

**EFFICIENCY OF THE FUNCTIONING OF TWO STOCK
EXCHANGES IN KAZAKHSTAN AND ISSUES RELATED TO
THEIR SUBSEQUENT MERGER**

By

Aigerim Kosbayeva,

Aknar Abuova,

Arman Shayakhmetov

MASTER's PROJECT

Submitted to

Nazarbayev University School of Public Policy

in partial fulfillment of the requirements for the degree of

MASTER OF PUBLIC ADMINISTRATION

Astana, Kazakhstan

November 22, 2024

Executive Summary

Problem Statement

Kazakhstan stock exchange (KASE) and Astana International Exchange (AIX) are the two stock exchanges operating under distinct jurisdictions in the financial landscape of Kazakhstan. Currently, there is duplication of roles as both the KASE and AIX play a role of operating and providing services for the markets in Kazakhstan and this, while helpful in some ways, has become a problem for the growth of the financial market in the country. Both of them offer similar services, but this service industry is under different jurisdictions and rules, which increase the challenges to the market players. As to some financial specialists and the President of Kazakhstan himself, the issue of the excess of stock exchanges has been raised and certain questions have been stated concerning the inefficiency of their maintenance and the necessity to investigate the possibilities of the unification of the stock exchanges under the single manager. This study eliminates the shortcomings of the current design and looks at the viability, outcome, and perception of different entities on the integration of KASE and AIX in the hope of providing tangible suggestions to improve the efficiency of Kazakhstan's FM. Hence, we are going to address the following research questions:

1. What jurisdiction should be applied for the merger of the stock exchanges?
2. What considerations expressed by stakeholders (investors, traders, brokers, etc.) should be taken into account before the merger of stock exchanges?

The objectives of this study:

- 1) To give brief description about AIX and KASE stock exchanges in terms of jurisdictions, infrastructure, economics;
- 2) To analyze the review of the best international practices on merger of stock exchanges;
- 3) To consider effective options for consolidation of stock exchanges in Kazakhstan.

Methods

This research applies a combination of primary and secondary data to collect information related to the topic of this research. For the primary data, the semi structured interviews were conducted. The purposive sampling approach was used to get the viewpoints of financial analysts and brokers. In addition, investigation of statistical data from the official website of AIX and KASE as well as legislative framework was utilized for comparative analysis purposes of secondary data. The convenience sampling approach, namely, examination of publicly disclosed data was utilized.

Findings and conclusion

Results show that in terms of jurisdiction, particularly for international actors, AIX offers more business-oriented and flexible regulation, KASE has more strict regulations. In terms of infrastructure, Avenir and the NASDAQ vs the MOEX trading facility. AIX uses technology from Avenir and NASDAQ. KASE uses the technology that MOEX provides. According to it, they are diametrically opposed and challenging to unite. Support from technology is expensive for both parties. In terms of comparison of operation of stock exchanges, for regional investors, KASE is a domestic market participant with substantial liquidity. AIX operates under the AIFC rule, which provides a superior technological framework for foreign investment. The cost of operation, the financial statements of KASE show that its business operations are balanced. There is no publication of AIX's financial statements.

The use of IT infrastructure does, however, come with clear operating costs. The strategy and composition of management differ greatly. Public officials represent the KASE board of directors. Shareholder representatives serve on AIX's Board of Directors. In terms of communication and planning: since September 2023, the communication strategy has been unclear. The market was still erratic. Furthermore, because KASE's shareholders were sanctioned in June 2024, the concerned parties did not prepare for the merger. Sanctions exposure has been considerable since the start of the Ukrainian conflict.

Practical implications

The operation of two stock exchanges, namely, AIX and KASE presents several challenges complicating their merger: Firstly, operational costs of having two stock exchanges, which overlap each others' functions, are considered to be high for the state budget. Secondly, existing language

barriers due to AIX reliance on English and KASE's employment of both Kazakh and Russian can impede the smooth consolidation. Thirdly, regulatory distinctions with AIX's operation under AIFC laws and KASE's operation under local legislation poses a challenge for successful consolidation. Fourthly, infrastructure duplications caused by each stock exchange's investments in exclusive systems makes it unreasonable to terminate one. Fifthly, potential shareholding issues can be caused by the divergent organizational structure of AIX and KASE. Finally, lack of transparency towards merger planning led to uncertainty; thus, undermined investor confidence.

