryptocurrencies as their underlying asset and indices for their value, settlements in digital currencies, and others. ETFs based on Bitcoin and

Ethereum are traded on the Toronto Stock Exchange; in the US, ETFs pegged to cryptocurrency are also traded on the NYSE. In Sweden, there is an exchange-traded note (ETN) for bitcoin, traded on the NASDAQ Nordic in Swedish krona. Cryptocurrencies are allowed as an underlying instrument for derivatives trading on the Swiss Stock Exchange. In 2022, the Bulgarian Stock Exchange BSE International announced a launch of trading in exchange-traded notes (ETN) for bitcoin and ether.

The Exchange also responds to market needs and thrashes over the introduction of new products, including those using blockchain technologies. At the first stage, the possibility of expanding the range of instruments is considered in order to popularize the derivatives market, to attract potential investors to the derivatives market and the market of derivative securities.

In particular, the Exchange explores the possibility of launching trading in futures contracts, the underlying asset of which will be a cryptocurrency index (Bitcoin or Ethereum), as in the case of instruments traded on the New York Stock Exchange, or cryptocurrency ETFs traded on the NASDAQ or XETRA exchanges.

In the future, the issue of launching a pilot project for issuance of tokenized securities or other promising products based on blockchain technology will be closely studied with the further prospect of detaching this line of business into a separate organization.

Taking into account that currently issuance and circulation of digital assets is legally allowed only inside AIFC, the Exchange studies and works on the issue with the authorized agency with respect to the possibility of organizing trading in derivatives, the cost of which depends on the value of digital assets, as well as launching a 'regulatory sandbox' to implement a pilot project to create an ecosystem for issuance and circulation of digital products based on blockchain technology on the KASE site.



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Implementation of surveillance system Scila Surveillance

Since July 29, 2022, the Exchange has successfully put into commercial operation a new surveillance system - Scila Surveillance™.

Implementation of Scila Surveillance™ surveillance system is a flexible solution from Scila AB company (Sweden) to automate surveillance processes over trading conducted by the Exchange in order to counter manipulation on the securities market, misuse of insider information and other unfair practices. This solution is high-tech for over 50 clients from more than 20 countries, including the world's leading exchanges, regulators and traders which seek to be able to detect, warn and prevent a wide range of types of unfair behavior on the exchange market, both at the notification level about their occurrence in real time, and at the level of obtaining a presentable evidence base for already established unfair practices.

A principal advantage of this system is compliance with presentday practices of the international trading environment, as well as with requirements of the fast changing regulatory framework, which means that the Exchange has reached a qualitatively new level of protection of the local market from a great variety of unfair practices even at the stage of their initial occurrence.

It should be noted that the current customization of the system meets all the new requirements of the laws of the Republic of Kazakhstan in the field of countering manipulation on the securities market, however, the Exchange intends to improve and develop the system in every possible way in order to have in its arsenal advanced technologies that meet international standards to enhance the confidence in market from local and international investors.

Strategic direction 4.

Increase of the value for stakeholders



The Exchange, as an important structural element of the financial market, continues to make efforts to add value for its stakeholders. In particular, within the new Strategy, the work is underway to increase the level of corporate governance, improve management reporting, apply new approaches to evaluating projects taking into account their marginality, and introduce new approaches to the dividend policy.

These events will contribute to the sustainable development of KASE and enhance its investment attractiveness, improve strategic and competitive advantages of the Exchange.

Implementation of new approaches to dividend policy

By its decision dated February 10, 2023, the extraordinary general meeting of shareholders of the Exchange approved a new Dividend Policy of the Exchange. New approaches to the dividend payment take into account international capital and asset adequacy standards for organizations that perform functions of the central counterparty, approaches to the dividend payments of foreign exchanges and central

counterparties, changes in the financial model of the Exchange due to the forthcoming separation of the settlement and clearing functionality and the functionality of the central counterparty into a separate organization.

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In particular, the new version of the Dividend Policy provides for conditions and a formula to calculate a dividend payout rate, taking into account compliance with an adequacy norm for a size of liquid assets of the Exchange to cover current and capital costs of the Exchange, as well as an adequacy of its reserve funds when performing functions of the central counterparty when it operates on the Exchange or when it is separated into a separate legal entity – a subsidiary of the Exchange.

When developing approaches to the dividend payment, international standards of risk management of the EMIR central counterparty were taken into account, according to which the capital of the central counterparty must be proportional to the risk associated with its activities at any time to ensure its adequate capitalization against liabilities and risks that are not covered by specific financial resources, and also allows for gradual liquidation or restructuring of its activities, if necessary. Additionally, when increasing the reserve fund, the expected growth in trading volumes of participants is also taken into account based on market dynamics and macroeconomic parameters.

Moreover, under IOSCO standards, equity-financed net liquid assets must be able to cover general business losses and to be equal to at least six months of current operating expenses. Taking into account high volatility of markets, which may entail a decrease in income of the Exchange or a growth of market risks, which must be covered by reserves of the Exchange, including as the central counterparty, terms and conditions of the Dividend Policy provide for preservation of net liquid assets of the Exchange in an amount that covers 36-monthly current capital and operating expenses of the Exchange.



Application of new approaches to project evaluation taking into account their marginality

In order to ensure high-quality and efficient achievement of goals of the Exchange's development and implementation of projects in 2022, new Rules for planning and managing projects have been adopted. The major objective of the Rules is to determine approaches to planning activities of the Exchange, its development and implementation of advanced practices of the Exchange's activities. The Rules prescribe the procedure for development and monitoring of the implementation of the development strategy of the Exchange, as well as of projects implemented as part of achieving strategic goals and other projects.

Setting goals for projects of the Exchange is based on the SMART approach, which assumes that goals must be specific, measurable, achievable, relevant and time-bound.

Key control instrument in the process of project implementation is the principle of control points, which consists in a comprehensive assessment of the project at certain points in its implementation, predetermined by the project plan. Along with that, the assessment of the timing of project stages, of sufficiency of human and material resources, and of the achievement of project goals is made.

For each project of the Exchange planned to be included in the development strategy, a project passport is drawn up as a scorecard, which includes a system of indicators to measure and evaluate effectiveness of the project based on the use of quantitative and qualitative KPIs (key performance indicators).

Training, consulting, market promotion

KASE pays special attention to in-depth study of financial services and improvement of financial literacy among all stakeholders. In 2022, the Exchange continued to arrange training programs for issuers and investors, students and media representatives. Using its 2020-2021 experience, KASE has effectively applied both the online format and the offline format of events. In 2022, the Exchange held most of its conferences, webinars and seminars remotely.

Issuer's Day

One of the most important initiatives of KASE is regular holding of the Issuer's Day. This format of the event is designed to strengthen communications between market participants, listed companies with investors and other interested parties.

During 2022, the Exchange regularly provided a platform to its large issuers, such as Kazakhtelecom JSC, Kaztransoil JSC, Kcell JSC and KEGOK JSC. During these meetings, heads of the companies provided information on operational and financial performance for the reporting period, talked about promising projects planned for implementation. Similar events were also organized with involvement of the Asian Development Bank, MFO Arnur Credit LLP, Microfinance Organization OnlineKazFinance LLP.

REGULATION (EU) No 648/2012 OF THE EUROPEAN PARLIAMENT AND OF THE
COUNCIL of 4 July 2012 on OTC derivatives, central counterparties and trade repositories

^{2.} Public quantitative disclosure standards for central counterparties, IOSCO

Training programs for issuers

In April 2022, as part of the 'Practice of preparing annual reports given ESG disclosure' webinar for potential and existing issuers, experts spoke about stages in preparing annual reports taking into account requirements for ESG disclosure and criteria for their assessment, about changes in GRI standards, as well as about designing versions for annual reports.

In June 2022, the Exchange invited entrepreneurs to its 'Raising Funding at KASE' training program. This program covered such topics as tools for raising funds on the stock market and their advantages, capital management of the company and ways to raise funds depending on a development stage of the company, as well as stages of preparation for placement of securities on the stock market.

As part of this comprehensive program:

- at the 'Instruments for raising funds on the stock market and their advantages' webinar the Exchange spoke about stock market instruments for business, their types and advantages, as well as about government programs to support small and medium-sized enterprises;
- » as part of the 'Capital Management of the Company and Ways to Raise Funding Depending on the Development Stage of the Company' webinar, analysts of the Exchange spoke about international and local practices to choose an optimal capital structure, about the influence of micro and macro factors on deviation from the optimal capital structure, as well as about how to calculate on one's own the fair funding rate;
- » as part of the third 'Stages of preparation for placement of securities on the stock market' webinar, speakers discussed requirements for potential issuers in terms of corporate governance, the content of documents and financial statements, about procedures and stages of listing, as well as requirements for disclosure of information during a period of circulation of securities.

In August 2022, KASE held a training webinar for listed companies on the 'ESG in corporate governance' topic. Experts spoke about the practice of applying ESG principles, about corporate risks associated with ESG, and about sustainability as a basis of the corporate strategy.



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Within cooperation with the IFC and the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, the Climate Bond Initiative (hereinafter referred to as CBI), a 'Deep dive into the process of issuing green/social/sustainable bonds' webinar was held.

Upon completion of the training, perspective companies were given an opportunity to sign an individual agreement with the IFC to prepare for the issue of ESG bonds on KASE at no charge.

Program participants learned about the process of issuing green, social and sustainable (GSS) bonds, about each of issuance stages, including preparation, requirements and structure content, as well as about the use of proceeds for the issue of green, social and sustainable (GSS) bonds and more. Speakers also talked about parties involved in the process, their roles and responsibilities, introduced successful examples, case studies and exercises designed for the practical study of some of the key actions in the issue process.

In August 2022, at a webinar for listed companies on the topic 'ESG in corporate governance,' experts discussed the practice of applying ESG principles, corporate risks associated with ESG, and sustainability as a basis of the corporate strategy.

Training events for investors

The Exchange annually allocates significant resources for activities intended to improve financial literacy of the population, as this contributes to the development of the stock market and the involvement of the population in investing. With this end in view, a number of different-scale projects were arranged in 2022.

One of striking examples of this initiative is the annual 'Stock Simulator' KASE contest. Last year it was held for the fourteenth time. The Exchange implements the project as part of improving financial literacy among students. In 2022, the competition took place within the IPO of NC KazMunayGas JSC and 'KASE FEST' fairs of Kazakhstan's brokers in cities of Almaty, Astana, regions of the Republic of Kazakhstan. Overall, more than 4,789 students participating in the project from more than 100 universities of Kazakhstan were registered. The contest chose 10 winners from 5 universities.

Within the Global Money Week global project designed to improve financial literacy of children and the youth, the Exchange held 'Fundamentals of investment literacy,' 'Pro IPO: what you need to know and how to participate,' 'Tax declaration of securities' webinars and the 'Tools of stock market for business' offline meeting with online broadcasting throughout Kazakhstan. More than 1,200 people took part in the events.

In June 2022, KASE, together with National Company Kazakhstan Temir Zholy JSC (KTZ), within the Road Show project, held an online presentation for potential investors before the placement of KZT bonds.

As part of preparations for KazMunayGas IPO, the Exchange held a number of events for investors:

- participation in information and explanatory meetings arranged by NWF Samruk-Kazyna JSC with the data about what an IPO is and how to become an investor in a large national company;
- >> launch of informational podcasts about IPO in the Kazakh and Russian languages on KASE's 'Business FM' radio station, which told what the IPO is and why a company needs it, why it is interesting for investors, how to choose a broker;
- > launch of videos about an IPO on its pages on KASE social networks.

In order to raise public awareness about stock market instruments, KASE held the following training programs and webinars:

- 'Stock market: memo to a novice investor' webinar;
- "My portfolio on KASE' training program on the topics: 'Introduction to the securities market', 'Selecting stocks', 'Selecting bonds', 'Selecting investment funds (mutual funds and ETFs)', 'Building an investment portfolio', 'Buying the first securities' in cooperation with brokerage organizations.

The Exchange also held 'KASE FEST' fairs of Kazakhstan-based brokers in top universities of Almaty and Astana. The events were arranged in support of the annual World Investor Week 2022 program of the World Federation of Exchanges (WFE). The main goal is to promote trading on the stock market of Kazakhstan, as well as to increase the level of financial literacy of potential investors, while preparing for the IPO of national companies of Kazakhstan.



PR events

The Exchange recognizes that active and effective interaction with mass media enables information exchange with all partners and stakeholders of the Exchange and contributes to creation of a favorable investment climate. The Exchange annually holds events intended to disclose information about the situation on the exchange market and financial instruments traded on it, initiatives of the Exchange, as well as about trends on global markets.

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As part of implementation of the UN's Sustainable Stock Exchanges Initiative, in 2022, the Exchange held an opening ceremony of the Ring the Bell for Gender Equality trading for the fifth time, as well as the Gender Inclusion and Sustainable Development conference.

KASE conducted FEAS on-site training for FEAS members. It was the ninth meeting of stock market specialists, within which KASE employees acquainted their colleagues with activities of the Exchange and its services. A series of lectures at the KASE Talks site has become one of the Exchange's most popular information projects lately. In 2022, it had seven live broadcasts, where speakers were financial market professionals who discussed various issues related to the development of the securities market, financing instruments for the financial sector as a whole.

In order to raise awareness of activities of the KASE exchange market, as well as to cover events of the stock market, the Exchange continued broadcasting the news program 'KASE Exchange News' on 'Business FM' radio station.

With a view to promote the KASE brand, the Exchange continues to produce digital content on a regular basis on social networks: LinkedIn, Facebook, Instagram, Telegram.

With support of KASE, the IX annual summit of top managers of the financial market CFO IDEA EXCHANGE & NETWORKING SUMMIT 2022 was held, during which Natalya Khoroshevskaya, Deputy Chair of KASE Management Board, spoke on the 'Exchange agenda of ESG and sustainable financing' topic.

Implementation of sustainable development principles

Mission of the Exchange, as an infrastructural organization of the stock market of the Republic of Kazakhstan, is to promote economic growth of the Republic of Kazakhstan by providing a wide range of tools to attract funding from domestic issuers, providing a platform for redistribution of liquidity in the financial system and providing a transparent investment environment for local and foreign investors.

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The Exchange, in the course of its activities, uses the following principles of sustainable development as set out in the Corporate Governance Code of the Exchange and other internal documents of the Exchange: openness, accountability, transparency, ethical behavior, safeguarding interests of stakeholders, legality, observance of human rights, intolerance to corruption, availability of procedures.

In its activities the Exchange sticks to the following principles of the UN Global Compact:

- human rights protection: the Exchange ensures
 and respects protection of human rights proclaimed
 at the international level; the Exchange ensures its noninvolvement in human rights violations;
- **2.** labor relations: the Exchange supports the policy of eradicating forced and child labor, discrimination in labor and employment;
- 3. environmental protection: the Exchange follows the precautionary principle in environmental matters; the Exchange takes initiatives intended to increase the responsibility for environment status; the Exchange welcomes development and dissemination of environmentally friendly technologies;
- **4.** suppression of corruption: the Exchange declares zero tolerance to all forms of corruption and other illegal actions, including extortion and bribery.

Implementation of principles of sustainable development is a strategic direction in activities of the Exchange within the 2019-2021 development strategy of KASE. Its appearance among key priorities of the Exchange not only corresponded to the general vector of the global exchange industry, but also made it possible to combine into a single system a range of tasks designed to increase the investment value of KASE and to enhance the confidence in the Exchange from its partners and stakeholders. These included improvement of the quality of risk management, the internal control and audit, increase of transparency of KASE's activities, introduction of environmentally friendly business standards and strengthening of the social responsibility.

ESG disclosure by listed companies

By joining the United Nations Sustainable Stock Exchanges Initiative, KASE promotes application of best practices in non-financial reporting, as well as sustainability reporting. As part of this work, KASE, in partnership with international financial institutions, develops and promotes methodological recommendations for these reports, and also consistently implements rules for compiling non-financial reporting and ESG reporting into mandatory disclosure requirements for listed companies. In February 2020, KASE updated requirements for annual reports, providing for additional disclosure of information on social responsibility and environmental friendliness for companies, securities of which appear in the 'Main' category of the Exchange's official list. Initiative of the Exchange was important for companies and provided an opportunity to build the capacity needed to produce quality sustainability reports. Already at the end of 2020, 80 out of 155 listed organizations provided annual reports with disclosure of ESG or its key elements.

In 2021, the Exchange singled out a separate document — 'Information Disclosure Rules', which includes key disclosure requirements for listed companies. And if earlier KASE insisted on disclosing only the principal points, now full disclosure of information in sustainable development has begun, including certain tabular specifications. Appendices have emerged that include a list of key performance indicators for general, environmental and social issues. Assessment of key performance indicators for corporate governance and such an important element as guidance on industry specifications are also included in full.

In 2022, the Exchange held a competition of annual reports in order to develop the practice of preparing non-financial reporting in Kazakhstan. During the competition, an assessment covered annual reports and reports on sustainable development of legal entities — residents of the Republic of Kazakhstan, which submitted applications for participation in the competition. In order to conduct this competition, the Exchange developed a procedure to evaluate annual reports, that takes into consideration the assessment of various characteristics of reports of participants in the competition. A total of 150 criteria were evaluated. All in all, 27 applications were submitted from organizations in the financial and non-financial sectors for participation in the competition. Based on results of the competition, winners were determined and an awarding ceremony was held.



ESG infrastructure

The Exchange, being a conductor of the ESG policy on the corporate market of Kazakhstan, creates opportunities for financing green, social projects on its site. Within the new Strategy, the development of information disclosure standards for issuers goes on, it is planned to develop an ESG reporting platform for investors and to introduce ESG indices, and active awareness-raising activities are underway to promote ESG principles on the corporate market of Kazakhstan.

Green issues

The sustainable bond market in Kazakhstan was launched in 2020, and the amount of funds raised in this segment grows year by year. While KASE attracted 14.0 billion KZT on the ESG bond market in 2020, in 2021 the amount totaled 29.4 billion KZT, and in 2022 it already reached 33.6 billion KZT.

The history of sustainable bond market in Kazakhstan began in 2020 with the first issues of green bonds for a total of 14.0 billion KZT, when the Asian Development Bank made two issues of green bonds on KASE for 14.0 billion KZT, funds from the placement of which were directed to finance projects to cut greenhouse gas emissions into the atmosphere.

In 2021, the Asian Development Bank placed the first issue of ten-year social bonds for 8.4 billion KZT at 10.15 % p.a. to finance projects designed to reduce gender inequality and promote empowerment of women and girls. In September 2021, DAMU Development Institute attracted 1.0 billion KZT for a period of five years at 11.90 % p.a. to finance SMEs, microfinance organizations, leasing companies in the context of the COVID-19 pandemic.

Also, in 2021, a new participant with green issues entered the ESG market of Kazakhstan. The Eurasian Development Bank raised 20.0 billion KZT for a period of three years at 10.50 % p.a. to finance green projects of the Bank in the Republic of Kazakhstan.

In 2022, despite growing rates of fundraising and instability of the situation, the volume of ESG raising continued to grow. The Asian Development Bank raised extra 14.0 billion KZT for social projects, as well as 3.4 billion KZT for green financing. Also, KEGOC attracted 16.1 billion KZT for the implementation of company projects, related to construction of necessary network infrastructure. These are the first social bonds issued with a floating coupon rate, linked to TONIA + 3 % indicator.

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ESG events

The Exchange regularly holds educational events, trainings and webinars on the issue of ESG bonds and ESG reporting and on corporate governance in the ESG direction.

In 2022, the Exchange arranged eight events (training seminars, webinars, round table discussions) on ESG topics for its existing and potential clients. Exchange employees also took part as invited speakers in similar events, organized by other companies.

An important event on the corporate market was the 'ESG - a new paradigm for development of the financial market' International Conference that took place on November 16, 2022 within the X Congress of Kazakhstan Financiers. The event was arranged by the Exchange in company with the NBK, ARDFM, AFK, IFC, UNEP. More than 1,300 people attended the conference offline and online, including 41 speakers from 9 countries of the world. Discussions covered global trends in financing sustainable development projects, introduction of ESG principles and standards into the government policy and regulation, issues of creating information disclosure standards, introduction of responsible investment, and many other aspects of ESG on the financial market.