Recommendations

The process of integration should cause minimal risks to the market participants. Also, the regulator should improve its communication and planning strategy to make the market updated and certain about the process of merger.

The following scenarios should be taken into consideration, depending on the goals the regulator has for the financial industry.

Scenario 1: Focus on the development of the local market - merger. The consolidation is going to be implemented under Kazakhstani jurisdiction and by usage of KASE IT infrastructure. It will make the listing process easier for all parties involved, and in the interim, a single stock market strategy can be implemented. Additionally, local issuers and investors will be highlighted. The potential risks for this scenario include decreased trust for the international society of investors and market uncertainty. Additionally, ongoing restructurings and shifting regulations may result in a decline in trust from the local financial community. This will also result in significant losses because of wasted money spent on building AIX and paying back foreign stockholders' shares.

Scenario 2: Development of local market and attraction of foreign capital - merger. The consolidation is going to be conducted under AIFC jurisdiction and by application of AIX IT infrastructure. The focus will be on international investors and issuers. The potential risks for this scenario consists of complicated access for local actors and amendments for RK regulations, which involves complex interactions with state authorities.

Scenario 3: Development of local market and attraction of foreign capital. The applied jurisdiction is going to be AIFC jurisdiction and by development of the integrated IT infrastructure. The

potential risks for this scenario include ongoing costs associated with stock exchanges and management bodies, possible tensions between stock exchanges due to distinctions of operational setup.

CONTENTS

ABSTRACT	7
ABBREVIATIONS.....	8
CHAPTER 1 - INTRODUCTION	9
1.1. Background and Problem statement	9
1.2. Research questions and objectives of the study.....	10-11
CHAPTER 2 - LITERATURE REVIEW	12
2.1. Relevant Concepts	12-17
2.2. Theoretical framework.....	17-18
CHAPTER 3 - METHODOLOGY	18
3.1. Data	18
3.2. Methods	18
3.3. Data analysis	19
3.4. The ethic of the study.....	19-20
CHAPTER 4 - FINDINGS & DISCUSSIONS.....	20
4.1. Integration commencement and planning.....	20-24
4.2. Operation of stock exchanges	24-27
4.3. Possibility of Merger Between KASE and AIX	27-28
4.4. Potential issues.....	29-30
CHAPTER 5 - CONCLUSION	30-32
5.1. Research summary	30
5.2. Practical implications.....	31
5.3. Limitations of the study	31-32
CHAPTER 6 - POLICY RECOMMENDATIONS.....	46
6.1. Scenario 1.....	32
6.2. Scenario 2.....	32-33
6.3. Scenario 3.....	33

REFERENCES.....	35-37
APPENDICES.....	37-45

1. Abstract

The stock exchange is a fundamental part of the country's financial market, which, in turn, contributes to economic stability and growth. The effective functioning of stock exchanges is a crucial component of the modern financial system, which has a significant impact on the economic development of the country. Nowadays, the role of stock exchanges is in informing the investment environment and providing financial stability, which is becoming more important in the worldwide economic changes. In the context of Kazakhstan, there are two stock exchanges, namely, the KASE, operating under Kazakhstani law and the AIX, which exists within the jurisdiction of AIFC. Despite the fact that AIX and KASE are established in the form of private commercial entities, both stock exchanges are ultimately owned by the state body - the National Bank of the RK. Consequently, mentioned stock exchanges are subject to state regulation.

The purpose of this research is to investigate some aspects of AIX and KASE related to their performance affecting the attractiveness of the RK's financial market. Also, research strives to identify options for potential merger of stock exchanges in Kazakhstan. This research contains an introduction covering background facts, and establishing a basis for future research. There are major parts of the literature review explaining past international experience for the merger of stock exchanges, whose findings discover findings that can be applied to Kazakhstan's experience and gaps that potentially can become a problem within and after the merger procedure. This research proposal also applies research methods by means of which data for the analysis shall be collected. Conclusion part provides recommendations for future actions to be performed in order to ensure smooth integration of merger in order to secure market participants from shocks and uncertainties.

Abbreviations

KASE - Kazakhstan Stock Exchange JSC

AIX - Astana International Exchange limited

AIX CSD - Central Securities Depository of AIX

ETF - exchange-traded fund

ETN - exchange-traded note

MAS Singapore's Monetary Authority of Singapore

QFB Qualifying Full Bank

SGX Singapore stock Exchange

SES - Stock Exchange of Singapore

SIMEX- Singapore International Monetary Exchange

NASDAQ-National Association of Securities Dealers Automated Quotations

ADX - Abu Dhabi Securities Exchange

DFM - Dubai Financial Market

MICEX - Moscow Interbank Currency Exchange

RTS - Russian Trading System

NSD - National Settlement Depository

MOEX - Moscow Exchange

OFAC - Office of Foreign Assets Control

OECD - Organisation for Economic Co-operation and Development

EU - European Union

UK - United Kingdom

SESDAQ - Stock Exchange of Singapore Dealing and Automated Quotation

CGE The Committee on the Governance of Exchanges

ACU - Asian Currency Units (ACUs)

QAMS - Kazakhstan Association of Minority Shareholders

ETNs - Exchange Traded Notes

KMGZ - KazMunayGas

KZAP - Kazatomprom

1. Introduction

1.1 Background and problem statement

Background

The KASE commenced its activity as a stock exchange from the moment of obtaining a license for the operation of securities trading in 1996 (KASE Official website, n.d.). It operated as a sole stock market until the creation of AIX. In 2017 Kazakhstan's government incorporated AIFC with specific jurisdiction functioning on the basis of principles of England and Wales, which establishes the framework differing from legislation of RK. The AIX was created as one of the constituent parts of the AIFC aimed at the development of the financial market. AIX's primary goal was the attraction of foreign issuers and investors to the financial markets of Kazakhstan. In turn, KASE deals with local issuers.

AIX was selected as a research venue for this study. The AIX was created in 2017 in order to build new contemporary infrastructure for the nation's stock market. The partnering shareholders of AIX are Shanghai Stock Exchange, The Silk Road Fund, Nasdaq. AIX's IT infrastructure is based on the software provided by Nasdaq, which offers the newest trading and market research solutions to AIX. (AIFC, 2019). The mission of AIX is to develop reliable and liquid capital markets in Central Asia by ensuring innovative services and products to investors, businesses. The stock exchange covers reliable and secure trading facilities, and access to investment. (AIX Official website, n.d.).

Problem statement

Throughout the time both exchanges started to overlap each other's functions. Both of them provide similar services, but they employ different rules. This causes additional implications for market actors. There also occurred a competition among them. It could be considered as a positive trend, however both AIX and KASE are state-owned enterprises and are financed by state budget. This causes excessive costs for the government. In our research we are going to consider the efficiency and necessity of the operation of two stock exchanges in Kazakhstan. Also, we will cover feasible options for their merger and potential outcomes.

Since the creation of AIX, those issues have been voiced by financiers. For the first time, the issue with the operation of two stock exchanges was raised in a speech made by the President of

Kazakhstan (Official Website of the President of Kazakhstan, n.d.). He stated that exchanges duplicate each other's functions and even compete. Operation of two duplicating stock exchanges is costly for the state budget. The President was assigned to consider the option for consolidating stock markets' management through a single vehicle. In our research we are going to concentrate on effective options for consolidation of stock exchanges in Kazakhstan.

1.2 Research objectives and questions

Research questions: within our research we are going to address the following research questions:

1. What jurisdiction should be applied for the merger of the stock exchanges?
2. What considerations expressed by stakeholders (investors, traders, brokers, etc.) should be taken into account before the merger of stock exchanges?

The objectives of this study are to:

- 2) Provide overview of AIX and KASE stock exchanges (jurisdictions, infrastructure, economics);
- 2) Review of the best international practices on merger of stock exchanges;
- 3) Consider effective options for consolidation of stock exchanges in Kazakhstan.

Structure of the thesis

This research proposal is elaborated within a master project, which examines the following topic: Efficiency of the functioning of two stock exchanges in Kazakhstan and issues related to their subsequent merger. The proposal includes an introduction, discussing background facts, and establishing a basis for future research. It covers major parts of the literature review explaining past international experience for the merger of stock exchanges, whose findings discover findings that can be applied to Kazakhstan's experience and gaps that potentially can become a problem within and after the merger procedure. This research proposal also applies research methods by means of which data for the analysis shall be collected. In the course of this research, there will be applied both quantitative and qualitative methods, whereas the methodology part shall be supported by drafts of the interview protocols, that will be delivered for completion to major stakeholders of the potential merger. All facts, data, information, and citations mentioned therein are supported by the reference part of this research proposal.