Informational policy

Information dissemination channels must provide a free and easy access to the disclosed information.

The Exchange sticks to the following principles when disclosing and distributing information:

- 1. pregularity, consistency, epromptness and timeliness;
- 2. completeness of disclosure of information within capabilities and competence of the Exchange;
- **3.** neutrality and objectivity;
- **4.** equal opportunities for access and availability of public information of the Exchange for regulators, partners and stakeholders:

- 5. ensuring control over confidentiality and use of insider information of the Exchange;
- **6.** maintenance of confidentiality: a reasonable balance between the openness of information and the observance of interests of the Exchange as a commercial organization;
- **7.** respect for rights of partners of the Exchange to information about changes in their activities, provided to the Exchange as the organizer of trades according to the requirements of the laws of the Republic of Kazakhstan.

Informational services

By now, KASE has not only introduced and improved a full range of standard information products supplied by world exchanges, but also created and has been developing its own data distribution channels for the convenience of retail and corporate consumers, using KASE information in their activities.

In 2022, the range of consumers of KASE information expanded with such subscribers and vendors as Fusion Media Limited (Investing.com), Persefoni AI Inc, Factset, Interfax, Citibank Kazakhstan JSC, Baiterek NMH JSC, VTB JSC (Kazakhstan), services of which use, among other things, KASE trade information and technical infrastructure. As a result, the number of corporate clients, having subscribed to information services of KASE, reached 30 companies. The number of clients, distributing trade information of KASE, reached 22, where three companies such as Bloomberg, Refinitiv, as well as Citigroup Global Markets LTD being global financial information providers distribute real-time KASE trading information with a combined audience of more than 200 end subscribers as of the end of 2022.

The number of paid subscribers in @KASEInfoBot bot on Telegram application commercialized in late 2021 reached 150 users by the end of 2022, the total number of bot subscribers exceeded 12.000, which confirms the demand for this service.

Users who prefer to receive extended content of trading information in real time monitor the course of trades on KASE through the corporate website of the Exchange. The number of such subscribers at the end of 2022 was 178.

KASE intends to further develop activities for dissemination of financial information through information products. Thus, in the first quarter of 2022, a browser-based version of the IRIS Finance information platform was launched. KASE plans also include the development of a service for obtaining archival information and other products, which would ultimately open up new opportunities for users for a broader market analysis.

Evaluation of quality of KASE services

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Increasing the level of customer satisfaction of the Exchange, maintaining high positions in the evaluation of exchange services and finding new ways to improve them are among top priorities of the Exchange.

Implementing new projects and introducing new products for members of the Exchange, listed companies and other recipients of services, KASE also seeks to receive feedback on these projects and products and to build communications with recipients of the exchange services.

In order to build an effective system of communication with customers to assess the quality of provided services, the Exchange has adopted Rules for determining criteria for the level of customer service of the Exchange (approved by a decision of the Exchange's Management Board, minutes of the meeting dated October 05, 2021 No. 105) (SLA standards), and also an information system (web-application) is developed to receive feedback from customers after getting results of each service. Users of the system are employees of all structural subdivisions of the Exchange, whose functional duties include customer service, as well as clients of the Exchange.

Moreover, KASE conducts a comprehensive assessment of customer satisfaction with activities of the Exchange. For these purposes, the Exchange conducts an annual questionnaire survey of its clients in terms of key business processes, including with engagement of independent research companies. Based on results of the survey, the Exchange, in an effort to continuously improve quality of services provided, determines a set of measures to improve services of the Exchange, which are further included in the action plan for the next year.

Questionnaire surveys of customers based on 2022 results were conducted by an independent consulting company. The survey covered 42 Exchange members (81 %), 85 listed companies (55 %) and 68 clients of information services of the Exchange out of 157 (43 %). The overall customer satisfaction rating of the Exchange at the end of 2022 was 87.6 % out of 100 %.

Environmental protection

In its activities, the Exchange seeks to reduce excessive consumption of resources and minimize an existing negative environmental impact through introduction of energy efficient technologies, decrease of water consumption, paper consumption for office needs with the help of the electronic document management system usage and a practice of two-sided printing. Main resources consumed by the Exchange are electricity, heat, paper products and water.

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During 2022, the Exchange collected almost 90 kg of waste paper, over 32 kg of glass, 28 kg of plastic and 1 kg of aluminum. Moreover, the Exchange held an apple orchard cleaning event by the KASE team in Almaty City.

In 2021, the Exchange introduced the Green Office program, which implies an integrated approach to managing the organization and includes a number of technical, motivational and educational activities based on generally accepted principles of three Rs:



Reduction – reasonable consumption of energy, water, electricity and more;

Replacement – environmentally responsible procurement and acquisition of goods and services that minimize the impact on the environment, promotion of alternative and/or efficient use of transport. In order to implement the Green Office program, the Exchange has created a headquarter of eco-activists from employees of the Exchange – KASE GREEN.

Refinement – reuse of office materials, paper and other consumables;



International activities

In order to study international experience and to increase awareness of foreign issuers and investors about the domestic stock market, the Exchange continues its activities in the international arena.

The Exchange is a full member of such international exchange associations as WFE, FEAS and MAE CIS and pro-actively participates in the work of these organizations.

In March 2022, the Exchange, together with the International Finance Corporation (IFC), held an annual opening ceremony of the Ring the Bell for Gender Equality trading and the Gender Inclusion and Sustainable Development event. The Exchange holds this ceremony for the fifth time within the UN Sustainable Stock Exchanges Initiative (UN SSE Initiative), which KASE joined in 2015. This action is traditionally supported worldwide by UN Women, IFC, Women and Exchange-Traded Funds and the World Federation of Exchanges. Every year, over 100 exchanges worldwide hold the opening ceremony of trading.

In May 2022, the Exchange paid a working visit to Surrey and London, UK, to participate in the annual WFE 'CCP & Derivatives Conference.' The delegation of the Exchange got acquainted with the latest trends in CCP development, default and risk management. Meetings were held with WFE member exchanges, financial institutions and companies to discuss cooperation issues.

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The Exchange also takes a direct active part in meetings of the CIS MAE as a member of the MAE Council. In May 2022, the Exchange made a working visit to Minsk, the Republic of Belarus, to participate in the annual General Meeting of the CIS MAE members and the Exchange Forum dedicated to the Meeting. Representatives of the CIS stock markets discussed development of FinTech on exchanges, sustainable development and ESG financing, as well as development of internal investment potential.

In September 2022, the Exchange took part in the 61st WFE General Assembly and an Annual Meeting, where participants determined main directions of the WFE work for the next year. Also within the WFE Meeting, it participated in panel discussions of leading exchanges and capital market experts for an in-depth discussion of key issues, related to the exchange industry and new technologies.

In September 2022, in Almaty City, KASE held a 'FEAS on-site training' for FEAS members, which includes 44 exchanges from 31 countries in Europe, Asia and the Middle East. Trainings are held annually by one of the exchanges – members of the Federation. In 2022, this was the ninth meeting of 20 stock market specialists, during which KASE employees acquainted their colleagues with activities of the Exchange and its services. A delegation of Tehran Stock Exchange Technology Management Co (TSETMC) also visited KASE to exchange information on technological solutions of the Iranian stock exchanges.

With support of FEAS member exchanges, the first series of the Borsa City educational comic magazine was released. It is available in the Kazakh, Russian, English, Arabic and other languages (https://comics.feas.org/). Borsa City is an educational comic magazine that tells the story of how the capital market and stock exchange help the youth, teachers and parents save the school and create a better future for the city.

In August 2022, KASE paid a working visit to the Istanbul Stock Exchange – Borsa Istanbul – in order to get acquainted with the Turkish capital market. Meetings were held with the General Director of Borsa Istanbul, Mr. Korkmaz Ergun, as well as with a local regulator – Capital Markets Board, and the Turkish Capital Markets Association. During the meeting, the parties exchanged information on current activities of organizations and exchanges, promising projects and development plans.

In October 2022, meetings were held with Dubai and Qatar exchanges DFM/ Nasdaq Dubai, Qatar Stock Exchange, DIFC Innovation Hub, DIFC financial services regulator – Dubai Financial Services Authority (DFSA) and financial center – Qatar Financial Center, as well as other IT companies. The parties exchanged information on current activities, key projects, discussed exchange technologies, regulatory issues and possible further cooperation.

In November 2022, a meeting was held with a delegation from the European Bank for Reconstruction and Development (EBRD) led by Alex Pivovarsky, the director of the Capital and Financial Market Department, at the EBRD. At the meeting, the parties discussed a possibility for the EBRD to conduct an analytical study of issuer companies in Central Asia, as well as prospects for participation of the EBRD in training sessions for potential issuers.

KASE and a delegation of representatives of the financial sector of the Republic of Turkmenistan, headed by Nurgeldi Meredov, the General Director of the Ashgabat Stock Exchange, held a series of working meetings to get acquainted with detailed information on organization of trading on various markets, on clearing and listing.

A delegation of the Baku Stock Exchange (BSE) and investment companies being BSE members also visited KASE. During the visit, the participants received information about implementation and development of KASE's Global project, got acquainted with activities of the Exchange as a whole.

As part of development of responsible and efficient investment, the Exchange participates in working groups and initiatives, the purpose of which is to unite and harmonize efforts in the application of sustainable development.

The Exchange won the Best Stock Exchange Central Asia 2022 nomination according to the CFI.co Awards 2022 international award. The emphasis was also placed on achievements of the Exchange in the field of ESG and the issue of green bonds by issuers. CFI.co Awards was established by the Capital Finance International British publication, which presents news and research in finance, economics and business.

In December 2022, meetings of the General Assembly, Council and Working Committee of FEAS were held at the site of the Egyptian Exchange in Cairo (Egypt). At the event, FEAS members discussed 2022 achievements and 2023 plans. Within the meetings, results of the training for employees of the federation members, studies conducted by FEAS members on development of the capital market were summed up. 'Capital Markets Talks' round table discussion was also held, where topics related to new instruments and trends on exchange markets were covered.

Moreover, the Exchange, together with the Representative Office of the European Bank for Reconstruction and Development (EBRD) in Kazakhstan, held an introductory meeting related to the 'Consultations for SMEs' Program. Brokerage companies were invited as consultants for SMEs with respect to the entry to the securities market.

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REVIEW OF RESULTS



Trends on the international exchange market

Tab. 1. Dynamics of real GDP and inflation (y/y %)

			Real GD	P (y/y %)		Inflation (y/y %)						
	IIIQ. 2022 (F)	IVQ. 2022 (OH)	IQ. 2023 (P)	IIQ. 2023 (P)	IIIQ. 2023 (P)	IVQ. 2023 (P)	IIIQ. 2022 (F)	IVQ. 2022 (F)	IQ. 2023 (P)	IIQ. 2023 (P)	IIIQ. 2023 (P)	IVQ. 2023 (P)
US	1,9	0,7	1,0	1,0	0,2	-0,2	8,3	7,1	5,6	3,8	3,2	2,9
EU	2,5	1,4	0,3	-0,3	-0,2	0,6	9,9	10,6	9,6	7,5	5,9	4,0
England	1,9	0,3	-0,7	-1,3	-1,2	-1,0	10,0	10,8	10,2	8,0	6,6	4,3
Japan	1,5	1,2	1,9	0,8	1,3	1,0	2,9	3,8	2,8	2,4	1,7	1,2
China	3,9	2,9	2,5	6,9	4,9	6,2	2,7	1,8	2,3	2,2	2,2	2,5
India	6,3	4,5	4,4	5,6	6,6	6,0	7,0	6,1	5,9	4,7	4,9	5,0
Russia	-3,7	-5,6	-6,5	-2,5	-1,8	0,2	14,4	12,2	8,8	3,5	5,2	5,1
Turkey	3,9	2,5	2,7	2,1	2,8	3,2	81,1	78,1	50,4	39,8	43,7	43,3
Brazil	3,6	2,6	1,3	0,7	0,4	0,8	7,2	5,8	5,0	3,6	5,5	5,6
Argentina	5,9	3,1	1,8	1,4	1,2	1,6	77,5	98,6	100,6	102,0	95,5	96,5

Source: Bloomberg economic forecast, 23.01.23

Even before the start of 2022, market expectations began to shift as rising inflation forced central banks to become increasingly hawkish. In 2022, the energy crisis, geopolitical escalation and a new disruption in supply chains pushed global inflationary pressures to historically high levels, which in turn triggered off a much sharper and more synchronous tightening of the monetary policy worldwide than previously expected.

By the end of 2022, inflation growth in most countries began to slow down. Although this tightening was necessary to stabilize prices, it had a significant inhibitory effect on business activities, slowing down the global economy so much that the world was on the verge of another recession. According to the consensus, the peak of the crisis will be passed no earlier than the first half of 2023. Inflation, in turn, according to BofA polls, despite the predicted slowdown, will remain the most significant residual risk of complex nature.



Below are key indicators of the global exchange market for 2022, compiled on the basis of WFE data:

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- >> the global capitalization of the equity market shrank by 40.7% compared to 2021 and made USD 67.5 trillion. The decrease was reported in all regions of the WFE member exchanges. The capitalization in the Americas (North and South America), in the Asia-Pacific region and in the EMEA regions (Europe, Middle East and Africa) plunged by 64.1%, 19.0% and 13.3%, respectively;
- >> the global volume of trading in shares in 2022 compared to 2021 decreased by 12.2% and stood at USD 137.4 trillion. In the Asia-Pacific region, the trading volume contracted by 22.9% to USD 50.3 trillion, in America – by 4.6% to USD 78.0 trillion, in the EMEA regions – by 4.1 % to USD 9.0 trillion.

At the end of 2022, among 54 WFE members, KASE ranked the 38th in terms of stock market capitalization, 48th in terms of stock trading volume and 18th in terms of bond trading volume among WFE member exchanges.

In terms of the pace of monetary tightening, 2022 is one of the most difficult on record. The Fed raised the rate by a total of 4.25% in 2022, showing the highest rate since 1980. The ECB raised the interest rate for the first time in 11 years, in aggregate by 2.5%. As a result, the yield on benchmark risk-free 10-year US Treasury bonds exceeded 4% for the first time since June 2008, the cost of borrowing on the markets reached the highest level in 15 years. As Bloomberg estimates, due to the refusal of companies to raise funding at a high rate, the corporate bond market lost in total at least USD 75 billion in 2022.

On the stock market, for the first time since 2018, all three major US indices closed the year in the red zone. Thus, the Dow fell by 8.8%; S&P 500 by 19.5%; Nasdaq by 33.3%. Such a strong collapse of the markets was last seen in 2008 against the background of the mortgage crisis. To some extent, this decline drives future pessimistic expectations for 2023, as central banks have signaled that the aggressive monetary policy tightening is not over yet.

Out of 11 sectors, 10 ended the year in the red zone, companies from the telecommunications sector (-41.1%) and shares of companies from the non-essential goods sector (-38.0%) sank the most. Only the energy sector closed in the green zone, having added 58.0% at the end of the year.



Fig. 1. Capitalization of stock exchanges, billion USD

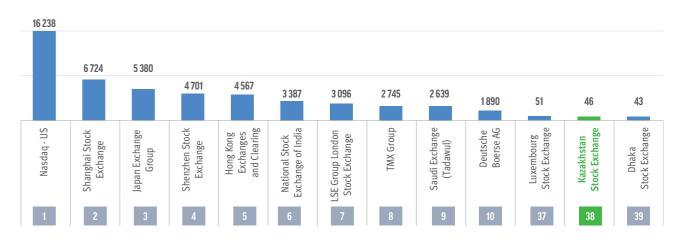


Fig. 2. Volume of share trading on the stock exchanges of the world, billion USD



Fig. 3. Volume of bond trading on the stock exchanges of the world, billion USD



The growth of the Turkish Stock Exchange Index by 197% in 2022 reflects depreciation of the national currency. The Central Bank of Turkey, in its attempt to stimulate its own production, contrary to policies of other regulators, was cutting the rate throughout 2022, and as a result, the rate decreased by 5% over the year. The Turkish lira was losing more and more of its value with each decision to cut the rate, in 2022 the rate plummeted by 70.2% from 10.899 to 18.555 per USD.

142% surge of the stock market of Argentine was also occurring amid the depreciation of the Argentine real by 86.6% from 92.584 to 172.79 per USD. The Central Bank of Argentina in 2022 raised its base interest rate to an unprecedented 75% for a normal economy. The regulator was forced to resort to such a measure due to the collapse of the national currency and the inflation approaching 100%.

The Brazilian stock market ranked the third in terms of growth rates with a result of 5%. In 2020-2021, the stock market of the country was declining against the background of political instability and heavy dependence on the Chinese economy. In 2022, Brazil elected a new president, the inflation slowed down from 10.38% in January to 5.79% in December, the exchange rate slightly stabilized and the stock market rebounded slightly

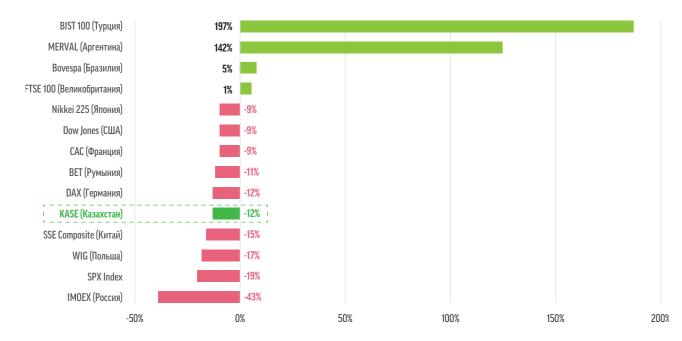
The most indices of developed countries ended the year with a decline within the range of 9-19%.

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The largest decline in 2022 was recorded by the stock market of the Russian Federation. On the day when the special military operation was announced on February 21, the Moscow Exchange Index lost 27.0% from 3,393.31 to 2,470.48 points. This forced the Bank of Russia to suspend trading in securities; the share trading resumed only a month later. Immediately after the resumption of the trading in late March, investors began to bet on the recovery of the market, which caused a tangible inflow of new funds into the market at a steady rate of 1.5-2.5 % per month until the end of August. At the end of October, the stock market received extra support from interim dividends of 1.4 trillion RUB, paid mainly by Gazprom, at least 150 billion RUB of which bidders reinvested back in shares. The partial mobilization announced on September 21 triggered off an outflow of significant funds from the stock market and changed the consumer behavior. The market switched to cautious behavior and by the end of the year it was developing in a narrow corridor around 2,200 points.

Below is a chart of changes in the main stock indices and the KASE Index for 2022.







At the end of 2022, the economy of Kazakhstan maintained moderate paces of development. The real economic growth made 3.2 %. The key factor of its stability was a positive dynamics in the real sector, including in the manufacturing industry, construction and agriculture.

Against the background of an uncertain geopolitical situation, persistently high food prices, as well as high inflationary expectations of the population, the National Bank moved to the tightening of the monetary policy. It increased the base rate from 10.25% in January 2022 to 16.75% in December. Monetary policy measures adopted in 2022 will further help cut the inflation and stabilize it over the medium term.

In 2022, escalation of the geopolitical situation and unfavorable conditions on the global financial markets had a negative impact on dynamics of the national currency. After weakening to 512.17 KZT in March, the tenge appreciated to 414.79 KZT in May. At the end of the year, the tenge lost 7.1% of its value against the USD to 462.66 KZT / USD.

At the end of 2022, the current account of the balance of payments developed with a surplus and amounted to USD 6.3 billion due to an improvement in the condition of the trade balance. Trade surplus made USD 35.1 billion, up by USD 16.4 billion compared to the same period last year. Export of goods soared by 40.7% to USD 84.8 billion, within which the growth of exports of oil and gas condensate rose by 50.9% to USD 46.9 billion. Imports of goods increased by 19.6% to USD 49.7 billion. Income of foreign direct investors went up by 15.1% and totaled USD 26.3 billion, an expansion of USD 3.3 billion. Current account surplus is unstable, as it is a consequence of high prices for raw materials, primarily oil.

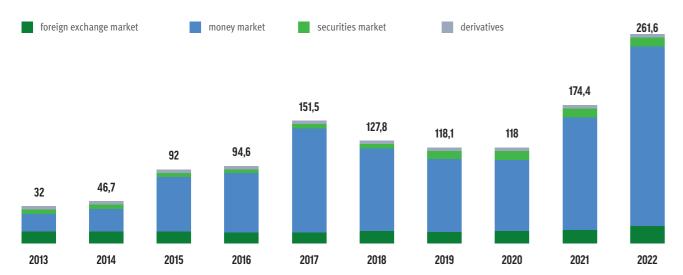
During 2022, the Kazakhstan stock market sustained a negative external impact, coupled with local factors, however, due to a broad diversification of presented financial instruments, the Kazakhstan Stock Exchange once again proved its stability during the implementation of unexpected stress scenarios.

KASE Markets

Trading volume on KASE updated its historical highs for the second year in a row

At the end of 2022, the total trading volume on all markets advanced by 50.0 % compared to 2021 and reached 261.6 trillion KZT, which is a record high for the stock market of Kazakhstan:

Fig.5 Dynamics of trading volume by sector, trillion KZT



The major part of the growth was provided by trading on the money market against the background of the urgent need of market participants for short-term KZT liquidity, while the increased supply was supported by high rates.

The foreign exchange market demonstrated an increased interest of investors in non-major currency pairs against the background of a switch to settlements in national currencies when conducting export-import transactions as well as due to a favorable change in the euro exchange rate against the USD.

On the securities market, the main share in the growth in trading volume was provided by placements on the primary market of state and quasi-state organizations, as well as increased trading volumes on the secondary market in the first half of 2022. Along with that, in the sector of shares, securities of investment funds and derivative securities, declining activities were reported against the background of external and internal shocks:



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Tab. 2. Dynamics of KASE trades, billion KZT

	2018	2019	2020	2021	2022	2022 change vs. 2021	2022 change vs. 2021, %
Securities market	4 872,8	5 286,8	7 878,2	6 218,2	8 980,5	+2 762,3	+44,4
► Shares	539,8	203,6	238,4	422,8	307,3	-115,5	-27,3
► KASE Global	-	-	-	6,4	25,8	+19,3	+300,5
► Corporate debt securities	2 309,4	2 715,6	2 691,2	1 980,8	2 488,8	+508,1	+25,6
► GS	1 644,8	1 823,7	4 650,7	3 575,9	6 004,3	+2 428,4	+67,9
► MFO bonds	101,0	540,2	274,2	155,4	126,9	-28,4	-18,3
► Securities of investment funds	0,4	0,9	20,3	38,1	8,8	-29,3	-76,8
► Derivative securities	277,3	3,0	3,4	38,8	18,4	-20,4	-52,5
Foreign exchange market	13 445,5	11 145,0	11 606,9	15 567,8	20 798,1	+5 230,3	+33,6
Money market	109 525,3	101 706,0	98 501,0	152 653,6	231 834,4	+79 180,8	+51,9
► REPO operations	75 861,9	72 707,8	88 568,9	141 631,4	202 635,7	+61 004,3	+43,1
 Currency swap operations 	33 663,4	28 998,2	9 932,1	11 022,1	29 198,6	+18 176,5	+164,9
Derivative market	-	0,4	<0,1	<0,1	7,9	+7,9	+433 098,2
► Futures	-	0,4	<0,1	<0,1	7,9	+7,9	+433 098,2
TOTAL trading volume	127 843,7	118 138,2	117 986,1	174 439,6	261 620,8	+87 181,3	+50,0

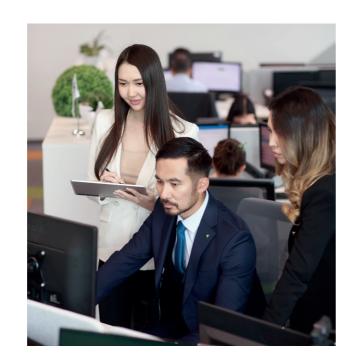
Source: KASE

Securities market

Revaluation of securities at higher rates and fears of a global recession have reduced the capitalization of stock markets worldwide, including in Kazakhstan.

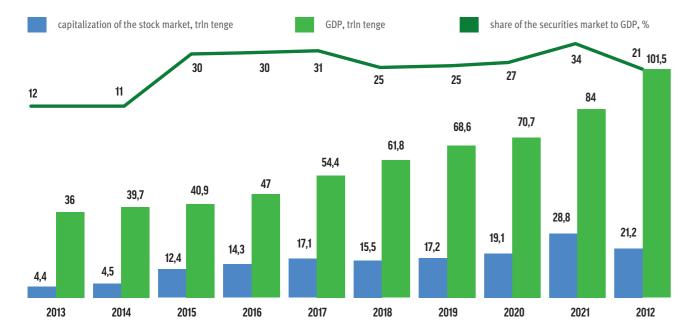
The capitalization of Kazakhstan's stock market in 2022 contracted by 26.4 % or 7.6 trillion KZT and amounted to 21.2 trillion KZT. Share of the stock market with respect to the GDP fell to 21 %.

The volume of corporate debt in circulation in 2022 declined by 6.3% or 973.5 billion KZT to 14.4 trillion KZT. The share of the corporate debt market to the GDP in 2022 was 14%.



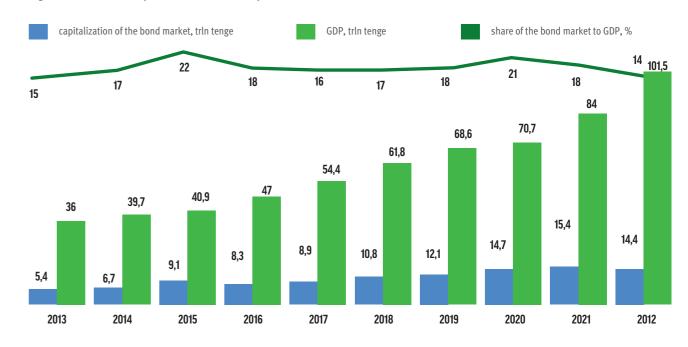
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Fig. 7. Ratio of KASE corporate bonds market capitalization volume to GDP, %



Source: KASE, stat.gov.kz

Fig. 7. Ratio of KASE corporate bonds market capitalization to GDP, %



Source: KASE, stat.gov.kz

Total number of issuers and new issues on the Exchange continues to grow.

As of January 01, 2023, trading lists of the Exchange contained a record number of instruments. These are 927 securities of 262 issuers, including 340 securities of 89 issuers on the 'Main' market, 101 securities of 67 issuers on the 'Alternative' market, 467 securities of 103 issuers on the 'Mixed' market, and 15 securities of 11 issuers on the 'Private Placement' market, four issues of shares of four issuers in the 'non-listed securities' sector.

In 2022, the official list of the Exchange contained 96 instruments from 50 issuers, including 26 instruments from 23 new issuers, including:

- >> common shares of five denominations of five issuers, including four new ones listed on KASE for the first time and one active issuer;
- > four shares of new issuers and six foreign ETFs were included in the KASE Global sector;

- yo new instruments of 32 issuers (including 10 new issuers) were included in corporate bonds, including 12 issues of bonds of six microfinance organizations were included in the official list of the Exchange;
- » nine issues of bonds of four international financial institutions;
- >> two issues of units of interval unit investment funds managed by Halyk Global Markets JSC and BCC Invest JSC.





The Government securities sector had 26 issues of nine foreign countries, including eight issues of five new issuers. These are government securities of the United States of America, Italy, Peru, Abu Dhabi, the Philippines, Qatar, Saudi Arabia, and Uzbekistan.

In 2022, local executive authorities issued and included in the official list of the Exchange 35 bond issues released both to finance housing construction within the implementation of Nurly Zher government housing and communal development program for 2020–2025, and to finance the construction of credit housing under Shanyrak pilot project.

As of January 01, 2023, the official list of KASE had nine issues of ESG bonds. These are five issues of 'green' bonds for a total amount of 83.5 billion KZT and four issues of social bonds for a total amount of over 43.4 billion KZT. The issuers were the Asian Development Bank, the Eurasian Development Bank, Damu Entrepreneurship Development Fund JSC, Development Bank of Kazakhstan JSC and KEGOC JSC.

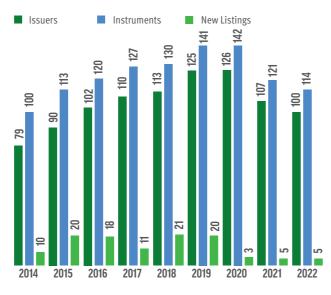
Due to the lapse of the circulation period, early redemption or cancellation of the issue, 60 issues of bonds of 24 issuers were excluded from the official list of the Exchange. Moreover, 20 issues of securities of 16 issuers were excluded from the official list of the Exchange, where 16 issues were excluded on request of the issuers.

As of January 01, 2023, 52 Exchange members were registered on KASE markets, including 43 members on the stock market, 33 members on the foreign exchange market, 27 members on the derivatives market.

Fig. 8. Dynamics of trading lists of shares and bonds of KASE

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Change in trading lists on the securities market*, pcs



* ignoring KASE Global shares

Change in trading lists on the bond market, pcs



Source: KASE

During the year, six new companies appeared in lists of KASE members:

- » Investment Company Standard JSC (in 'stock' and 'currency' categories);
- Subsidiary Organization of Halyk Bank of Kazakhstan 'Halyk Finance' JSC (in the 'currency' category);
- >> EuroCentrAstana JSC (in 'stock' and 'derivatives' categories);
- **»** UD Capital JSC (in 'stock' and 'derivatives' categories);
- » NGDEM Finance JSC (under the 'derivatives' category);
- >> Freedom Finance Global PLC (in the stock category).

In the structure of the list of the first class liquidity, the number of non-index securities and securities of investment funds is growing

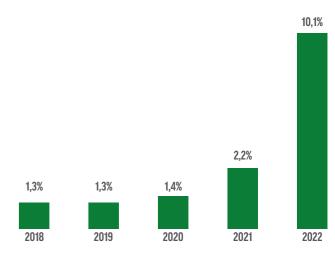
As of January 2023, there are 42 instruments in the lists of the first class liquidity of KASE. They include 20 names of shares of Kazakhstan's issuers, 11 names of shares of foreign companies and 11 names of securities of investment funds. According to the Exchange rules, in order for a stock to be included in the list of the first class liquidity, it must meet criteria for number, frequency and volume of deals made, as well as for the number of exchange members who had made deals with it. In 2022, the amount of Kazakhstan's non-index securities included in the list of the first class liquidity doubled.

The retail investor base is rapidly expanding for the third year in a row, this year the total number of accounts reached almost one million

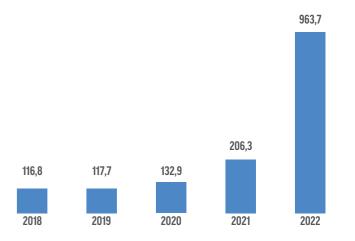
Expanding segment of private investors remains one of the most striking trends on the local securities market. According to the CSD, as of January 01, 2023, 963,730 accounts were opened in Kazakhstan, including 550,203 sub-accounts (547,152 individuals) and 413,527 personal accounts opened through omnibus accounts. Thus, as of January 01, 2023 investors account for nearly 5.8 % of the workforce.

Fig. 9. Dynamics of brokerage accounts

Growth rate of involved population, %



Growth rate of number of accounts, %



 $Source: Central\ Securities\ Depository,\ stat.gov.kz$

The growth in the number of accounts in 2022 is attributed to the following:

- » streamlined process of opening a brokerage account through remote personal identification and emergence of new digital brokerage mobile applications;
- >> conduct of IPO of NC KazMunayGas JSC;
- >> growing interest in the possibility of opening and using omnibus accounts, which appeared in mid-2021.

According to the data of the Central Securities Depository, 35.6% of the total number of retail investors falls within the age category from 35 to 54 years. In 2022, this group grew 2.2 times (from 87 to almost 195 thousand people). The age group from 25 to 34 ranks the second, during the reporting year its size rose 2.8 times (from 59 thousand to 166 thousand people). Most new accounts are opened by young investors aged from 18 to 24. Their number soared 4.3 folds over the year (from 23 to almost 101 thousand).

Men account for 55.2% of retail investors and women for 44.8%. During the year, the number of women among owners of brokerage accounts increased 2.8 times (from 87 to 244 thousand people), and the number of men – 2.3 times (from 130 to 301 thousand people).

The largest number of sub-accounts of individual holders was in Almaty City (25.3 %), Astana City (10.4 %) and Karaganda

Given the growing involvement of the population of Kazakhstan in trading on the stock market, on July 12, 2022, the Law 'Amendments and additions to certain legislative acts of the Republic of Kazakhstan on regulation and development of the insurance market and the securities market, banking' was adopted.

Main innovations relate to the protection of rights of retail investors, namely:

» only brokers and investment portfolio managers holding relevant licenses from the regulator can provide investment consulting in Kazakhstan. Limits of responsibility for poorquality provision of investment consulting are fixed for these individuals. Investment consulting provided without a license from the Agency will substantiate administrative and criminal liability;

» before providing investment recommendations, brokers are required to evaluate the risk profile of a retail investor and to conduct a procedure to evaluate and recognize a retail investor as a qualified or 'unqualified' investor;

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- » measures were introduced to ensure fair pricing on the securities market;
- >> the list of signs of manipulation and dishonest behavior on the stock market was expanded.

Comprehensive implementation of these measures will improve the level of trusting environment for activities on the domestic stock market and will protect citizens of Kazakhstan from the work with intermediaries that provide their services in bad faith.



Resumption of the 'People's IPO' program was one of the landmark events of the local securities market





Source: Central Securities Depository, stat.gov.kz

On June 28, 2022, within the V conference 'Astana Finance Days', the Chairman of Management Board of National Welfare Fund Samruk-Kazyna JSC Almassadam Satkaliyev announced an IPO of National Company KazMunayGas JSC in 2022 on Kazakhstan's stock markets.

From November 09 to December 02, 2022, a subscription was made to shares of NC KazMunayGas JSC within the IPO. During the subscription, over 129 thousand applications were received from investors for a total amount of more than 181 billion KZT, while applications for the amount of more than 153 billion KZT were satisfied. Thus, within this IPO, the Fund sold 18,303,584 ordinary shares of companies, which is 3 % of the total number of placed ordinary shares of NC KazMunayGas JSC.

Placement of shares of NC KazMunayGas JSC broke records in the Republic of Kazakhstan in terms of amount of investments attracted from local investors and number of participating investors. Through subscription in the KASE trading system, the company raised 137.5 billion KZT, including 70.1 billion KZT (51.0 %) from individuals, 55.3 billion KZT (40.2 %) from institutional investors and 12.1 billion KZT (8.8 %) from other legal entities.

For KASE platform, this placement was the third 'People's IPO' and every new one significantly kindled interest of citizens in the stock market. In 2012, individuals being citizens of Kazakhstan submitted 34.7 thousand applications for participation in the IPO of KazTransOil JSC for the amount of 22.1 billion KZT. In 2014, individuals submitted as far as 42.0 thousand applications for a total amount of 9.5 billion KZT for participation in the IPO of KEGOC. This year, for participation in the IPO of NC KazMunayGas JSC, the number of applications from citizens of Kazakhstan totaled 128.7 thousand pieces for the amount of 74.6 billion KZT, where 70.1 billion KZT were submitted through KASE platform. In November, 48,734 new personal accounts were opened in the CSD system, which, among other things, is related to the IPO of NC KazMunayGas

From the opening date of trading on December o8 to December 31, 2022, the volume of trading in shares of NC KazMunayGas JSC on KASE floor made 23.2 billion KZT, the price increased by

Under the influence of external and internal factors, the volume of trading on the secondary market of shares decreased, while the number of deals made with shares has been growing for the third vear in a row.

Volume of trading in shares in 2022 reached 307.3 billion KZT, where 223.4 billion KZT were being traded in the fourth quarter due to the IPO of NC KazMunayGas JSC and an increase in trading volume on the secondary market. During the first three quarters, the volume of trading in local shares was restrained due to a combined impact of negative external and internal factors.

Meanwhile, the trend for an increase in the number of deals made on the stock market continues. Thus, in 2022, 2,107 deals were made daily with an average volume of one deal in 595 thousand KZT, while in 2018, 573 deals were made on the market daily with an average volume of 3.8 million KZT.

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Table 3: Highlights of trading on the stock market

	2018	2019	2020	2021	2022
Trading volume, bln KZT, including	539,8	203,6	238,4	422,8	307,3
primary market	0,5	<0,1	3,5	0,9	138,4
secondary market	539,3	203,6	234,9	421,9	168,9
Number of transactions, pcs	141 072	103 222	195 687	452 284	516 318
Daily average number of deals, pcs.	573	420	795	1846	2 107
Average volume of one transaction, k KZT	3 826,7	1 972,1	1 218,2	934,8	595,2

This trend is largely explained by the inflow of retail investors. In the breakdown of main categories of investors on the secondary market, retail investors remain the most active, accounting for 44.3 % of the gross turnover of share trading. Participation of banks is estimated at 0.4 %, brokers/dealers at 12.3 %, other institutional investors accounted for 11.5 %, a share of other legal entities is 31.5 %.

In 2022, the share of foreign investors increased to 13.8% of the total gross turnover. The increase in the share of non-residents of the Republic of Kazakhstan on the stock market is mainly connected with an expected growth on the emerging markets. Leading analytical agencies share the same opinion that the emerging markets in Asia will outpace other regions next year. According to the October report of the International Monetary Fund (IMF), in 2023, the global economic growth will reach 3.2 %, while the economy of developed countries will add 2.4 %, and of developing countries – 3.7 %. In terms of regions, the largest growth is expected in the economies of the Middle East and Central Asia (+5.0 %), which includes Kazakhstan as well.

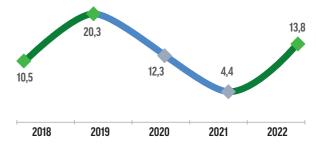
Fig.11 Structure of investors in 2022 *



 $^{^{}st}$ of the total gross turnover of trading in shares on the secondary market ignoring major deals and

KASE index at the end of 2022 diminished by 11.5% to 3,251.64 points. Its maximum value was recorded on January 11 -3,626.92 points. Its minimum value was recorded on June 17 - 2,617.15 points. In the first half of the year, the stock market of Kazakhstan followed the global market into the bearish territory, with a 27.2% decline. All representatives of the index basket closed in the red zone, except for shares of Bank CenterCredit ISC. Most of the index stocks lost one third of their value, meanwhile common shares of Kaspi.kz, included in the Index since May 05, 2022, plummeted by as much as 53.6 %. Since the beginning of the second half of the year, the domestic stock market has witnessed the recovering Index and a gradual return of liquidity. Investor sentiment was boosted by release of successful financial reports and holding, albeit with a delay and not in full compliance with market expectations, of the dividend season.

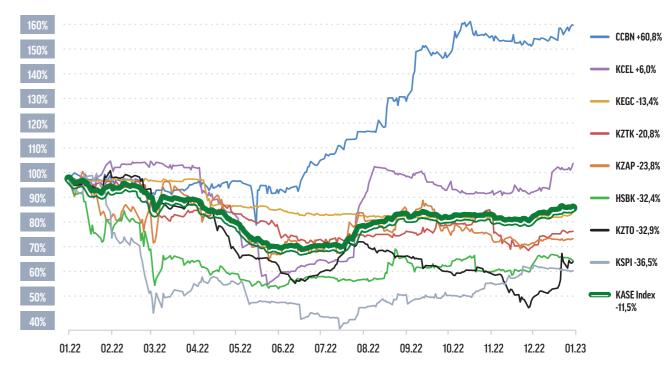
Fig.12 Share of non-residents in overall gross turnover*, %



* of the total gross turnover of trading in shares, position of an ini non-recurring transactions are excluded from the calculation

Strong financial data and holding a dividend season facilitated the recovery of the KASE index in the second half of 2022.