2. Literature review

This literature review makes emphasis on articles dedicated to the international practice of stock exchange mergers and integration processes. Almost every developed country encountered a situation where two or more stock exchanges operated within one country. The selected literature list provides insights on the processes and practices of other countries during the merger and integration process focusing on several indicators such as ease of trading, transparency, efficiency, productivity, and other criteria on the functioning of two or more stock exchanges.

Selected literature provides practice and experience of other countries, which have dealt with this issue. Following the President's address, public officials related to the merger process started to speak up on potential consolidation processes. The Governor of the AIFC and AIX CEO commented that the merger process should be conducted in the short-term period to preserve the continuation of business operations and to protect involved parties (brokers, dealers, market makers, retail and institutional investors) from any harm to their market activities, which can be entailed by delayed and bureaucratized process of stock markets integration.

The merger of stock markets is widespread around the world. Further we are going to consider selected cases and practices. As we know, Singapore is recognized as one of the leaders of developed countries. In our research, we will investigate an example of successful integration and discuss several characteristics of successful stock exchanges in Singapore. Hew (2002) highlighted a number of characteristics of successful stock exchanges in Singapore. These characteristics consist of lower taxation, high level of transparency, regulatory framework, ease of trading, strong banking sector, development of capital markets, and financial liberalization measures. Low Level of Taxation: ACUs are allowed a tax rate of 10 per cent on clearing transactions effected with a non-resident and other approved institutions which prove Singapore's favorable tax regime to foreign financial institutions. High Level of Transparency and Regulatory Framework: MAS regulates and supervises the market very closely and this ensures a clear and stable financial market. The regulatory framework consists of comprehensive laws such as the Banking Act, the Securities Industry Act, and the Futures Trading Act. It has been possible to maintain the health and stability of the Singapore financial system under this regulatory regime. Ease of Trading: The SGX entails a one stop trading platform that brings together both the securities and derivatives markets. The undertaking of the move to decrease the number of settlement periods within the

financial authority and strive to enforce the straight through processing of stock trades will be in conformity with industry benchmarks to ease tedious cities within the trading process. Bank Consolidation and Strong Banking Sector: Efforts to consolidate local banks into larger entities and the invitation for foreign banks to participate more fully in the financial sector are designed to create a more competitive and robust banking environment. Development of Capital Markets: The further development of Singapore's bond and equity markets such as SESDAQ, steps taken to encourage more Singapore and overseas firms to list are all indications of Singapore's serious intent to expand its capital market. Financial Liberalization Measures: Singapore's gradual policy liberalization of its banking system and the latest QFB licenses plus the increased role of foreign banks are the steps that demonstrate Singapore's further strengthening and development of competitiveness and innovations in the financial services industry.

CGE in 1998 was requested to evaluate global trends in exchange ownership and operations and develop the most appropriate model for the ownership, functional organization, and governance of the exchanges moving forward, in order to position the stock exchanges of Singapore leader in Asia and beyond (CGE,1999). The Stock Exchange of Singapore (SES) and the SIMEX were merged in December 1999 and formed the Singapore Exchange (SGX). The SES and SIMEX were combined under the new agreement to form a single, privately owned stock corporation, which became public on November 23, 2000. Hew (2002) and Wong et al. (2006) found that before merging, the requirements to be listed on SES were easy for foreign companies and fewer limits on foreign ownership for member firms. Moreover, the SES has enhanced foreign involvement since 1987 (Hew, 2002, Wong et al., 2006). After the approval of the secondary international listing in the year 1980, there was a tremendous increase in market capitalization of the Singapore equities market. This result increased market competitiveness and attracted international investors to the newly formed SGX. Furthermore, with the entry of global investors and allowing access to international brokers the competition was up thus reducing the transaction costs. Ultimately SGX made it possible to offer more effective and adaptable financing (Hew, 2002).

Another example would be the deal of NASDAQ which merged with OMX in the year 2008. Prior to merger, NASDAQ was a key major stock exchange in the USA while the OMX Nordic stock exchange was comparatively lesser in terms of market capitalization. Liu, Y. (2016) mentioned that one of the characteristics of successful integration of stock exchanges was the strategic aspects of NASDAQ group stock exchanges. As pointed out by Xie et al. (2020), NASDAQ's merger with

OMX is a part of a wider plan in the acquisition of the global market and authority. When NASDAQ continues diversification into other strategic areas and consolidates its position in the Nordic and Baltic region, where OMX was mainly operating before the amalgamation, then the consolidation is seen as strategically planned. The concept underlying this strategy is aimed at enhancing the precision with which current stock prices reflect all other available data. From the acquisition of OMX, NASDAQ's strategy is therefore to make smart acquisitions as it seeks to expand its operational capacity and influence. Thus, the idea here is to construct a larger and much more integrated trading platform that is better equipped for global competition.