Fig.13 Components of KASE Index



Source: KASE

Bank CenterCredit JSC decided not to distribute net profit among its shareholders. However, its common shares soared by 60.8% in 2022 amid strong financial performance. Net profit of the bank in the first nine months of 2022 amounted to 127.2 billion KZT, which is 11.9 times higher than the same indicator in 2021. On May 6, the bank completed its transaction for acquisition of Subsidiary Bank Alfa-Bank JSC and received dividends from this transaction for a total of 50.0 billion KZT. Highlighting the improvement in the business positions and the increase in the capital stock of Bank CenterCredit JSC, S&P Global Ratings upgraded its rating of the bank from B to B+ with a Stable outlook in July 2022, Moody's Investors Service raised its outlook from 'Stable' to 'Positive'.

Also, the decision to pay annual dividends was postponed by Kcell JSC until results of the auction for radio frequencies are received. According to reporting for the nine months of 2022, the net profit of the mobile operator rose by 30% to 32.5 billion KZT compared to the same period of the past year. Meanwhile, shareholders of the **Kazakhtelecom JSC** parent company, after several cycles of postponing the decision, in November 2022 approved the payment of 2021 dividends in the amount of 3,509.39 KZT per share.

The Board of Shareholders of **National Atomic Company** Kazatomprom JSC, KEGOC JSC and KazTransOil JSC did not postpone the dividend season in 2022.

Shareholders of National Atomic Company Kazatomprom JSC decided to pay dividends in the amount of 876.74 KZT per share on May 27, 2022. This is the largest dividend amount in the history of company's publicity. According to the performance of nine months of the reporting year, the uranium company announced a 1.9-fold increase in its net profit to 306.3 billion

In June 2022, **KEGOC JSC** paid dividends for the second half of the previous year in the amount of 50.85 KZT per share. In October, shareholders of the company approved the dividend payment for the first half of 2022 in the amount of 65.44 KZT per share. The dividend season did not move despite the fact that, as follows from results of nine months, the net profit of the company fell down by 43.8% to 79.2 billion KZT.

In April 2022, **KazTransOil JSC** allocated 10 billion KZT for the payment of dividends making 26 KZT per share. This is much lower than market expectations. Also, the net profit of the company declined in the first nine months by 48.9% to 25.2 billion KZT due to decreased transportation volumes, while the main decline took place in the second quarter, in the third

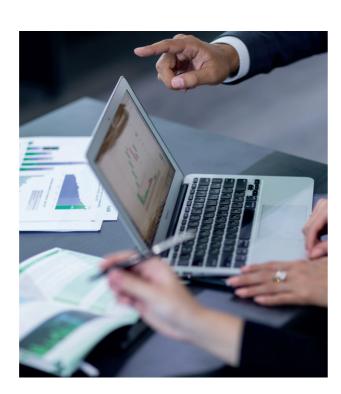
guarter the decline slowed down. As a result, the following performance for 11 months, shares of the company recorded the largest decline in price by 48.5%.

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Index representatives of the banking sector – Kaspi.kz JSC and Halyk Savings Bank of Kazakhstan JSC – slightly shifted the dividend season, but approved payments as strong financial reports were published.

Consolidated statement of **Kaspi.kz JSC** for the nine months of 2022 demonstrated a 36% swell in net profit to 422 billion KZT. According to the performance of the second quarter, shareholders received dividends in the amount of 500 KZT per share, according to the performance for the third quarter – 600 KZT per share. The group also launched a share buyback program three times for a maximum of USD 100 million each. During the year, within these programs, GDRs worth USD 137.8 million were purchased from the market.

Net profit of Halyk Savings Bank of Kazakhstan JSC for the nine months of 2022 made 417.1 billion KZT, which is 25.2% higher than the analogous indicator of 2021. On October 21, 2022, meeting of bank's shareholders decided to pay dividends in the amount of 12.71 KZT per share, which is equivalent to a dividend yield at 10.8%. Total amount of the 2021 dividends was 138.6 billion KZT, which is 30% less than in the last year.

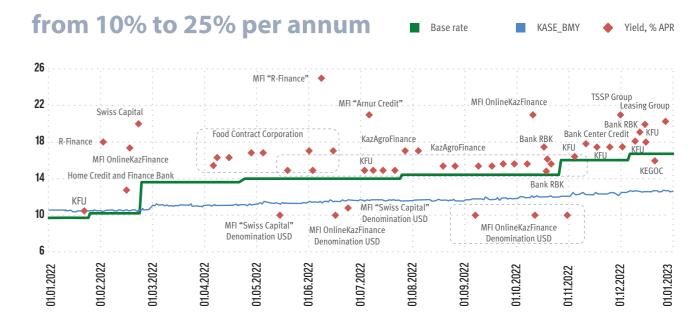


Volume of trading in corporate bonds on KASE in relation to 2021 increased by 25.6% or 508.1 billion KZT to 2.5 trillion KZT.

On the primary market, against the background of the base rate increased by the NBK, rates for placement of debt instruments also grew. Yield on market placements of corporate bonds during the current year was in the range of 10.0-25.0% p.a:

Number of placements and issuers on the corporate debt market continues to grow

Fig.14. Market placements in 2022



In the first half of 2022, the volume of corporate placements was at a very low level on the corporate borrowing market amid aggressive rate hikes and high uncertainty. From the third quarter, the situation levelled off and, by late 2022, the total volume of corporate placements amounted to 1.5 trillion KZT, 30.5% more than the volume of placements for the same period last year. All in all, bonds of 53 issues of 20 issuers were placed on KASE in 2022 for a total amount of 1,492.2 billion KZT.

On the secondary debt capital market, at the end of the first and the beginning of the second quarter of 2022, an increased trading volume was reported due to revaluation at a higher rate and liquidation of positions of the Russian subsidiary banks.

The volume of trading in corporate bonds on the secondary market for 2022 went up by 19.1% to 996.7 billion KZT. Trading on the secondary corporate debt market reached its peak in April-June, after that the turnover went down, but compared to 2021, it still remained at an elevated level.

As on the stock market, the bond market has a record number of transactions in 2022. It is 18,481, with a continuing downward trend in the average volume of one transaction. Average daily trading volume amounted to 10.2 billion KZT (on the secondary market -4.1 billion KZT), average daily number of transactions -75 (on the secondary market -67), average volume of one transaction – 134.7 million KZT (on the secondary market –60.4 million KZT).

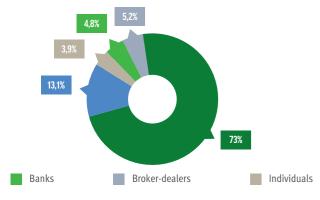
year	2018	2019	2020	2021	2022
Trading volume, billion KZT, including	2 309,4	2 715,6	2 691,2	1980,8	2 488,8
– primary market	1 858,2	1 953,7	2 239,4	1 143,7	1 492,2
– secondary market	451,2	761,9	451,8	837,0	996,7
Number of transactions, pcs	2 203	2704	3 203	8 839	18 481
– primary market	137	363	1 033	980	1 978
– secondary market	2066	2341	2 170	7 859	16 503
Average daily number of transactions, pcs	9	11	13	36	75
Average volume of one transaction million KZT	1 048,3	1 004,3	840,2	224,1	134,7

In the breakdown of main categories of investors on the primary market of corporate bonds, banks accounted for 27.0%, broker/ dealer organizations for 2.9%, other institutional investors for 11.1%, other legal entities for 58.1%, individuals for 0.8 %. The share of participation of non-residents was 3.5%.

In the breakdown of main categories of investors on the secondary market of corporate bonds, banks accounted for 4.8%, broker/ dealer organizations for 5.2%, other institutional investors for 13.1%, other legal entities for 73.0%, individuals for 3.9 %. The share of non-residents made a record 16.4%.

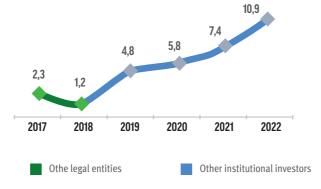
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Fig.15 Structure of investors in 2022*



 $^{\ ^*} of the \ total \ gross \ turnover \ of \ trading \ in \ corporate \ bonds \ on \ the \ secondary \ market, \ ignoring \ major$ transactions and non-recurring transactions

Fig.16 Share of non-residents in overall gross turnover*, %



 $^{^{\}star}$ of the total gross turnover of trading in corporate bonds, position of an initiator of specialized trading is excluded from calculation

The government securities sector recorded record high trading volumes both on the primary and secondary markets

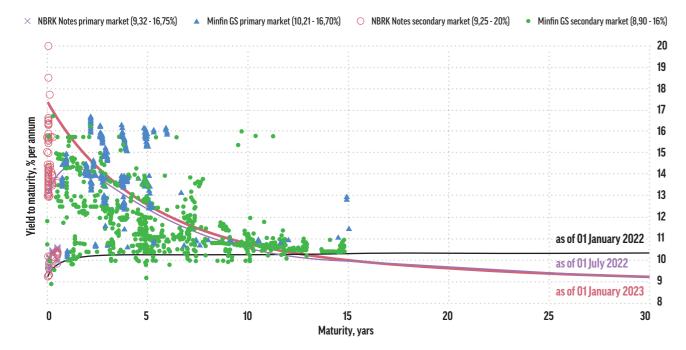
In 2022, the total volume of trading on the primary and secondary markets of government securities stood at 6.0 trillion KZT, which is a record high for the government securities sector.

Table 5: Highlights of trading on the government securities market

year	2018	2019	2020	2021	2022
Trading volume, billion KZT, including	1644,8	1823,7	4 650,7	3 575,9	6 004,3
– primary market	853,4	1 446,6	3 734,0	2 701,5	4 145,7
– secondary market	791,4	377,1	916,8	874,4	1 858,7
Number of transactions, pcs	1 410	887	1859	2 557	3 420
– primary market	162	249	793	938	812
– secondary market	1 248	638	1 066	1 619	2 608
Average daily number of transactions, pcs	7	7	8	10	14
Average volume of one transaction million KZT	1 166,5	2 056,0	2 501,7	1 398,5	1 755,7



Fig.17 GS yield for 2022 and GS yield curve



The volume of trading on the primary GS market soared by 53.5% or by 1,444.1 billion KZT to 4,145.7 billion KZT. This amount included 176.4 billion KZT raised by akimats (administrations) of 12 regions, cities of Almaty, Astana and Shymkent. The Ministry of Finance attracted 3,969.2 billion KZT with an average weighted yield of 10.21-16.58% p.a., having placed 29 issues (14 new issues and 15 issues were enlarged) with maturity ranging from 0.8 year to 15.0 years.

Volume of trading on the primary GS market

1 4444,1 billion +53,5%

On the secondary market as a whole for 2022, the trading volume totaled 1,858.7 billion KZT, more than a double increase compared to 2021. MEKAM trading volume expanded by 471.2 billion KZT or 87.6%. Volume of trades in Eurobonds of the Ministry of Finance tripled, however it accounts for a minor share in the trading structure. The manifold increase in the

Trading volume in the secondary market 1858,7 billion KZT

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volume of GS trading was attributed to liquidation of positions in treasury portfolios due to the revaluation against the background of the drastic hike of the base rate of the NBK. The sale reached its peak in March-April 2022.

In terms of maturity on the primary market, the share of liabilities with maturity from 3 to 5 years rose from 18% to 43% since the beginning of 2022. The share of long-term securities with maturity from 5 to 10 years and over 10 years dropped from 20% to 12% and from 25% to 5%, respectively, as compared to the previous year.

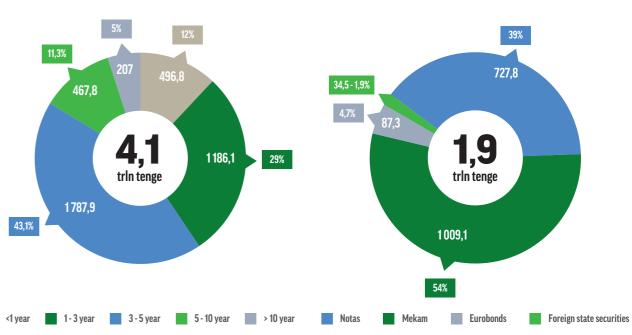
On the secondary market, in the breakdown by maturity, the share of trading in securities with maturity from 3 to 5 years increased from 5% to 20% and with maturity of over 10 years from 11% to 16%. The share of short-term securities with maturity from 1 to 3 years diminished from 22% to 10%, and the share of medium-term securities with maturity from 5 to 10 years slid from 22% down to 12%.

The structure of investors in 2022 on the part of buyers of government securities on the primary market was changed. The share of institutional investors rose from 35% to 74%, while the share of STBs declined from 47% to 14%

On the secondary market, on the buy side, the share of other legal entities increased (from 48% to 54%) and the share of brokers/ dealers decreased (from 9% to 3%) since early 2022. On the sale side of the secondary market, a similar trend is reported: the share of legal entities grew from 26% to 35%, while shares of other categories of investors descend.

Fig.18 Structure of GS placement on the primary market by remaining maturity, billion KZT, %

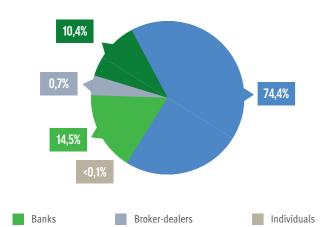
Fig.19 Volume of the secondary securities market on KASE by instruments, billion KZT



Source: KASE



Fig.22 Share of non-residents in gross turnover on the primary market, %



The trading volume of non-residents on the secondary market on the buyer side in physical terms in 2022 surged 2.3 times compared to 2021, while their share remained almost unchanged both on the buy and sell sides and made 8% and 6% respectively.

Fig.20 Structure of investors on the primary market in 2022

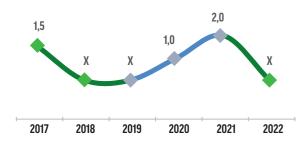
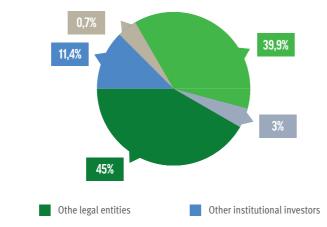


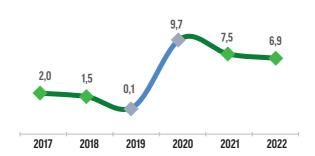
Fig.23 Share of non-residents in gross turnover on the secondary market, %



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Launch of new indices will make it possible to form more representative benchmarks of value of money and financial instruments on the market of Kazakhstan.

Fig.21 Structure of investors on the secondary market in 2022



Since March 09, 2022, the Kazakhstan Stock Exchange started calculating and publishing a series of indices of the government securities market of the Republic of Kazakhstan.

New series of GS indices demonstrate the change in the cost and yield of government securities at different maturity periods: less than one year (s), from one to five years (m), from five years and more (l).

Each series includes:

- » KZGB_CP price index of GS 'net' prices, calculated at prices excluding accumulated and unpaid coupon interest;
- » KZGB_DP total income price index, where total income implies prices including accrued coupon and reinvested coupon payment;
- **»** KZGB_Y yield index, expressed in a percentage p.a.

According to results for the year, the yield of government securities with maturity of up to 1 year demonstrated the highest growth (+6.77%). The yield of government securities with maturity from 1 to 5 years increased by 3.06%, with maturity of over 5 years – by 0.25%

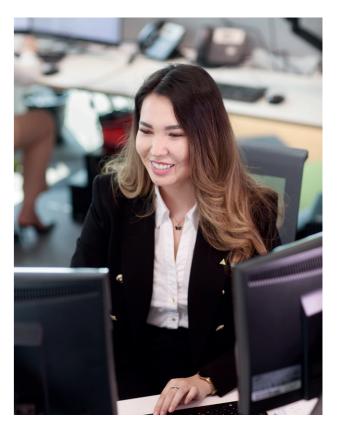


Fig.24. Change in the Yield Index at different terms



In the sector of foreign securities of KASE Global, the trading volume amounted to 25.8 billion KZT

At the end of December, 46 shares and six ETFs of Van Eck Associates Corporation, BlackRock Fund Advisors, Global X Management Company LLC and State Street Global Advisors foreign issuers circulated in the KASE Global sector.

According to 2022 results, more than 28 thousand transactions were made in the 'KASE Global' sector in the amount of 25.8 billion KZT. The average daily trading volume was 105.3 million KZT, average daily number of deals - 116, average volume of one deal - 908.3 thousand KZT.

The following shares accounted for the largest trading volume in 2022:

- Airbus SE (AIR_KZ) 133 transactions for a total of 10.4 billion KZT;
- Apple Inc. (APPL_KZ) 2,529 deals for a total of 2.8 billionKZT;
- Intel Corporation (INTC_KZ) 2,762 deals for a total of 1.6 billion KZT.

Among major categories of investors, brokers/ dealers accounted for 36.8%, other institutional investors for 5.9%, other legal entities for 24.2%, individuals for 33.2% The share of non-residents is estimated at 0.6%.



Securities of international financial organizations

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At the end of the year, 40 issues of bonds of four international financial organizations were listed on KASE. These are nine issues of the Asian Development Bank, 16 issues of the Eurasian Development Bank, 13 issues of the European Bank for Reconstruction and Development and two issues of the International Finance Corporation.

Trading volume in this sector for 2022 declined by 18.3%, reaching 126.9 billion KZT, while the number of transactions, on the contrary, increased 2.2-fold.

The volume of placements on the primary market decreased by 26.0% down to 86.4 billion KZT. Six issues of three international financial institutions were placed in total.

On the secondary market, the trading volume amounted to 40.5 billion KZT, which is higher by 5.2% or 2.0 billion KZT.

In the breakdown of the main categories of investors on the primary market, banks accounted for 35.6%, broker/ dealer organizations for 0.9%, other institutional investors for 32.3%, other legal entities for 31.2%.

In the breakdown of the main categories of investors on the secondary market for 2022, banks accounted for 11.6%, broker/dealer organizations for 13.9%, other institutional investors for 20.0%, other legal entities for 53.2%, individuals for 1.3%. The participation of non-residents is estimated at 18.4%.

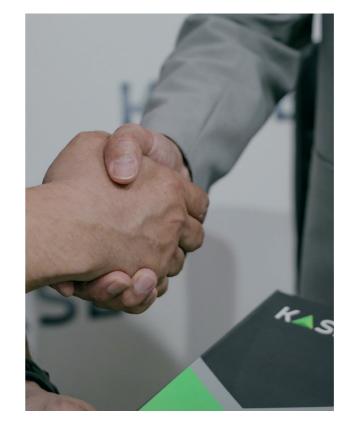
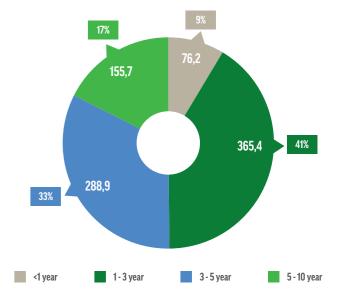


Fig.25. Structure of debt under MFO bonds in circulation by remaining maturity*



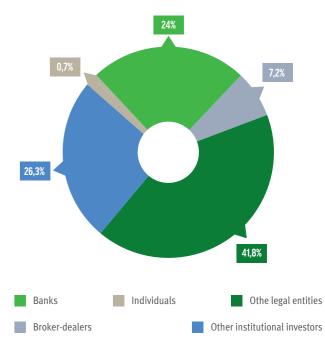
* data are set out as of 01 January 2023 at par value

Fig.26. Structure of investors on secondary market for 2022*

Securities of investment funds

As of January 1, 2023, the Investment Fund Securities sector had 21 instruments of mutual funds managed by six management companies and six ETFs, including two newly added investment funds managed by BCC Invest JSC and Halyk Finance JSC in 2022. Volume of trading in these instruments totaled 8.8 billion KZT, which is 76.8% lower than in 2021. The largest volume of trading was represented by Fixed Income USD IUIF managed by Freedom Finance JSC and Primary Placement Fund CEF under the management of the East-West Management Company LLC.