After the merger of these stock exchanges the combined company was named Nasdaq OMX Group. In terms of trade volume, the Nasdaq OMX Group became the second-biggest public stock exchange globally. Before the merger OMX was a relatively small European stock exchange. Even though these two stocks were located in two continents, they were consolidated successfully (European Central Bank, 2007). Xie et al. (2020) found that stock market investors' options for diversification were diminished after the merger of NASDAQ and OMX. Researchers used the Granger causality analysis with the Error Correction mechanism, which shows a significant change between the two stock exchanges, supporting the improved integration following the merger. However, the authors emphasized that post-merger cointegrated stock exchanges reduce the long-term advantages of foreign portfolio diversity. Xie et al. (2020) findings offer proof for the claim that national laws and international agreements must be followed in order for the financial markets to grow sustainably. Liu, Y. (2016) found that the frequency of price surges is influenced by stock exchange consolidation; this situation happened in Nordic stock exchanges. It means that merging can affect the likelihood of stock price shocks, characterized by extreme price changes. The overall finding highlights that stock market mergers, on average, reduce the likelihood of price shocks. Additionally, it was found that the effects are asymmetric: the likelihood of sudden price increases decreases for large and medium-sized companies, while for small firms the effect is ambiguous. The study results also show that market risk has decreased since stock market consolidation. The study takes into account the consolidation of the trading platform in the Nordic countries, which began in 2003 with the merger of the Stockholm and Helsinki stock exchanges into the new trading platform OMX. This process culminated in the acquisition of OMX by the NASDAQ stock exchange in 2008. Based on the observation that, following a merger, stocks that were listed on

isolated exchanges become more accessible to investors, it is assumed that market consolidation may reduce the likelihood of stock price shocks.

Kokkoris, I. & Olivares-Caminal, R. (2008) and Osborne, C. (n.d) having analyzed previous experience of stock exchange mergers at the examples of New York Stock Exchange, NASDAQ, London Stock Exchange, Euronext and OMX, researchers identified several benefits that follow the merger of stock markets. In terms of equity markets, integration processes entail a decrease of trading costs, which is beneficial for the investors. This creates an incentive for expanding the investor pool. As to bond placement, integration may potentially boost market liquidity and reduce credit SPREAD. On the other hand, there might be some downsides like a freeze of technology development. Stock markets are highly dependable on their infrastructure, so such points should be taken into account during upcoming merger arrangements in Kazakhstan. There also might occur a decrease of competition in the stock market, whereas the competition serves as a driver for development and technology. Another view was provided by Dorodnykh, E. (2013), stating that the integration process can be significantly influenced by different macroeconomic, structural, cultural-geographical and operative forces. This correlated with the situation in Kazakhstan, where merger meets opposition from certain officials representing stock markets. Another issue is that both AIX and KASE have different infrastructure, targets, and management compositions. There was a large merger headed by Euronext. According to Espinosa-Méndez, C., Gorigoitia, J., & Vieito, J. (2019), the results of the integration demonstrated that merger of stock exchanges increase returns of the exchanges. This argument has served as a point towards consolidation of two stock markets into one. Another point was made by Nielsson, U. (2009), stating that market liquidity boosts following the merger. In contrast, the failure of the NYSE Euronext and Deutsche Borse merger was due to a large size of stock exchange market, based on Cress, C. (2012).

Joseph, R. & Fernandez, M. (2016) and Abdel Shahid, S. & El Serafie, H. (2002) in two different articles analyze the potential advantages of a merger between the ADX and the DFM. The studies indicate positive merger characteristics for all involved parties such as improved liquidity, reduced operational costs, ease of trading and technological innovations. Improved Liquidity: Consolidation of DFM and ADX is expected to lead to increased market liquidity which will ease the determination of fair stock prices and reduce the risk of mispricing. Ease of Trading: The merger is projected to lead to greater convenience for investors by provision of a wider range of available securities through a single platform with a unique investor number. Transparency and