In the breakdown of the main categories of investors, 27.3% are individuals, 21.5% are brokers/ dealers, 2.1% are other institutional investors, 49.1% are other legal entities. The share of non-residents was 4.8%.



* of the total gross turnover of trading in MFO bonds, position of an initiator of specialized trading is excluded from calculation

Money market

The volume of trading on the money market in 2022 reached a record high at 231.8 trillion KZT, an increase of 51.9% or 79.2 trillion KZT from the last year.

Fig.27. Inflation and interest rates



Several factors contributed to such a significant increase in turnover on the money market.

During periods of high turbulence on the market, there is traditionally a need for short-term liquidity. In 2022, trading on the money market peaked in April-June.

In 2022, the base rate grew from 9.75% to 16.75%, while money market rates also increased, making it more appealing for companies that provide liquidity. MM_Index composite indicator of the money market, which is a weighted average value through the volume of transactions, the value of yield on USD/KZT currency swap operations and automatic repo operations with government securities opened for one business day, increased by 733 b.p. over the year up to 17.85% p.a. from 10.52% p.a.

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Reliable guarantees of discharge of obligations by the counterparty emerged due to the introduction of the institution of the Central Counterparty on the money market in 2020. In 2022, the share of repo transactions with the CCP increased to 94.0%.

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Repo operations

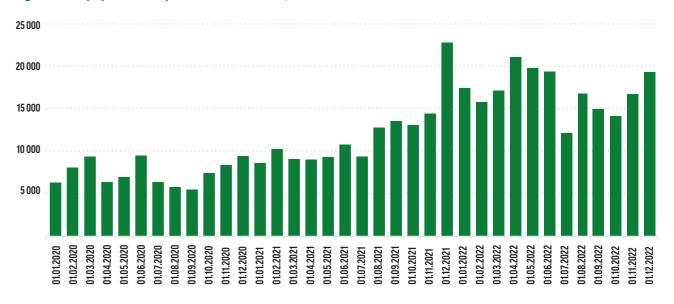
The total volume of repo transactions for 2022 amounted to 202.6 trillion KZT, which is 61.0 trillion KZT or 43.1% more than the trading volume in 2021. The drastic increase in the trading volume started in the fourth quarter of 2021, volumes remained in 2022, while the borrowing reached its peak during the period from April to June. The largest growth in trading volume was reported by individual participants, including second-tier banks during the period of liquidation of assets of Russian subsidiary banks, broker-dealer organizations, as well as other participants during the period of geopolitical escalation.

Average daily volume of transactions made 827.1 billion KZT, average daily number of executed transactions was 942, average volume of one transaction – 878.1 million KZT. In the structure of repo transactions, over 75.3% were auto repo transactions with GS, auto repo with NRS were 24.6%, direct repo with NRS and direct repo with GS were 0.03% each. Two auto repo deals were made with CPC for 5.1 million KZT.

At the end of 2022, TONIA indicator rose by 707 b.p. from 10.56% to 17.63% p.a., the value of the TRION indicator grew by 703 b.p. from 10.53% to 17.56% p.a., the value of the TWINA indicator increased by 670 b.p. from 10.34% to 17.04% p.a. Seasonal fluctuation was reported during the period of tax payments, and the pressure on the indicator intensified in December 2021.



Fig.28. Monthly dynamics of repo volume in 2020-2022, billion KZT



In the structure of repo transactions, the trend towards an advance in the share of transactions with participation of the Central Counterparty continues. In 2020, the share of repo transactions with the CCP was 34.1%, in 2021 – 84.3%, in 2022 the share of the CCP rose to 94.0%.

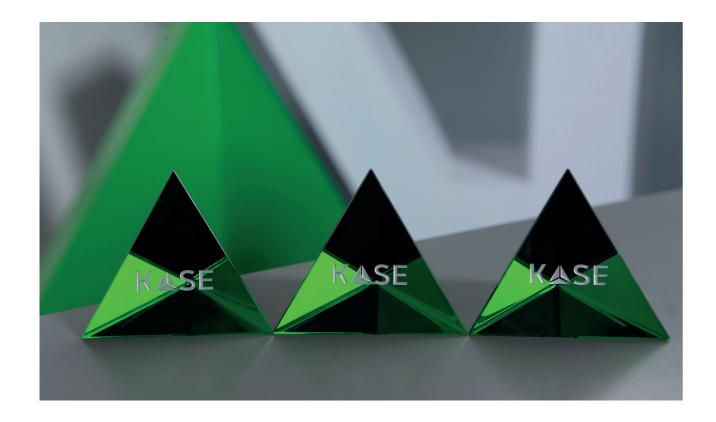
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As the central counterparty institution develops, there is a gradual increase in trading on longer periods. In 2022, repo transactions for the amount of 9.6 trillion KZT were closed for a period from 7 to 30 days, and 245 billion KZT for a period from 30 to 90 days.

In August 2022, the Kazakhstan Stock Exchange launched a new version of the ASTS+ trading and clearing system, which provides for a possibility to make repo transactions with the CCP with clearing participation certificates. Clearing participation certificates are non-issue collateralized perpetual securities issued by the exchange and certifying the right of their owners to a share of assets in a specially created guarantee fund of KASE – property pool.

Tab. 6 Transactions on REPO market in breakdown by maturity for 2015-2022, billion KZT:

	2015	2016	2017	2018	2019	2020	2021	2022
0 - 7 days	22 325	56 583	72 484	74 482	70 839	85 331	135 872	192 781
7 - 30 days	887	529	1 281	1 341	1866	3 238	5 593	9 612
30 - 90 days	1	2	25	19	2	0	167	243
Total	23 213	57 114	73 790	75 843	72 707	88 569	141 631	202 636



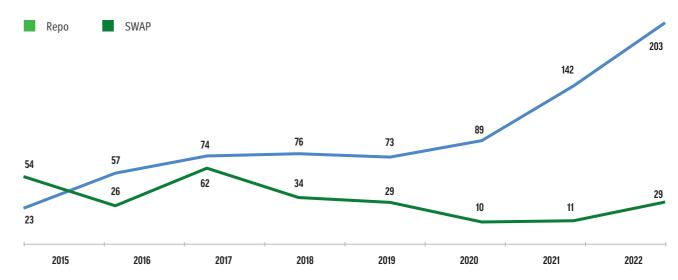
Currency swap transactions

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The volume of trading in currency swaps from 2017 to 2020 decreased annually in favor of an increased volume in trading with repo instruments. In 2021-2022, the trend changed, and the volume of made swaps began to grow.

In 2022, the total volume of currency swap transactions boomed by 18.2 trillion KZT or 2.6 times to 29.2 trillion KZT

Fig.29. Change in volume of REPO-SWAP transactions in 2015-2022, billion KZT



Average daily volume of transactions in 2022 amounted to 119.2 billion KZT, average daily number of transactions was 21, average volume of one transaction made 5.6 billion KZT.

In the instrument structure, on the currency swap market, transactions with a one-day currency swap (USDKZT_o_oo1) accounted for 74.2% of the total trading volume (21.6 trillion KZT or USD 47.0 billion), deals with a two-day currency swap (USDKZT_o_oo2) accounted for 20.7% of the total trading volume (6.0 trillion KZT or USD 13.4 billion), deals with a weekly currency swap (USDKZT_o_o1W) accounted for 0.1% of the total trading volume (32.0 billion KZT or 70.0 million USD), transactions with a monthly currency swap (USDKZT_o_o1M) accounted for 0.7% of the total trading volume (194.2 billion KZT or USD 432.0 million), transactions with a one-day currency swap with the Russian ruble (RUBKZT_o_oo1) accounted for

o.6% (166.5 billion KZT or 22.4 billion RUB); on the currency swap market, 3.1% of the total trading volume (0.9 trillion KZT or 120.0 billion RUB) were transactions with a two-day currency swap with the Russian ruble (RUBKZT_o_oo2), less than 0.1% of the total trading volume of swaps (11.2 billion KZT or 1.3 billion RUB) were RUBKZT_1_001 transactions, 0.5% of the total trading volume of this pair (139.2 billion KZT or EUR 280.8 million) were transactions with a one-day currency swap (EURKZT_o_oo1), 0.1% of the total volume of trades in this pair (30.8 billion KZT or EUR 55.0 million) was transactions with EURKZT_1_001.

The yield on SWAP-1D (USD) one-day dollar swap at the end of the year reached 18.62% p.a. and increased by 914 b.p. since the beginning of the year. The yield SWAP-2D (USD) on two-day currency swap rose up by 844 b.p. to 18.68% p.a.

Foreign exchange market

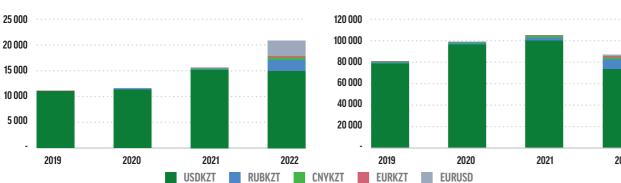
For the past four years, the foreign exchange market has been witnessing a steady growth in the trading volume, which is mainly due to activities of the Exchange members in line with their strategies and needs of their clients.

Along with that, there are a gradual withdrawal from the total dominance of trading in the USD/KZT currency pair and a development of direct conversion operations on currencies of Kazakhstan's partner countries.

The trading volume on the foreign exchange market in 2022 reached 20.8 trillion KZT, which is 33.6% higher than the value of the previous year. The share of trading in the USD/KZT pair in the total volume made 71.8% or 14.9 trillion KZT, which is 1.4% lower than the analogous period of the previous year. The share of the RUB/KZT pair increased from 1.7% to 10.3%, reaching 2.1 trillion KZT, which is 7.9 times higher than in 2021. The share of the CNY/ KZT pair increased from 0.8% to 2.8%, reaching 589.9 billion KZT, which is 4.8 times higher than in 2021. The share of the EUR/KZT pair rose from 0.2% to 0.9%, making 185.6 billion KZT, which is 5.3 times higher than in 2021.

In July, amid fears of recession risks in the Euro zone, the USD reached parity with Euro. Already in August, the Euro exchange rate fell below USD. During this period, the interest of investors on KASE currency market shifted significantly towards trading in the EUR/USD pair. In September and October, trading in the EUR/ USD pair surpassed the trading volume of the USD/KZT pair, and

Fig.30. Volume of trading in foreign currencies, billion KZT

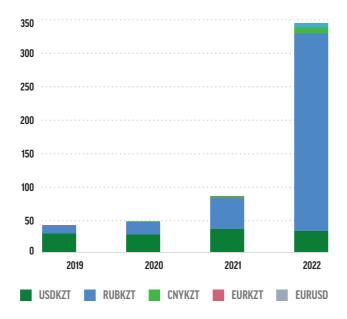


by the end of 2022, the EUR/USD pair accounts for 14.2% of the total trading volume on the foreign exchange market.

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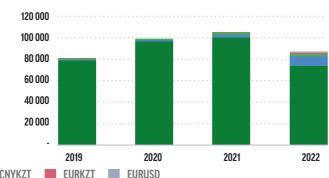
In the breakdown by the number of instruments, 344.1 billion currency units were purchased on the foreign exchange market in 2022 compared to 84.1 billion currency units purchased in 2021. Out of the total volume, the number of USD purchased in 2022 was 32.3 billion units (9.4%), rubles – 296.5 billion units (86.2%), yuan – 8.5 billion units (2.5%), Euro – 392.6 million units (0.1%). 6.3 billion Euro units (1.8%) were bought for USD:

Fig.31. Number of currency units, billion units



Instead, the number of transactions on the currency market declined from 103.6 thousand down to 85.7 thousand, thus reflecting the growth trend of an average volume per transaction.

Fig.32. Number of currency transactions, pcs



Derivatives market

At the end of December 2022, non-deliverable futures for USD/ KZT, RUB/KZT exchange rates, common shares of Halyk Savings Bank of Kazakhstan JSC, common shares of NAC Kazatomprom JSC and KASE Index were available for trading in this sector of the stock market.

Futures for RUB/KZT exchange were added in August 2022, and in November five relevant deals were closed for the amount of 7.9 billion KZT. There were no other contracts on the derivatives market in 2022. Trading volumes in this sector are still humble. The development of this segment requires a great liquidity and a high level of professionalism of the participants. KASE works on a market maker program in this segment.

Operating and financial results

As of December 31, 2022, assets of the Exchange according to the audited consolidated financial statement for 2022, totaled 12,109.7 billion KZT, 2.8 times increase as compared to the last year (by 7,757.1 billion KZT).

Considerable increase in assets and liabilities is due to the fact that since October 01, 2018, the Exchange has been performing CCP functions on all markets, being a party for each participant in all transactions made at exchange trading and guaranteeing their execution on a net basis. In particular, in the consolidated financial statement, financial assets of the central counterparty stood at 11,769.5 billion KZT.

Cash and cash equivalents amounted to 267.9 billion KZT, financial assets considered at amortized cost made 31.9 billion KZT, reverse REPO operations were 35.6 billion KZT.

Liabilities and capital

The amount of the Exchange's liabilities swelled 2.8 times and reached 12,083.1 billion KZT, where 97.4% or 11,769.5 billion KZT are financial obligations of the central counterparty, 2.6% or 312.8 billion KZT are guarantee fees and the collateral for clearing participants placed on accounts of KASE as a central counterparty.

Equity capital of the Exchange for the reporting year went up by 35.1% (6.9 billion KZT) and reached 26.6 billion KZT. The size of the authorized capital of the Exchange at the end of 2022 was 4.2 billion KZT and did not change from the last year.

Clearing reserve funds did not change compared to the last year and stood at 3.2 billion KZT. Provisions for the revaluation of main assets amounted to 183.7 million KZT.

Fig. 33. Key Performance Indicators



Income

The operating income of the Exchange at the end of 2022 made 11.9 billion KZT, which is 4.7 billion KZT or 65.8% higher than results of the previous year. The fee income totaled 5.7 billion KZT, an increase of 1.5 billion KZT or 34.6%. The interest income rose 2.1 times or by 3.4 billion KZT and amounted to 6.4 billion KZT

In the structure of commission income, the major portions are represented by clearing fees (37%), an income from commission fees for operations (36.6%), listing fees (13.7%), an income from membership fees (5.4%), an income from provision of information services (4.3%), an income from provision of remote access services (2.9%).

The commission of the Exchange for the conduct of operations stood at 2.1 billion KZT, which is up by 0.6 billion KZT or 37.4%. The increase in commission fees compared to the same period last year was due to the growth in trading volume on all markets.

Listing fees of the Exchange in 2022 decreased by 52.3 million KZT or 6.2%, reaching 785.4 million KZT.

Clearing fees of the Exchange grew by 946.9 million KZT or 81% and totaled 2.1 billion KZT. The income from membership fees declined by 29.7 million KZT or by 8.7% as compared to 2021, amounting to 310 million KZT. The income from provision of information services decreased in 2022 by 6.5 million KZT or 2.6% and stood at 246.2 million KZT.

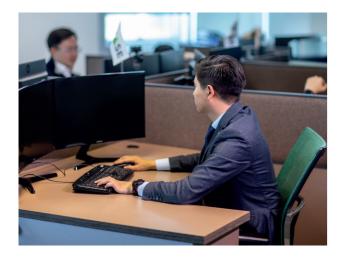
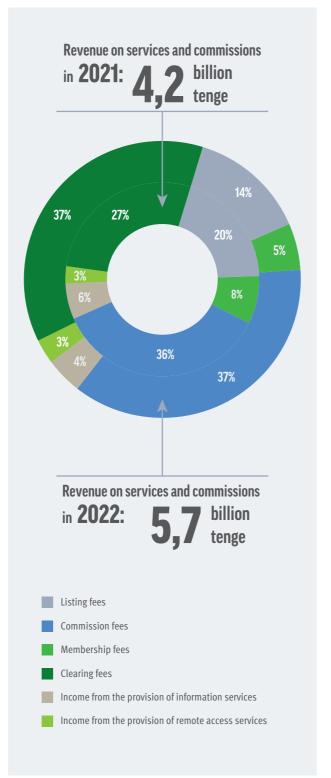


Fig.34. Structure of income in the breakdown of core services

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Expenses

Expenses of the Exchange for the year amounted to 4 billion KZT and increased by 1.1 billion KZT or 37% as compared to the previous year. In the structure of expenses of the Exchange, the largest portions are represented by personnel expenses (57%), wear and amortization (10.6%), maintenance of fixed assets and intangible assets (5.8%), other expenses (27%). Growing costs are attributed to an increase in the number of staff and therefore a rise in personal expenses; and an increase in expenses for wear and amortization items.

Operating activities results of the Exchange

At the end of 2022, the net profit of the Exchange totaled 6.8 billion KZT, an increase of 2.9 billion KZT, which is 74.6% higher as compared to the previous year. EBITDA surged by 82% and made 8.4 billion KZT. Operating income of the Exchange soared by 65.8%, operating expenses rose by 37%, operating margin advanced by 66.6% in 2022 against 59.6% a year earlier. Net profit margin increased to 57.1% in 2022 against 54.2% a year earlier.

Return on equity (ROE) at the end of 2022 expanded from 22% to 30% due to an increase in net profit in the reporting year.

Return on assets (ROA) edged down from 0.13% to 0.08% as a result of a significant increase in assets due to repo transactions with the central counterparty.

CORPORATE REPORT





Subject to the laws of the Republic of Kazakhstan, general meeting of shareholders is a supreme management body of the Exchange.

Corporate Governance

Information about shareholders

As of January 01, 2022, the total number of announced ordinary shares of the Exchange made five million, including 1,075,231 placed ordinary shares, shareholders of which were 48 parties, including banks, brokerage and insurance companies, retail investors as individuals. The National Bank accounted for 46.99 % of the total number of the placed ordinary shares of the Exchange.

General meeting of shareholders and Board of Directors of KASE

Subject to the laws of the Republic of Kazakhstan, general meeting of shareholders is a supreme management body of the Exchange. List of issues falling within the competence of the general meeting of shareholders is determined by 'About Joint Stock Companies' law of the Republic of Kazakhstan and the Charter of the Exchange.

The Board of Directors is a management body of the Exchange that carries out the general management of the Exchange, except for issues referred by 'About Joint Stock Companies' law of the Republic of Kazakhstan and/or the Charter of the Exchange to the exclusive competence of the general meeting of shareholders of the Exchange.



In May 2021, the general meeting of shareholders determined a quantitative composition of the Board of Directors out of ten people, including:

- >> three unelected members of the Board of Directors a representative from the authorized body for regulation, control and surveillance of the financial market and financial organizations and a representative of the National Bank of the Republic of Kazakhstan based on clause 4 article 84 of 'About Securities Market' law of the Republic of Kazakhstan, as well as a Chairperson of the Management Board of the Exchange (ex officio) based on sub-clause 2) clause 3 article 17 of the charter of the Exchange;
- » four representatives of shareholders of the Exchange;
- >> three independent directors of the Exchange.

The general meeting also determined that:

- » the term of tenure of the elected members of the Board of Directors starts from the date of their election and expires at the annual general meeting of shareholders of the Exchange, which will cover an annual financial statement of the Exchange for 2023;
- » the following persons were elected as members of the Board of Directors representing shareholders of the Exchange: Abdrazakov E. S., Dronin A. V., Marich I. L., Salimov Ye. I. and the following persons were elected as independent directors of the Exchange: J. Willems, I. Doron, Elemesov A. R.