Reduced Costs: Consolidation of IT operations and back office will lead to optimization of facilities, enable the introduction of new technologies and increase the capacity of professional staff, which in turn will enhance organizational efficiency and reduce operating costs. Economies of Scale and Scope: The consolidation of ADX and DFM will result in economies of scale, which decrease average unit costs due to increase of trading volumes, and economies of scope, which arise from offering complimentary services on a single trading platform. Based on the results of the study, there are highlighted significant improvements in ADX in distinct aspects after the potential merger. These improvements include higher rankings in value of shares traded, volume of shares traded, number of transactions, market capitalization, number of listed shares, and number of trading days. On the contrary, there exist challenges which could impede potential merger of ADX and DFM, according to Paltrinieri, A. (2012). Firstly, asymmetric governance models could lead to future governance disparities. For instance, DFM has completed the process of demutualization and self-listing, while the government of Abu Dhabi is the single owner of ADX. Secondly, the leadership hierarchies can result since the government of Abu Dhabi has more economic weight over Dubai and can easily intervene in the procedures of consolidated stock exchange. In general, the merger of ADX and DFM can be considered as a useful step leading to strengthening the UAE's position as a financial center in the region.

The merger of the MICEX and the RTS into a single trading platform, namely Moscow Exchange, was the Russian financial industry's response to the global wave of mergers and acquisitions based on Teplova, T. & Rodina, V. (2012). This process aimed to strengthen the Russian financial sector in conditions of economic instability and was organized with the participation of the government. The major aims were improving economies of scales and volumes, developing a several securities trading platform, minimizing transaction costs and risks, and aspiring to be an International Exchange. Increasing Transparency and Reducing Costs: Moving on to structural changes, the Center Securities Depository, which contributed greatly towards bringing out the trades and the rate of some settlement services, helped to open the stock exchange market to foreigners. Reducing market fragmentation: Since the merger of MICEX and RTS led to eliminating the market fragmentation by increasing the relative importance of the main market, and enhancing the market's liquidity due to the attraction of market members from other trading floors. Improved liquidity: The merger aimed at improving the liquidity through diversification of trading, bringing down the trading costs as well as rationalizing the trading processes. Nevertheless, this

consolidation is fragile in terms of liquidity due to positive and negative network externalities. For example, there is a risk of liquidity flowing into offshore trading venues, similar to the situation which took place during the financial crisis in emerging markets on Latin American stock exchanges. Also, a study of liquidity after the acquisition of the RTS by MICEX demonstrated that liquidity in the market worsened from September 2011 to September 2012. The authors recommend that the management of the Moscow Exchange pursue a balanced policy aimed at establishing itself as a regional player in order to strengthen liquidity and take advantage of positive network external factors. This means liberalizing access for foreign market participants, reducing government control, and supporting liquidity in company segments with mid and small capitalization, as well as increasing transparency in strategic development.

There were debates about whether the merger of stock exchanges will be successful. According to Charles et al. (2015), analysis of 31 cases for stock exchange mergers conclude that the positive effect of merger declines throughout time. Moreover, the authors mentioned that this effect is short-term. The article investigates that higher levels of efficiency are less frequent after a stock exchange merger. This suggests that, on average, the stock market becomes less informationally efficient in the periods following mergers. The authors mentioned that the impact on the level of efficiency depends on various characteristics of the merger, such as the level of development, size, geographical diversification, and industry diversification of the stock exchange. This indicates that all merger types do not affect information efficiency in the same manner, and the effect series depends on the aspects related to mergers.

Provided insights will help to take into account mentioned aspects as well and to consider it through a lens of Kazakhstan's context. In our further research we will dive deeper on the mechanism of merger and integration. We will try to identify critical points that prevent the smooth consolidation of stock exchanges. According to our investigation of recent literature, we assume that factors of successful stock exchanges mergers include, but not limited by, a high level of transparency, stable regulatory framework, openness for foreign investors and technological compatibility.

Theoretical framework

Effective operation and integration of stock exchanges are influenced by several important factors, which promote the competitive position and investor attraction, including foreign and domestic ones.

Firstly, stable and high transparency create a conducive environment to investors. For example, the policies which have been set by the Monetary Authority of Singapore puts into operation the principles of the ‘market openness’. which guarantees the stability in the exchange rate, that in turn will attract foreign investors.

Secondly, increase in market size through market consolidation and integration translates into increased liquidity coupled in reduced transaction costs. For instance, the combination of NASDAQ and OMX enhanced, deep, and convenient trading facilities for accessing its wide general pool of international investors since its formation.

The other element for success is liberalization and openness of the market to foreign actors. Permissive tax treatment and Internet access to brokers from anywhere in the world provided by the SGX make possible market capitalization expansion and comparable levels of investment.