Composition of the Board of Directors as of January 01, 2022:

representatives of the National Bank and the authorized body based on 'About Securities Market' law of the Republic of Kazakhstan:

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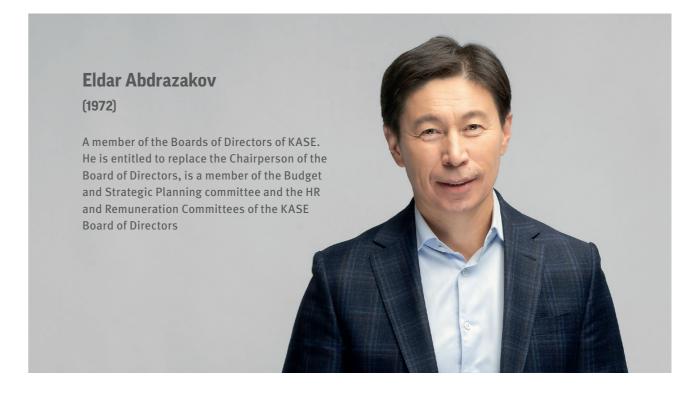
- » Moldabekova Aliya Meirbekovna (Chairperson of the Board of Directors) - Deputy Governor of the National Bank of the Republic of Kazakhstan;
- >> Khadzhiyeva Maria Zhamalovna Deputy Chairperson of the Agency for Regulation and Development of the Financial Market;

the head of the executive body based on charter of the Exchange:

» Aldambergen Alina Otemiskyzy – Chairperson of the Management Board of KASE;

elected members of the management body on the basis of 'About Joint Stock Companies' law of the Republic of Kazakhstan:

- » Abdrazakov Eldar Sovetovich Chairman of the Board of Directors of Centras Securities JSC; Insurance company Centras Insurance JSC, Insurance company Kommesk-Omir JSC, Life insurance company Centras Kommesk Life JSC;
- » Dronin Alexander Vladimirovich Deputy Chairman of the Management Board of BCC Invest JSC;
- >> Elemesov Askar Raushanovich an independent director of KASE:
- >> Israel Doron an independent director of KASE;
- **» Marich Igor Leonidovich** Managing Director of Sales and Business Development at Moscow Exchange MICEX-RTS
- Salimov Ertay Ismailovich Deputy Chairman of the Management Board of Halyk Bank of Kazakhstan JSC;
- >> Jan Willems an independent director of KASE.



Eldar Abdrazakov was elected as a member of the KASE Board of Directors in 2005 and was re-elected to this position in May

During 2021-2022 and January 2023, Eldar Sovetovich successfully completed three consecutive stages of IoD **Chartered Director qualification:**

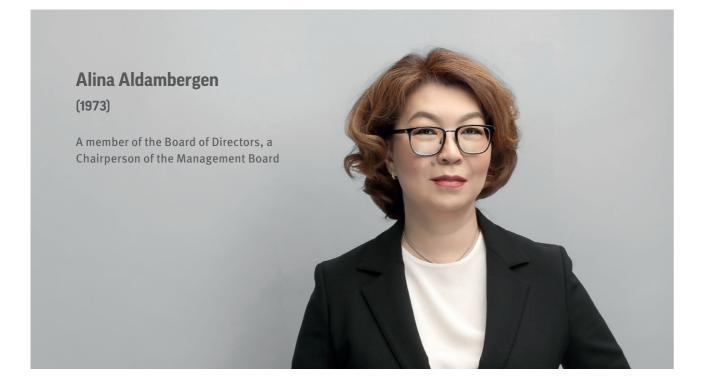
- >> Certificate in Company Direction, 2021;
- » Diploma in Company Direction, 2022;
- >> Chartered Director, 2023;
- >> He was awarded the highest qualification Chartered Director, and the status – Confirmed Director, from the Institute of Directors, UK, confirming the high professional competence of Eldar Sovetovich.

Over the years of his career, he worked as a Managing Director in Kazkommertsbank OJSC, General Director of Kazkommerts-Securities OJSC, Chairman of the Management Board of Centras Securities JSC, currently he is a General Director of Centras Capital LLP, a member of the boards of directors of ForteBank JSC, Air Astana JSC. He is a member of the National Council for Corporate Governance under the Presidium of NCE Atameken.

He is a founder of the Kazakhstan Growth Forum, an initiator of the Professionalize Kazakhstan educational project for youth.

He owns Centras Group holding, which includes Kommesk-Omir, Centras Kommesk Life, Centras Insurance insurance companies, as well as Centras Securities JSC, Centras Capital LLP financial companies, iLEX law firm, SOS medical center and Centras Venture Fund JSC.

In 1995, he graduated with honors from Akhmet Yassawi International Kazakh-Turkish University with major in International Economic Relations. He continued his studies for master's degree with the same university, and in 1996 he was awarded the academic degree of Master of Science with major in International Economic Relations. In 2010, he successfully completed a program for executives at Harvard Business School (US).



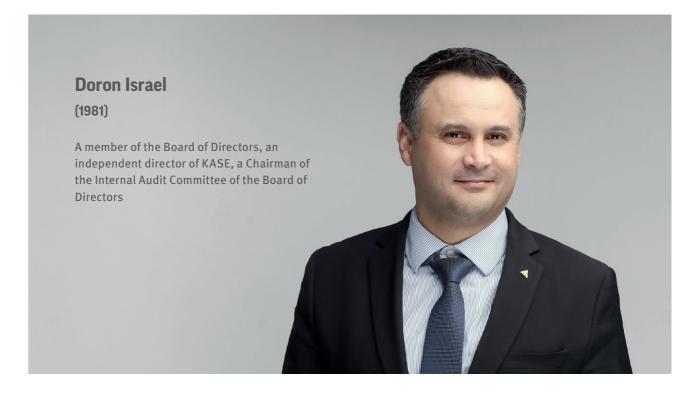
On February 09, 2016, she was elected as the Chairperson of the Management Board of KASE, she is a member of the Board of Directors. She was re-elected to this position in June 2020. In different periods, she held such positions as Chairperson of the Management Board, Member of the Board of Directors of Pension Plan Investment Management Organization ABN AMRO Asset Management JSC, Deputy Chairperson of the Management Board of SJSB ABN AMRO Bank Kazakhstan JSC, Deputy General Director, General Director of Samruk-Kazyna Finance LLP, Deputy Chairperson of the Management Board of National Managing Holding Baiterek JSC and held responsible government positions as Deputy Chairperson of the Agency of the Republic of Kazakhstan for Regulation of Activities of the Regional Financial Center of Almaty, Deputy Chairperson of the Agency of the Republic of Kazakhstan for Regulation and Surveillance of the Financial Market and Financial Organizations.

Currently, she is a member of the National Council for Corporate Governance under the Presidium of NCE Atameken, a member of Association of Financiers of Kazakhstan ALE, a member of the Board of Directors of KASE Clearing Center JSC, Central Securities Depository JSC. Since 2017, KASE led by A. Aldambergen together with the International Finance Corporation (hereinafter – IFC), holds the annual Ring the Bell for Gender Equality as part of the implementation of the UN Sustainable Stock Exchanges Initiative, which KASE joined in 2015.

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In 2016 she was awarded the Kazakhstan Respublikasynyn tauelsizdigine 25 zhyl jubilee medal, in 2018 - the Order of Kurmet.

In 1995, she graduated from the Kazakh State Academy of Management with major in Finance and Credit. In 1997, she graduated as a Master of Business Administration (MBA) from School of Business Administration named after William E. Simon within the University of Rochester.



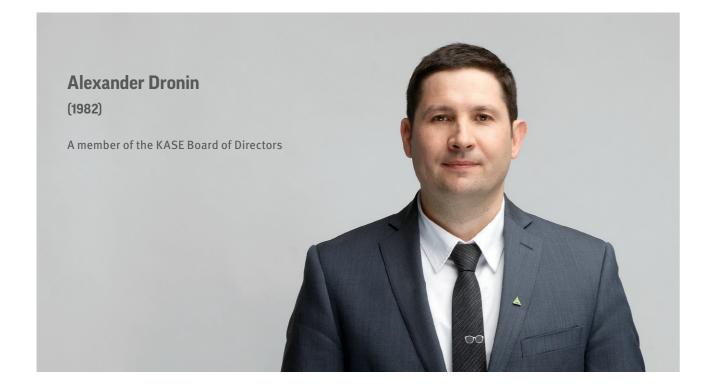
Doron Israel was elected as a member of the Board of Directors, an independent director in May 2021.

Over the years of his career, he worked at EY (Ernst & Young), Department of Professional Practice, Tel Aviv, Israel, Corporate Finance Department of the Israel Securities Authority, Jerusalem, Israel

Currently, he is a Professor at Arison School of Business, IDC Herzliya, where he teaches accounting, econometrics and finance. He is also a Professor at the Graduate School of Business, Nazarbayev University where he teaches accounting and econometrics.

In 2006, he graduated with honors from Tel Aviv University with a bachelor's degree in economics, accounting and management.

In 2012 he graduated from Stanford University with a Master's degree in Statistics, in 2013 he received a PhD in Business Administration with major in accounting.



Alexander Dronin was elected as a member of the Board of Directors in May 2021.

Over the years of his career, he worked in banking and IT sectors as an accountant/ financial director, he headed a risk management unit and, subsequently, a financial unit at BCC Invest JSC. He held such positions as Deputy Chairman of the Management Board of BCC Invest JSC in charge of the business unit. He was a member of the Board of Directors and was an independent director of LIC Standard Life JSC.

Currently, he is an independent strategic consultant in various projects in insurance, investment, and financial engineering sectors.

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In 2003, he graduated with honors from Turar Ryskulov Kazakhstan Economic University with major in accounting and audit. In 2012, he received a master's degree in the MBA program of the International Academy of Business majoring in Business Administration. In 2013, he became a PhD student at Massey University (New Zealand).



Askar Elemesov was elected as a member of the Board of Directors, an independent director in May 2021.

Over the years, he held such positions as Deputy Chairman of the Management Board of Bank Caspian JSC, Bank TuranAlem JSC, Halyk Savings Bank of Kazakhstan JSC, CEO of Deutsche Bank Securities Kazakhstan and Troika Dialog Kazakhstan JSC investment companies, Chairman of the Financial Sector Committee under the Presidium of NCE Atameken and held responsible government positions as Deputy Governor of the National Bank of the Republic of Kazakhstan, Vice Minister of Finance of the Republic of Kazakhstan.

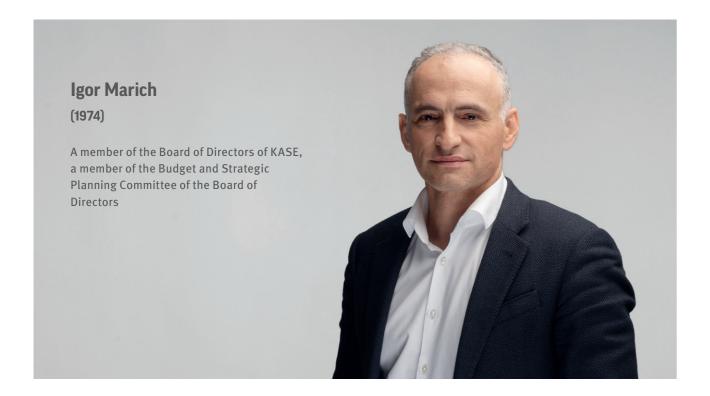
Over the years, he was a member of boards of directors of various financial organizations and organizations with state participation. Thus, he was an independent director of Halyk Savings Bank of Kazakhstan JSC, Kazkommertsbank JSC, Housing Construction Savings Bank Otbasy Bank JSC, National Managing Holding KazAgro JSC, Sovereign Wealth Fund Samruk-Kazyna JSC, National Company KazMunayGas JSC, National

Atomic Company Kazatomprom JSC, Development Bank of Kazakhstan JSC, Unified Accumulative Pension Fund JSC, etc. He was a Chairman of the Board of Directors of Association of Financiers of Kazakhstan ALE.

Currently, he is a head of a branch of ACRA (Analytical Credit Rating Agency), a member of the Board of Directors — an independent director of Bereke Bank JSC, a member of the Board of Directors/ Independent Director of Unified Accumulative Pension Fund JSC, a member of the Board of Directors/ Independent Director of Samanea Limited, a member of the Board of Directors/ Independent Director of SkyBridge Invest JSC, a member of the Board of Directors/ Independent Director of Samanea Limited.

In 1990, he graduated from Lomonosov Moscow State University majoring in Political Economy, in 1994, he received a master's degree from the University of Washington majoring in Business Administration.

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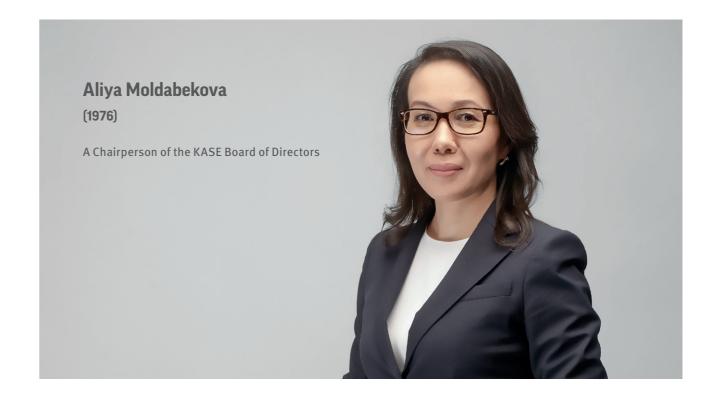


Igor Marich was elected as a member of the Board of Directors, an independent director in 2018, and was re-elected as a member of the Board of Directors in May 2021.

Over the years, he held such positions as Managing Director for Money Market at Moscow Exchange MICEX-RTS PJSC, Member of the Management Board/ Managing Director for Money and Derivatives Markets of Moscow Exchange MICEX-RTS PJSC, Member of the Management Board/ Managing Director for Sales and Business Development at Moscow Exchange MICEX-RTS PJSC. Over the years, he headed operations with securities in various Russian banks (in the ELBIM-BANK until 1999, and later in Sodruzhestvo Bank), worked at MICEX, supervised the development of the derivatives market on the MICEX, as well as the development and implementation of new instruments on markets of MICEX Group. He took an active part in creation of the REPO market on the MICEX and in subsequent development of exchange-based REPO operations, as well as in organizing deposit and credit operations of banks on the MICEX.

Currently, he is a Chairman of the Management Board and a Chairman of the Supervisory Board of Non-Banking Credit Organization, that is the National Clearing Center Central Counterparty (Joint Stock Company), a Chairman of the Supervisory Board of National Commodity Exchange Joint Stock Company, a member of the Board of Directors of MB Innovations Limited Liability Company, of National Financial Association (Self-Regulatory Non-Commercial Organization) (NFA), of Non-Banking Credit Institution Petersburg Settlement Center Closed Joint-Stock Company, a member of the Supervisory Board of Non-Banking Credit Institution National Settlement Depository Joint-Stock Company.

In 1998, he graduated with honors from the Financial Academy under the Government of the Russian Federation with major in Banking. In 2015, he graduated from INSEAD Business School under TGM program.



Based on clause 4 article 84 of 'About Securities Market' law of the Republic of Kazakhstan and sub-clause 1) clause 3 article 17 of the KASE Charter, she joined members of the Board of Directors in January 2020 as a representative of the National Bank of the Republic of Kazakhstan, and by decision of the Board of Directors she was elected as a Chairperson of the Board of Directors in January 2020, in May 2021 she was reelected as a Chairperson of the Board of Directors.

Over the years, she held such positions as Deputy Director of the Department of Monetary Operations (Department of Monetary Operations and Asset Management) of the National Bank of the Republic of Kazakhstan, Director of the Department of Monetary Operations of the National Bank of the Republic of Kazakhstan.

Currently, she is a Deputy Governor of the National Bank of the Republic of Kazakhstan.

She was awarded Kazakhstan Respublikasynyn tauelsizdigine 20 zhyl, Tengege 20 zhyl, Eren enbegi ushin, Astana 20 zhyl anniversary medals, Honored Worker of the NBK badge. She repeatedly received Gratitude of the Governor of the National Bank of the Republic of Kazakhstan.

In 1999, she graduated from the Kazakh State National University named after al-Farabi. She is a Candidate of Science in Physics and Mathematics.



Ertay Salimov was elected as a member of the Board of Directors, an independent director of KASE in 2016. He was reelected as a member of the Board of Directors in May 2021.

He has been employed with Halyk Bank since August 1995 and over the years of his career he held such positions as Deputy Head of the Non-Trading Operations Division of the Foreign Exchange Operations Department, Deputy Head of the work with precious metals Division of the Foreign Exchange Operations Department, Principal Banker of the work with Precious Metals Division of the International Operations Department, Principal Banker of the Precious Metals Division of the International Operations Department, Principal Banker of the Commodity Division of the Trade Finance Department, Principal Banker of the Commodity Division of the Treasury, Head of Forex Operations Management, of Money Market of the Treasury, Head of the Department of Trading Operations of the Treasury, Deputy Director of the Treasury, Director of the Treasury, Director of the Treasury.

Today, he holds such positions as Deputy Chairman of the Management Board of Halyk Bank of Kazakhstan JSC, Chairman of the Board of Directors of Subsidiary of Halyk Bank of Kazakhstan Halyk Finance JSC.

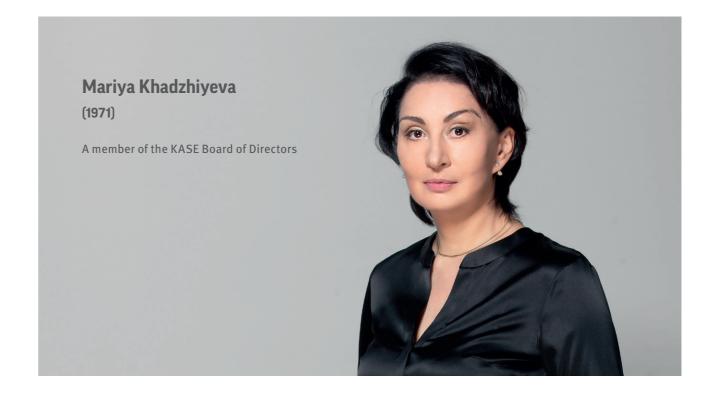
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He was awarded various diplomas for his professional achievements.

In 2013, he received the Tengege 20 zhyl jubilee medal – Best Financier;

In 2017, he was awarded an Order of the Association of Financiers of Kazakhstan – Honored Financier with specialty in International Economic Relations.

In 1995, he graduated from the Kazakhstan State Academy of Management with a degree in Finance and Credit.



Based on clause 4 article 84 of 'About Securities Market' law of the Republic of Kazakhstan and sub-clause 1-1) clause 3 article 17 of the KASE Charter, she joined the Board of Directors in January 2020 as a representative of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market.

Over the years, she held such positions as Deputy Director of the Department for Surveillance of Securities Market Entities and Accumulative Pension Funds of the Agency of the Republic of Kazakhstan for Regulation and Surveillance of the Financial Market and Financial Organizations, Director of the Department for Surveillance of Securities Market Entities and Accumulative Pension Funds of the Agency of the Republic of Kazakhstan for Regulation and Surveillance of the Financial Market and Financial Organizations, Deputy Chairperson of the Committee for Control and Surveillance of the Financial Market and Financial Organizations of the National Bank of the Republic of Kazakhstan, Director of the Department for Surveillance of Securities Market Entities of the National Bank of the Republic of Kazakhstan, Director of the Department of the Securities Market of the National Bank of the Republic of Kazakhstan, Director of the Republic of Kazakhstan, Director of the Republic of Kazakhstan, Director of the Republic of Kazakhstan, Deputy

Chairperson of the Management Board of the Unified Registrar of Securities, Chairperson of the Management Board of the Unified Registrar of Securities, First Deputy Chairperson of the Council of Association of Financiers of Kazakhstan ALE.

Over the years, she was a member of the boards of directors of Kazkommerts Securities JSC, Central Securities Depository JSC, Unified Registrar of securities JSC, Insurance Compensation Guarantee Fund JSC.

Currently, she is a Deputy Chairperson of the Agency for Regulation and Development of the Financial Market.

She was awarded such medals as Kazakhstan Constitutsiyasyna 10 zhyl jubilee medal, Kazakhstan Respublikasynyn tauelsizdigine 20 zhyl, Honored Worker of the National Bank of the Republic of Kazakhstan badge, Tengege 20 zhyl jubilee medal, Eren enbegi ushin medal.

She received gratitude for the pro-active conscientious work in the staff of the Integration Committee.

She received gratitude of the NBK Governor.

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Jan Willems was elected as a member of the Board of Directors, an independent director in December 2020, and was re-elected to the same position in May 2021.