Higher scale of exchange, improved transport and communication networks and lower operating costs also promote efficiency in exchanges. For instance, merging of MICEX and RTS in Russia enabled the exchange to operate at lower costs and foreign counterparties’ access was made easier.

However, the following are the discovered causes of failure: Low informational efficiency after mergers and acquisitions sustains the integration of current information and erodes investors’ trust. Also, variable market structure and lower trading turnover, which is observed on the Moscow Exchange, significantly decrease the exchange’s competitiveness on the global arena. It also renders management model differences and resistance to integration as a root to conflicts and barriers to successful consolidation. These elements continue to show that the stock exchange markets depend on transparency, comprehensive regulation, and foreign investment and that failures originate from management problems, low informational transparency, and resistance.

3. Methodology

3.1 Data

This research applies a combination of primary and secondary data to collect information related to the topic of this research. The primary data includes interviews with stock market experts and stakeholders, official websites of AIX and KASE, legislations governing stock market activities of Kazakhstan and AIFC, news reports, while secondary data is taken from expert reports and literature related to the merger of stock exchanges. Guided by the open market principle, both stock exchanges publish market data on a periodic basis on their official websites. In our master project we are going to apply such information for the purpose of analysis and comparison of performance.

3.2 Methods

Qualitative data collection tools will include semi-structured interviews with crucial stakeholders and stock market experts. This type of primary data collection is going to apply a purposive sampling method, which means that people with relevant expertise in the financial sphere and who are capable of giving a full explanation on subject matter will be interviewed. The stakeholders for this investigation include representatives of stock exchanges as traders, brokers, along with financial analysts. It will help to gain a deeper understanding about existing KASE and AIX and the necessity of their consolidation. The preliminary interview protocol is provided in Appendix 1.

Quantitative data is going to be based on secondary data such as statistics which are available on official websites. The official KASE and AIX platforms provide full market information regarding stock prices, listed companies, market participants and regulatory updates. The variables for quantitative components include financial performance, market integration and investors' confidence with indicators such as trading volumes, stock prices and liquidity measures. A convenience sampling approach is going to be used for selecting the necessary data. This approach implies that two available data sets, namely, AIX and KASE statistics are going to be used for comparison in terms of operations, regulations, market access and performance.

3.3 Data analysis

Qualitative data will be examined through conventional content analysis. Although the interview will contain some set of predetermined questions, the usage of probing and interpreting questions along with direct and specifying questions will help to gain deeper understanding of interviewees'

perceptions and expectations about KASE and AIX merger. Hence, the codes or key thoughts and patterns will be interpreted from raw data by application of inductive approach. Similarly, comparative analysis will be conducted in order to explore relative strengths and weaknesses of each exchange.

Quantitative data will be analyzed by application of comparative analysis. Since the financial indicators such as stock prices and trading volumes differ for two stock exchanges, this approach is directed to identifying any significant trends that can influence market liquidity. For example, if one exchange is demonstrating positive trends such as increase of trading volume, this implies attractiveness of the market and the possible success of a potential merger. Similarly, investigation of volatility for each exchange is crucial for revealing potential risks. For instance, by comparing volatility of stock prices and trading volume, we can predict which exchange is going to maintain stability after a potential merger. Also, additional analytical tools such as forecasting may be utilized based on completeness of ongoing evaluation.

3.4 The ethic of the study

The aspect of ethical concerns was considered in the course of this study. The Institutional Research Ethics Committee (IREC) approval for each team member has been sought to meet ethical requirements set down by the Nazarbayev University. Before the interviews as part of the primary data collection measure, an informed consent form was developed and each participant was familiarized with it. The anonymity of the interviewee is guaranteed by this form which also makes the responses received confidential. Interviewees were also informed of the objective of the study, their rights as subjects and their freedom to withdraw from the study with or without reason.

Given that the data like the stock prices, trading volumes, and total number of companies listed by AIX and KASE are information which are in the public domain from the official sites of the AIX and KASE, the data collected under the assessment of the secondary data supported ethical standards to avoid violation of copyright laws. To keep records accurate electronic files were backed up in CDs/ DVDs which were locked with passwords. Therefore, the data storage was compliant with the University's data management policy.