Over the years of his career, he was an official at investment funds of Euroclear Bank, Brussels, Belgium; Head of BISYS Fund Services Transfer Agency (now Citi bank Ireland Plc), Dublin, Ireland; Customer Service Officer at Deutsche Bank Security Services (now State Street Bank and Trust), Edinburgh, Scotland; Head of Sales and Communications (Vice President) – Head of Russia, CIS and Netherlands department at Clearstream Banking, Luxembourg

In 2013 - 2018, he was a Vice President for Market Development at Clearstream Banking, Luxembourg.

Currently, he is an Executive Director, the Head of Global Markets Products department at Clearstream Banking, Luxembourg.

In 1997, he graduated from the University of Ghent (Ghent, Belgium) with a degree in Germanic Philology.

In 2022, meetings of the Board of Directors were held on a regular basis both in person and in absentia.

During the reporting period, the Board of Directors studied strategic and current issues of activities of the Exchange that fall within its competence. 13 offline meetings of the Board of Directors and 30 absentee voting sessions were held.

In line with 'About Joint Stock Companies' law of the Republic of Kazakhstan, the following committees of the Board of Directors and commissions of the Exchange operate on the Exchange to cover vital issues and to prepare recommendations for the Board of Directors:

- » Budget and Strategic Planning Committee of the Board of Directors;
- » Internal Audit Committee of the Board of Directors;
- **>>** HR, Remuneration and Social Issues Committee of the Board of Directors.

In line with Requirements for organizational structure of the auction organizer and for composition of the listing commission of the stock exchange, as well as with the Rules for implementation of activities of the structural unit of the auction organizer carrying out activities to supervise transactions in the trading system of the stock exchange, approved by the Decree of the Management Board of the National Bank of the Republic of Kazakhstan dated December 19, 2015 No. 249, the Exchange operates:

- >> Listing Commission;
- » Issuer Audit Committee of the Board of Directors.

Subject to the Procedure for settlement of disputes and conflicts arising in the course of implementing transactions with financial instruments, as approved by a decision of the Board of Directors, KASE operates the Dispute and Conflict Resolution Commission.

Procedure for formation and operation of committees of the Board of Directors and commissions of the Exchange, their number, as well as their competence, functions, quantitative composition are regulated by internal documents of the Exchange, as approved by the Board of Directors.

The following events took place in 2022:

- 3 114 meetings of the Budget and Strategic Planning Committee of the Board of Directors of the Exchange;
- y meetings of the HR, Remuneration and Social Issues Committee of the Board of Directors of the Exchange;
- 3 12 meetings of the Internal Audit Committee of the Board of Directors of the Exchange;
- **»** 3 meetings of the Listing Commission as well as 2 absentee voting of this commission.

Representatives of the Agency for Regulation and Development of the Financial Market and an investment company were members of the Committee on budget and strategic planning of the Board of Directors of the Exchange as experts.

The Board of Directors in conduct of its activities is guided by the goals and objectives stipulated by the Corporate Governance Code of the Exchange, the Charter of the Exchange, the Regulation on the Board of Directors and complies with its functional duties to achieve positive results of the Exchange.

Management Board of the Exchange

The Management Board is a collegial executive body of the Exchange and it manages the current activities of the Exchange, with the exception of resolving issues referred by 'About Joint Stock Companies' law of the Republic of Kazakhstan and the Charter of the Exchange to the exclusive competence of the general meeting of shareholders and/ or the Board of Directors of the Exchange.

Composition of the Management Board as of January 01, 2023:

- » Aldambergen A. O., Chairperson of the Management Board;
- » Mazhekenov E. B., Deputy Chairman of the Management Board:
- Sarzhakov Zh. N., Deputy Chairman of the Management Board:
- >> Khoroshevskaya N.Yu., Deputy Chairperson of the Management Board;
- » Tsalyuk A.Yu., Deputy Chairman of the Management Board.

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A Deputy Chairman of the Management Board of KASE

He was appointed as a Deputy Chairman of the Management Board in July 2020.

In different years of his career, he was a broker, the head of the Trade Organization Department, a Chairman of the KASE Clearing House, head of the Trade Organization Department, the Director of the Trades Department, the Managing Director/ Director of the KASE Trades Department.

Currently, he is a member of the Board of Directors of Kyrgyz Stock Exchange CJSC.

He graduated from the Kazakh State Academy of Management majoring in Economics.

In 2016, he was awarded the Order of the Honored Financier.



Zhainar Sarzhakov (1977)

A Deputy Chairman of the Management Board of KASE

Zhainar Sarzhakov is appointed Deputy Chairman of the Management Board since April 2021.

Over the years, Zhainar Sarzhakov held senior positions in the Department of Monetary Operations, the Department of Financial Accounting and Monitoring of Financial Operations of the National Bank of the Republic of Kazakhstan, participated in development of investment strategies for gold and foreign exchange assets of the NBK, the National Fund of the Republic of Kazakhstan, pension assets of the UAPF, he was an investment consultant at First Heartland Securities JSC.

Currently, he is a member of the Board of Directors of KASE Clearing Center JSC.

He is a graduate of Lomonosov Moscow State University with a degree in Applied Mathematics.



Natalya Khoroshevskaya (1973)

A Deputy Chairperson of the Management Board of KASE

Khoroshevskaya Natalya was appointed as a Deputy Chairperson of the Management Board in October 2013. She was re-elected to this position in June 2020.

In different years of her career, she was an economist at KASE Clearing House, an economist at the KASE Information and Analysis Department, and held a position of the Director of the KASE Information and Analysis Department.

In 1997, she graduated from the Market Institute at the Kazakh State Academy of Management; in 2012, she graduated from Lomonosov Moscow State University as a Master of Business Administration.

Under the supervision of Khoroshevskaya N.Yu., the focus was made on commercial distribution of information as one of key directions of the stock exchange business.

In 2012, she was awarded a jubilee medal for the 20th anniversary of the tenge, in 2020, she received the Order of Kurmet.



Andrey Tsalyuk (1960)

A Deputy Chairman of the Management Board of KASE

In October 2007, he was appointed as a Deputy Chairman of the Management Board. He was re-elected to this position in June 2020.

In different years of his career, he held positions such as Head of the Information Department, Deputy Director for Information of Information Agency Semirechye LLP, Head of the Information and Analysis Department, Director of the Information and Analysis Department of KASE.

Under the supervision of Tsalyuk A.Yu. AFINEX/KASE Information and Analytical Service and Financial Markets Information Agency IRBIS LLP were established, which for a long time were top providers of information products and analytics on the financial market of Kazakhstan.

By Decree of the President of the Republic of Kazakhstan dated December 07, 2010, he was awarded a certificate of honour of the Republic of Kazakhstan for merits in state and public activities, significant contribution to the socio-economic and cultural development of the country, strengthening of friendship and cooperation between peoples.

In 2016, he received the Kazakhstan Respublikasynyn tauelsizdigine 25 zhyl jubilee medal, in 2020 he was awarded the Kazakhstan Constitutsiyasyna 25 zhyl jubilee medal.

In 1982, he graduated from the Faculty of Geology of Leningrad State University named after A.A. Zhdanov.

Information about remuneration

Payment of remuneration and reimbursement of expenses to members of the Board of Directors and the Management Board of the Exchange is carried out in accordance with the terms and conditions of contracts signed with them. Amounts of bonuses for indicated executives are determined by the General Meeting of Shareholders in relation to members of the Board of Directors and by the Board of Directors in relation to members of the Management Board, depending on financial and economic performance of the Exchange in the respective financial year.

Remuneration of members of the Board of Directors

According to 'About Joint Stock Companies' law of the Republic of Kazakhstan, the Charter of the Exchange and the Regulations on the Board of Directors:

- >> monthly remuneration of members of the Board of Directors is determined by decision of the general meeting of shareholders of the Exchange;
- Size of an annual bonus of any member of the Board of Directors must not exceed 85 % of the total amount of the monthly remuneration paid to such a member of the Board of Directors for all months of the year for which the bonus is paid;
- >> annual bonus is not paid to members of the Board of Directors, who in a reporting financial year participated in less than 50 % of the meetings of the Board of Directors, absentee votings of members of the Board of Directors, meetings of committees of the Board of Directors, other standing committees and commissions of the Exchange, where these members of the Board of Directors participated.

During 2022, fifty million six hundred ninety nine thousand two hundred and fifty KZT (50,699,250 KZT) were paid to members of the Board of Directors of the Exchange.

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No remuneration is fixed and paid to members of the Board of Directors of the Exchange who are representatives of state authorities of the Republic of Kazakhstan or who are persons not eligible for remuneration according to the laws of the Republic of Kazakhstan:

- >> to representatives of the National Bank of the Republic of Kazakhstan and the Agency for Regulation and Development of the Financial Market, who are members of the Board of Directors based on clause 4 article 84 of 'About Securities Market' law of the Republic of Kazakhstan and sub-clause 1) clause 3 article 17 of the Charter of the Exchange;
- >> to the Chairperson of the Management Board of the Exchange, included in the composition of the Board of Directors ex officio based on sub-clause 2) clause 3 article 17 of the Charter of the Exchange.

Remuneration of members of the Management Board of the Exchange

According to 'About Joint Stock Companies' law of the Republic of Kazakhstan, the Charter of the Exchange and the Regulation on the Management Board:

- » monthly salary of a member of the Management Board is determined by decision of the Board of Directors;
- >> based on results of the study of performance of the Management Board and the Exchange for the reporting year, the Board of Directors makes a decision to fix an annual bonus for members of the Management Board for the reporting year;
- size of the annual bonus of the members of the Management Board is determined by decision of the Board of Directors based on results of the evaluation of performance of each member of the Management Board during the reporting year;
- The Board of Directors can decide on a lump sum payment to a member of the Management Board.

During 2022, one hundred seventy seven million six hundred twenty six thousand one hundred and eighty seven KZT (177,626,187 KZT and 31 tiyn) were paid to the members of the Management Board of the Exchange.

Corporate Responsibility and Human Resources management

KASE team is the main value and a key resource, the level of its professionalism and safety directly underlies results of activities of the Exchange.

The Exchange builds labor relations with its employees on the following principles:

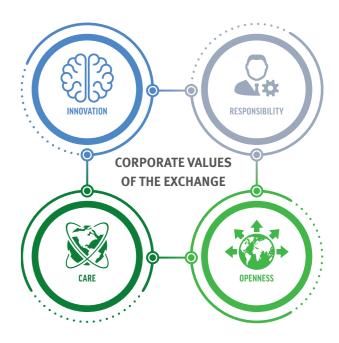
- **1.** observance of the generally recognized labor rights of the employee:
- 2. provision of equal opportunities and non-discrimination in hiring, remuneration, providing access to training, promotion, dismissal on such grounds as gender, race, language, religious, political and other beliefs, citizenship, national or social origin, limited opportunities;
- **3.** fair remuneration and effective motivation of the personnel, objectivity in selection, recruitment, rotation and promotion of the personnel, creation of equal conditions for development and advanced training of employees;
- 4. availability of a personnel training and development system with the use of modern technologies and information management systems, which are implemented subject to the laws of the Republic of Kazakhstan and the Personnel Management Policy of the Exchange.

The Exchange regularly implements measures to ensure proper organization of work of employees at the workplace and strives to create safe working conditions, that meet requirements of the laws of the Republic of Kazakhstan in this area.

Corporate values

An important component of the operation of the Exchange as a team of professionals that implements strategically important projects for the development of the exchange market is the presence of corporate values that meet current challenges and the self-identification of the KASE team.

Corporate values of the Exchange are innovation, responsibility, openness and care.



We operate based on principles of innovation and sustainability for the common good, constantly adapting to change, collaborating with our partners, customers and each other in an open and transparent manner. We are responsible for our decisions, confirming professionalism of our team and high quality of services, we care about the future of our country, customers and employees, creating conditions for the development.

In the reporting year, a number of events were held to develop the value approach on the Exchange.

Corporate values of the KASE stand for the desire to unite the business and teams into a single whole in order to develop the stock market, introduce new technologies, products and services, improve existing services and technologies in a changing modern environment, as well as to contribute to the achievement of sustainability by all market participants.

In line with the previously approved approach, the staff of the Exchange selected among its colleagues bearers of corporate values for 2022 — KASE employees demonstrating personal traits that best meet key terms of corporate values such as openness, innovation, responsibility and attentive attitude towards others.

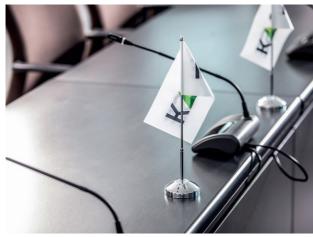
In order to form the corporate culture, the Exchange holds various corporate events and employs the following tools:

- >> confirmation of success diplomas and thank-you letters;
- >> team building and development of corporate values;
- » motivation creation of a favorable working mood in the team;
- » Increase of the employee satisfaction and awareness.

We can include the following into main focuses in internal communications.

Timely and complete informing of employees (on an ongoing basis, the informing is carried out through Townhalls, sending messages by e-mail, social networks, etc.).

Development of communication and team-building relations between employees conducting (team building, guest lectures, meetings with newcomers, an engagement survey, selecting value carriers, and corporate holidays of the Exchange).



In 2022, employees of the Exchange were awarded for outstanding work and projects:

- >> Gratitude of the Governor of the National Bank of the Republic of Kazakhstan was awarded to 2 employees
- >> Gratitude of the Chairperson of the Agency of the Republic of Kazakhstan for regulation and development of the financial market was awarded to 4 employees of the Exchange;
- >> 4 employees of the Exchange were awarded with the merit badge 'Honored Financier';
- » 6 employees of the Exchange were awarded with the merit badge 'The Best Financier';
- » certificates of appreciation for the implementation of KASE projects - holding auctions (subscriptions) with blocking of the collateral in the new ASTS+ trading and clearing system, implementation of the surveillance system Scila Surveillance, participation in IPO, launch of an updated browser version of the IRIS Finance information product, introduction of indices and indicators of the government securities market, implementation of clearing participation certificates, for the participation in information and explanatory campaign in regions of Kazakhstan on the IPO of NC KazMunayGas JSC, for the participation in the 9th Onsite Training Program of the Federation of Euro-Asian Stock Exchanges (FEAS), for the participation in Almaty Marathon 2022 – were awarded to more than 90 employees.

In order to ensure the development of the corporate culture of the Exchange, the following corporate events were arranged:

- >> Townhalls highlighting the performance for a quarter. Events are held in a combined offline and online format:
- » meetings of newly hired employees with the Chairperson of the Management Board of the Exchange. Events are held on a quarterly basis as a breakfast-acquaintance;
- **»** KASE Insight with the involvement of external speakers: Renaissance Agency business coach Viktor Malchikov conducted a training 'Life without stress and emotional burnout,' while Eldar Abdrazakov, a member of the Board of Directors of the Exchange, gave a lecture 'Anti-crisis measures and assessing impact of sanctions on the economy of Kazakhstan'.



KASE employees participated in the summer transformational retreat training 'Changes are inevitable' and a quest trip to a waterfall, timed to the celebration of the state holiday 'Day of the Capital of Kazakhstan'. The employees made a team ascent to the Butakovsky waterfall.

KASE arranged the Donor Day with assistance of the Republican Blood Center and the Red Crescent Society of the Republic of Kazakhstan. This year, 27 employees of the Exchange joined the good initiative and helped save someone's life. Each of them donated 400-450 ml of blood;

On the eve of the World Cleanup Day, the Exchange held an eco-cleanup day. Within the campaign, its employees collected garbage in an apple orchard in Almaty foothills;

KASE team participated in the Almaty Marathon 2022 at the Ekiden distance (a team relay at a marathon distance of 42 km), and the Exchange employees also participated in individual races at different distances;

A corporate evening was arranged for KASE employees and a Children's New Year Tree – for children of the employees as part of the New Year celebration.

In terms of charity, the Exchange employees held a holiday dedicated to Children's Day for young patients of the Scientific Center of the Pediatrics and Pediatric Surgery, KASE employees also provided assistance to children with special needs and disabilities. The children wrote letters to Santa Claus, and the employees of the Exchange fulfilled their wishes.

Education and development

Education and advanced training are a part of the personnel management policy of the KASE. The Exchange encourages its employees to get new knowledge and develop the existing one through internal and external trainings.

Vocational and compulsory training is a priority. Much attention is paid to the development of professional skills in the financial sector, corporate competencies and project management and IT skills necessary for the implementation of strategic projects of the Exchange.

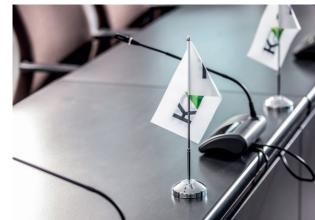
In the reporting year, 53 employees of the Exchange passed the training. They mainly had courses in the following areas: Corporate finance, Financial modeling Financial analysis, IT direction (Java, Oracle, Linux) and accounting courses (1C HRM, Finance Director, Tax consultant). Also, a course on Project Management with IPMA certification was arranged for employees of a number of departments.

Staff

As of January 01, 2022, KASE's headcount was 231 units, while the actual headcount was 192 units.

Education of employees

At the end of the reporting period, the majority of KASE employees (99.5 %) have higher education.

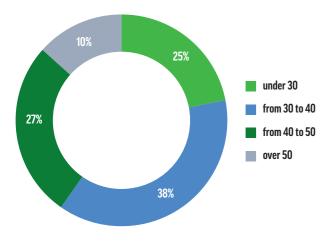


Age structure of the Exchange

In terms of age, the personnel has the following structure. Young people aged under 30 years account for 25 %, employees aged between 30 and 40 years for 38 %, staff aged from 40 to 50 years for 27 %, and those over 50 years for 10 %. The average age of employees of the Exchange for 2022 was 37 years.

Fig.35. Age structure of the Exchange

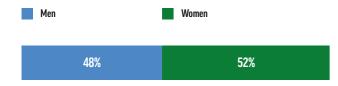
Diversity of staff by age in 2022, %



Gender composition of the Exchange

At KASE, the total number of female employees is 52 %, male – 48 %. Along with that, the top management (the Management Board and the Board of Directors of the Exchange) of the Exchange demonstrates a high rate of involvement of the women in management: 40 % of the Management Board and 30 % of the Board of Directors are women.

Fig.36. Gender composition of the Exchange



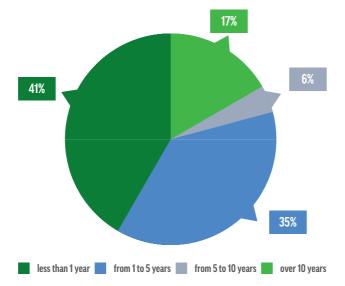


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Stability of KASE personnel

In the reporting period, the personnel composition of the Exchange was significantly renewed. At the same time, 17 % of employees have a total work experience on KASE of more than ten years, 6 % of employees – from five to ten years of experience on KASE, 35 % of employees – between one and five years of experience on KASE, and 41 % are employees with the work experience of less than one year on the Exchange.

Fig.37. Stability of KASE personnel



Social responsibility

Within the development of the corporate social responsibility, the Exchange pays special attention to the improvement of financial literacy of the youth of Kazakhstan. In this regard, the Exchange continues an active cooperation with universities of Kazakhstan in terms of organizing internships and practical trainings on the Exchange, employing outstanding students, as well as conducting guest introductory lectures and seminars on the stock market at the Exchange territory and in universities. A number of students from various universities have completed internships and practical trainings at KASE.



Risk management system of the Exchange

The structure of the risk management system on the Exchange is represented by risk management at several levels involving the following bodies and divisions of the Exchange: the Board of Directors, the Management Board, a structural division responsible for risk management, a compliance division, a legal division, an Internal Audit Service, structural divisions – risk owners.

Continuous development and improvement of the risk management system allows the Exchange to respond in a timely manner to changes in the internal and external environment, to improve efficiency and fruitfulness of its activities.

The risk management system is designed for timely identification, assessment, monitoring and control, as well as mitigation of potential risks that may affect the achievement of strategic and operational goals of the Exchange.

In 2022, in order to improve its risk management system, the Exchange updated its Risk Management Rules, which define underlying principles for the effective operation of the risk management system, tasks of the risk management system, risk management tools, further development of the institute of risk coordinators and increase of the risk culture of employees of the Exchange.

The Board of Directors of the Exchange annually approves its risk register, key risk indicators, reviews its risk map, sets a maximum allowable value of risk indicators, continuously monitors dynamics of risk events and takes measures to minimize risk events in the future.

In the reporting period, an annual risk identification procedure was carried out. Risks were identified both from the point of view of the past period and from the point of view of future possible events, as well as on the basis of a comprehensive analysis of all business processes. When capturing new development directions of the Exchange, the risk register was supplemented with new identified risks. New risks connected with the current political situation in the country and in the world have been identified and assessed.

Taking into account the work done, the risk register and the risk map of the Exchange, which were approved by the Board of Directors and the Management Board of the Exchange in early 2023 were revised.

Improvement of the risk culture at the Exchange is carried out on an ongoing basis through involvement of structural divisions in the risk management process, as well as through exchange of information between the Board of Directors, the Management Board, committees under the Management Board and employees of the Exchange.

In 2022, measures were taken to enhance the risk culture of employees of the Exchange. New employees get acquainted with principles of the risk management system at the Exchange. As a result of the measures taken to improve the risk culture of employees of the Exchange, there is a higher degree of understanding of involvement of each employee in the risk management system.

For the efficient management of market risks of the Exchange in the course of activities of the CCP, the Market Risks Committee has been established. It is a permanent collegial body under the Management Board of the Exchange. Functions of the Committee include approval of values of fundamental and approved risk parameters of financial instruments, preparation of recommendations for the Management Board of the Exchange on setting and applying individual limits and restrictions to clearing participants on exchange markets, as well as other functions provided for by internal documents of the Exchange.

In order to identify areas that require the improvement of the risk management system, Internal Audit Service of the Exchange, in line with the Internal Audit Plan, evaluates effectiveness of the risk management system.

Domestic and foreign political events in 2022 seriously affected the economy of Kazakhstan and escalated the existing problems that emerged after the COVID-19 pandemic. These are mounting inflation, volatility in exchange rates and prices for financial instruments, disruption of transport and logistics chains, as well as negative impact of sanctions imposed against constituent entities of the Russian Federation, including against subsidiaries of Russian banks. All these factors have a different extent of influence on activities of the Exchange. Thus, the disruption of transport and logistics chains entailed a significant increase in delivery time of the equipment, the complication of procurement procedures, and the revision of plans to upgrade the IT infrastructure of the Exchange.

The risk management system implemented on the Exchange, which monitors and controls market risks of the Exchange as a clearing organization (central counterparty) in an automatic mode, made it possible to promptly respond to the increased volatility of financial instruments traded on the Exchange.

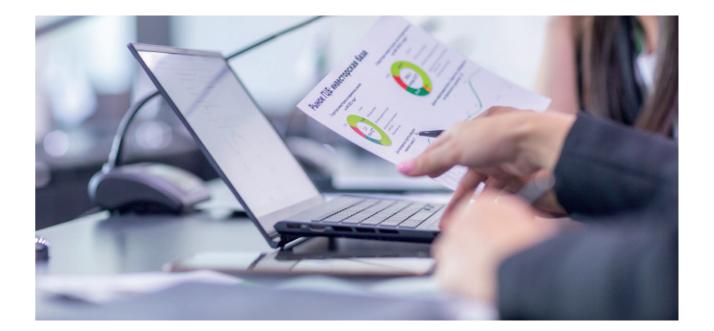
However, it is necessary to indicate that the January events affected the manifestation of the operational risk due to the reduction of the trading rules. All implemented operational risks did not cause material damage to the Exchange.

Internal audit

Internal control and audit are important elements of the risk management system. The internal control system complies with the purpose, strategy and activities of the Exchange and ensures control over timely identification and assessment of risks on an ongoing basis inherent to the Exchange, and over adoption of timely measures to minimize significant risks in line with the internal documents of the Exchange. Internal control makes it possible to achieve:

- » efficiency of activities of the Exchange, including formation of a risk-oriented approach in making management decisions, effective management of assets and liabilities of the Exchange, timely identification of risks and ensuring of the continuity of activities of the Exchange;
- >> completeness, reliability and timeliness of financial, regulatory and other reporting for internal and external users, a broad range of information products for investors and professional participants on the securities market, as well as the information security;
- » observance of requirements of the laws of the Republic of Kazakhstan by the Exchange, of applicable laws of foreign countries, as well as of international standards in compliance, including those on AML/CFT issues, and internal documents:
- >> timely detection of suspicious transactions and operations subject to financial monitoring, as well as cases of misuse of the insider information;
- >> prevention of the involvement of the Exchange and its employees in illegal activities, including fraud, errors, inaccuracies, deceit, legalization (laundering) of proceeds from crime, and financing of terrorism.

Internal Audit Service (hereinafter referred to as the IAS) performs the function of the third line of defense at the Exchange. According to the International Standards for Professional Practice of Internal Auditing (hereinafter referred to as the Standards), the mission of internal audit is to maintain and increase the value of the Exchange through the conduct of objective internal audits based on a risk-oriented approach, provision of recommendations and knowledge exchange. In its activities, the internal audit follows norms of



laws, requirements of the regulator, the Standards and internal regulatory documents of the Exchange. In order to ensure independence and objectivity of the internal audit, the IAS is functionally subordinate and accountable to the Board of Directors of the Exchange. The interaction with members of the Board of Directors of the Exchange is carried out both through the Internal Audit Committee of the Board of Directors and directly. Annual audits plan, budget and internal regulations that govern activities of the IAS are approved by the Board of Directors of the Exchange. The IAS regularly (on a quarterly and annual basis) submits reports on its activities to the Board of Directors of the Bank. Audits and discussions conducted by the IAS in 2022 were carried out in order to assess the effectiveness of risk management systems, internal control and corporate governance in trading, clearing and settlement activities, in the areas of IT audit, procurement process and work with suppliers, information security, listing procedures. Audits of the risk management system and surveillance activities were also carried out.

Based on results of the IAS tasks, more than a hundred recommendations were formulated to improve the internal control system, and corrective action plans were studied based on results of the conducted audits. Most of the recommendations were related to the need to improve the quality of methodological work, to improve the risk management system and improve the internal control system, develop business processes maps and automate them, and bring actual activities of divisions in line with the internal regulations of the Exchange.

The IAS carried out constant monitoring of the implementation of these plans and provided relevant opinions to the Internal Audit Committee and the Board of Directors.

Along with that, in order to improve their skills, IAS employees took part in conferences and an online training. At the end of 2022, the IAS confirmed its independence to the Board of Directors.

Compliance control and anti-corruption

Regulatory changes, external challenges and the need to introduce the best corporate governance practices have become factors that predetermined the relevance of maintaining an effective compliance policy on the Exchange. In this regard, today, the compliance control is an integral part of the risk management system of the Exchange and its organizational structure.

In order to effectively manage compliance risks and ensure effective compliance control, the Exchange has established and operates the Compliance Department, which is accountable to the Board of Directors.

As part of the approved 2022 Action Plan (hereinafter referred to as the Plan), the Compliance Department carried out a number of activities intended to ensure the compliance of activities of the Exchange with requirements of the laws of the Republic of Kazakhstan and applicable foreign laws.

The Compliance Department constantly monitors compliance risks in activities of the Exchange, including compliance with requirements of the anti-corruption laws, compliance with sanctions, restrictions of foreign states and special conditions when making transactions, presence (absence) of a conflict of interest, analysis of supervisory response measures taken and/ or sanctions by authorized state authorities and study of complaints (appeals). Based on the monitoring results, the Service develops recommendations and provides compliance opinions to prevent violations, minimization, control and to prevent compliance risks.



Starting from February 2022, in connection with the special military operation of the Russian Federation in Ukraine, the US, the European Union, Great Britain, as well as a number of other countries introduced sanction restrictions and prohibitions against the Russian Federation, the Government of the Russian Federation, the Central Bank of the Russian Federation, individuals from the Russian Federation and companies, including those which are listed companies and/or members of the Exchange.

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Under such conditions, a number of events were conducted in connection with the imposed sanction regime, and comprehensive measures were taken to enhance the internal control and to mitigate the impact of sanction risks.

Within which:

- 1. an analysis of the imposed sanction restrictions and prohibitions was carried out, including with involvement of an international legal consultant;
- **2.** measures were taken to prohibit/restrict certain transactions on the Exchange;
- 3. a list of sanction lists, according to which the Exchange members, admission initiators, issuers of securities included in the official list of the Exchange, and other counterparties of the Exchange are checked in the course of establishing and/or continuing business relations, was expanded;
- **4.** internal systems were automated/improved;
- **5.** sanction monitoring procedures were introduced;
- 6. relevant amendments were made to internal documents on implementation of the internal AML/ CFT control, procurement of goods, works and services, organization of the contractual and legal work, provisions on the membership on the Exchange, listing rules and procedures.

Along with that, new restrictions and prohibitions against persons under the jurisdiction of the Russian Federation are monitored on an ongoing basis.

During the year, the Compliance Department carried out scheduled compliance checks according to the 2022 Inspection Plan, as a result of which shortcomings and violations were noted, and measures were recommended to improve business processes.

In compliance with the best international practices and requirements of the anti-corruption laws of the Republic of Kazakhstan, the Exchange introduced the anti-corruption compliance through the expansion of functions of the Compliance Department. The Compliance Department develops and implements a set of measures and control procedures intended to counter corruption and to form zero tolerance for corruption within the organization.

In compliance with the Plan, the Compliance Department carried out analysis and modeling of situations of a potential conflict of interest among employees of the Exchange related to their functions and/or participation in a procedure/business process of the Exchange, stipulated by job descriptions of employees, regulations on divisions and other internal documents of the Exchange, as a result of which a Conflict of Interest Matrix as a tool to identify a conflict of interest was developed.

The Compliance Department administers registers of affiliated persons and persons connected with the Exchange by special relations, lists of employees of the Exchange and other persons who have an access to the insider information.

In order to reduce the risk of violation of sanction restrictions, the Compliance Department during 2022 actively participated in development and implementation of measures to strengthen the internal control on the Exchange in terms of monitoring the compliance with the sanction regimes of foreign countries, with residents of which the Exchange closely cooperates.

The Compliance Department also carries out the compliance expert examination of draft internal documents of the Exchange and amendments and/or additions to them according to requirements of the laws of the Republic of Kazakhstan and an applicable law of foreign states that affect activities of the Exchange in provision of services and in conduct of operations on the financial market.

In order to maintain and develop the compliance culture among the Exchange employees, the Compliance Department regularly conducts training on the following topics:

- >> compliance risk management and compliance culture;
- >> conflict of interest management;
- anti-corruption measures and restrictions, including the requirement to submit a declaration of assets and liabilities.

Business continuity management

The Exchange takes measures to improve the business continuity management system. This activity is regulated by internal documents – the Business Continuity Management Policy approved by the Board of Directors of the Exchange dated April 24, 2020, the Rules for Organization of Business activity Continuity and Restoration and the Business Continuity Plan approved by the Exchange Management Board on July 30, 2020, developed in line with requirements of international standards in order to ensure continuity of critical activities in case of incidents and emergencies, as well as to minimize their impact on the core business in order to quickly restore activities of the Exchange. In order to ensure restoration of activities of the Exchange in crucial areas, the Management Board of the Exchange approved the Business Continuity and Recovery Plan, which is updated on a quarterly basis.

In the reporting period, the work was carried out to update internal documents of the Exchange, which regulate the business continuity management system. The need to update internal documents regulating the business continuity management system is connected with a change in the IT infrastructure of the Exchange. The Exchange has built a system of several data processing centers and it also upgraded its business continuity management scheme. Moreover, the IT infrastructure of the Exchange is constantly upgraded in order to ensure a fault-tolerant system. The business continuity management system, which is being built to this day, including an optimal IT infrastructure, ensures the restoration of critical activities within a specified time from the moment a critical situation occurs. Data processing centers that ensure the operation of the Exchange meet modern requirements – TIER II (fault tolerance – 99.75 %) and TIER III (failure tolerance – 99.98 %).



Business continuity and recovery plans are regularly tested (including testing of the operation of the trading and clearing systems in backup data processing centers and using virtual work places and a backup office) by profile divisions of the Exchange.

Within improvement of the business continuity management system, in 2023 it is planned to upgrade the complex of virtual workplaces that are created on the Exchange servers in main and backup data processing centers (DPC) and that provide for an access to all information systems of the Exchange from laptops, regardless of a location of the users, including without the use of resources of the main office of the Exchange. Work places virtualization makes it possible to quickly respond to emergencies.

Continuity of activities of the Exchange is ensured by the organization of internal work, but there is also an influence of external factors of the natural, social, economic and technological nature. In particular, certain key aspects of activities of the Exchange depend on an uninterrupted supply of services by crucial suppliers, which are regularly analyzed by the Exchange for their fault tolerance and availability of measures taken by them in order to ensure a continued supply of services of the adequate quality, given requirements of international standards.

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Activities of the Exchange were effective during the state of emergency and in conditions of the quarantine. The management of the Exchange took maximum measures to suppress the spread of coronavirus infection (COVID-19) in conditions of the pandemic.

During the January events, the Exchange was able to ensure business continuity, with the exception of January o6, 2022, when the National Bank of the Republic of Kazakhstan, together with the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, issued an order to temporarily suspend activities of all financial market entities.

From January 10 to January 21, 2022, the Exchange carried out its activities under a reduced trading schedule – until 01:00 p.m., since January 24, 2022, the Exchange switched to its regular mode of operation.

During the specified period, the speed of processing of transactions slightly slowed down due to Internet restrictions in the country.

The launch of the special military operation by the Russian Federation in Ukraine had consequences in the form of supply chains disruption in procurement, including the procurement of servers needed for data processing centers upgrade. As a result, some of activities envisaged by plans of the Exchange to improve its business continuity management system were put off until 2023.

In 2022, there were no excesses of the maximum allowable downtime/ target recovery time for business processes.

There is no actual material damage from the implementation of risk events related to the business continuity management system in 2022.



Information and physical security

The key task of the information and technical security service (hereinafter referred to as ITSS) is to constantly improve the protection level and minimize risks of the information security of the Exchange. ITSS in its tasks is guided by the Decrees of the Government of the Republic of Kazakhstan, regulatory legal acts, international standards and seeks to apply international practices.

In the reporting period, a software was put into operation to prevent information leaks, information security event management system. A software was implemented on local computers and server platforms to prevent malware. In order to increase a level of protection against various types of cyber threats, an external and internal audit of the Exchange information systems is carried out.

Moreover, within improvement of the information security system, an event was held in the reporting period to raise awareness of employees of the Exchange on information security vulnerabilities and threats, and insights about new threats and information security requirements are regularly sent out. A number of checks were carried out for compliance with

internal documents, as well as a set of other measures related to the enhancement of the user discipline in the network and systems of the Exchange.

As part of the plan to improve the regulatory documentation in compliance with the information security standard ISO 27001:2013 and requirements established by the authorized agency, amendments and additions were made to internal documents of the Exchange that determine the operation of the information security management system of the Exchange.

Combination of these measures made it possible to improve the level of information security of the Exchange and reduce risks of the Exchange in this area.

In order to improve physical security of the Exchange, procedures for monitoring the provision of security services were improved, security and disturbing alarm systems are used.

ABBREVIATIONS AND TERMS

ASTS+	trading and clearing system of the KASE developed based on the trading and clearing system of the Moscow Exchange
CDSB	Climate Disclosure Standards Board
COVID-19	acute respiratory infection caused by SARS-CoV-2 coronavirus
EBRD	European Bank for Reconstruction and Development
ESG	Environmental, Social and Governance criteria
ETF	Exchange Traded Fund
FAST	FIX Adapted for Streaming (protocol of data transfer in trading systems)
FEAS	Federation of Euro-Asian Stock Exchanges
FIX	data transmission protocol, which is an international standard
Frontier Market	Frontier Market
FTSE	international index service Financial Times Stock Exchange
IFC	International Finance Corporation
IOS, Android	a mobile operating system for smartphones, electronic tablets, wearable players and some other devices
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering
IR	Investor Relations
IRIS	exchange information terminal
ISO	International Organization for Standardization
IT	Information Technology
KASE	abbreviation of the name of Kazakhstan Stock Exchange JSC
MOEX	Moscow Exchange PJSC
MSCI	Morgan Stanley Capital International international index service
IOSCO	International Organization of Securities Commissions

Principles for Responsible Investment
indicative weighted overnight ruble denominated loans (deposits) rate, which reflects an estimate of the cost of unsecured overnight ruble denominated borrowings by a standard borrower among Russian banks with minimum credit risk.
Standard & Poor's international index service
Service Level Agreement
sponsored market access (access to submit orders directly to the trading system)
the interest rate on the money market in USD, which is the weighted average median rate for the volume of transactions of three different types of REPO on overnight terms secured by government securities of the US Treasury
it is based on real transactions and reflects the average interest rate that banks pay for borrowing in pounds sterling on "overnight" terms from other financial institutions and institutional investors
trading and clearing system on the derivatives market
Internet platform for remote access to trading, developed by KASE
TONIA Compounded Index – TONIA composite index calculated every calendar day based on the last calculated value of the TONIA indicator
TONIA Compounded Rate — composite TONIA rate calculated every calendar day based on TCI values. The calculation uses a sliding window equal to the actual number of calendar days in the settlement period
a settlement condition under which the transaction is executed on the day of its conclusion (from the English word 'today')
a settlement condition under which the transaction is executed on the next business day from the date of its conclusion (from the English word 'tomorrow')
a main indicator of the repo market, which is the weighted average interest rate on repo transactions with a Basket of government securities for a period of one day, calculated at the end of each trading day
a weighted average interest rate on repo transactions with a Basket of government securities carried out with the participation of a Central Counterparty for a period of one day, calculated during each trading day
a weighted average interest rate on repo transactions with a Basket of government securities carried out with the participation of a Central Counterparty for a period of seven days, calculated during each trading day
Sustainable Stock Exchanges
virtual workplaces system
Women's Empowerment Principles
World Federation of Exchanges

JSC	joint stock company
ARDFM	Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market
ACDE	Association of Central Depositories of Eurasia
STB	second-tier bank(s)
Exchange	Kazakhstan Stock Exchange JSC
Brokers/dealers	Brokerage and/or dealer organizations licensed by an authorized body
GDP	gross domestic product
HEI	higher education institution
GS	government-issued securities
DAMU	Damu Entrepreneurship Development Fund JSC
EMEA	Europe, Middle East and Africa
EBRD	European Bank for Reconstruction and Development
KASE Index	KASE Stock Market Index
СРС	clearing participation certificates
IAE CIS	International Association of Exchanges of the Commonwealth of Independent States
mln	million
bln	billion
MOEX	Moscow Exchange PJSC
IFO	International Financial Organization (international financial organizations)
NBK	National Bank of the Republic of Kazakhstan
Atameken NCE RK	National Chamber of Entrepreneurs of the Republic of Kazakhstan Atameken
NGS	non-government securities

GOB	government-owned bonds
UN	United Nations
OPEC+	an international intergovernmental organization established by oil-producing countries in order to control oil production quotas.
OECD	Organization for Economic Cooperation and Development
COVID-19 pandemic	the current pandemic of coronavirus infection caused by the SARS-CoV-2 coronavirus
PJSC	Public Joint Stock Company
MIF	mutual investment fund
SP	software program
Government	Government of the Republic of Kazakhstan
RCE	regional chamber(s) of entrepreneurs
IAS	Internal Audit Service
CIS	CIS Commonwealth of Independent States
USA	United States of America
T+2	a settlement condition under which the transaction is executed on the second business day from the date of its conclusion
TCS	trading and clearing system
LLP	limited liability partnership
trln	Trillion
k	thousand
FRS	federal reserve system
CSD	Central Securities Depository
ССР	central counterparty
DPC	Data Processing Center

Contacts and requisites

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