4. Findings & Discussions

The primary objective of this part is to assess the stock exchange integration plan. Also, the emphasis is made on the operation of KASE and AIX. Based on the findings, there will be provided corresponding recommendations. Findings are based on qualitative interviews with key stakeholders, analysis of documents from regulatory bodies, and publicly available data on exchange performance. This section is divided into two key parts: operation of the stock exchanges and commencement and planning of the integration.

4.1 Integration commencement and planning

This part will discuss the initial stage and planning approach regarding the process of merger. The Government and involved officials on a periodic basis updated the community about the process of integration discussions. Based on it we will be able to discover risks and failures that could be potentially prevented.

One of the most actively discussed topics in the last years has been the problem of co-existence of the two stock exchanges of Kazakhstan — AIX and KASE. It is worth recalling that the process of consolidation started in September 2023 due to the annual speeches of the President of the country who declared the necessity to consider the possibility of merger of KASE and AIX. The process of integration of stock exchanges in Kazakhstan was launched with the purpose of creating a single financial market and enhancing the role of Kazakhstan as the financial center of the region. The idea included positioning KASE as a central exchange for local market members and AIX, which was created for the attraction of foreign investors and issuers.

During the data collection process, some of the respondents noted that the integration planning stage was far from perfect. This, in turn, imposed additional risks for the financial market causing reduced trust and transparency issues. One respondent commented that:

”The belief was that there should be integration between the exchanges, but apparently there was weak coordination between the regulatory authorities and the exchanges which led to time delay in the achievement of the intended goals and investor confusion”. Another response from the interviews raised the issue that, while there appeared the strategy to be a laid down, however, the stock market players had divergent estimates and anticipations towards the process of consolidation. Some saw the purported synergy to immediately translate into market growth, while others expected long term play out of complementary exchanges between the two platforms. To confirm those claims it is necessary to consider the planning stage more carefully.

Respondent's views are confirmed by the consequential public releases made by involved state bodies. On September 1, 2023 President K.Z.Tokayev said in his annual address to the nation:

"For our financial system, this is excessive. In order to increase the capacity and attractiveness of the domestic market, I am instructed to explore the possibility of consolidating the potential of these exchanges under a single management."

Following that government bodies commenced discussions on integration of stock exchanges. From the President's assignment it is not clear how consolidation should be performed. What does consolidation of potentials mean? According to Daniyar Temirbayev, Executive Director of the QAMS, the president's directive implies not a merger of the exchanges, but the synchronization of certain stock market processes.

The head of the Agency for Regulation and Development of Financial Markets, Madina Abylkassymova, provided comments on the President's directive: "We believe there is a rationale for these two platforms to create a unified liquidity pool. The specific mechanism for how to combine them and in what format this should occur will be further developed in collaboration with the AIFC". From this it can be concluded that one of the main goals of the merger is increase of liquidity in Kazakhstan stock market. In turn, liquidity can be increased only from full merger of stock markets.

"Questions will already arise regarding these specifics and how to consolidate them. KASE is our old stock exchange, which is not 100% owned by the state through the National Bank. It also has a stake owned by the Moscow Exchange, amounting to 13.10%. As a result, the Moscow Exchange holds shares in KASE, and there is, therefore, a small risk because the Moscow Exchange is owned by the Joint-Stock Company NSD, which is currently under European sanctions." - says recognized economist A.Chebotarev. Thus, potential sanctions associated risks were identified even prior to discussions. Increased sanction risk will cause suspension of the merger. However, involved parties did not pay attention to such a risky exposure. Since the beginning of the aggravation of the geopolitical situation, the Moscow Exchange, as an important financial institution of the Russian Federation, was subject to imposition of sanctions by OFAC, EU and UK.

On September 28, 2023, the Governor of the AIFC, R.Bekturov, provided comments regarding the merger: "AIX and KASE could be united within a single holding, where the stock market could

be developed on AIX under the jurisdiction of the AIFC. The strength of the Kazakhstan Stock Exchange lies in the currency and money markets— 97% of trading takes place on KASE today. I believe we could focus on this platform and develop the derivatives market. But all of this should happen within the framework of a unified holding." Thus, this announcement demonstrates that parties started to develop mechanisms for integration. At least, there was one of the options for potential merger, whereas the stock market will be united under AIX, currency and money market will remain at KASE. Also, the Governor announced the first deadline for integration. He said that parties should decide on a merger mechanism until March 2024. It was also stated that the process of integration itself should be quick so the market can be predictable for investors and other stakeholders.

On October 11, 2023, one month after the President directive, the CEO of the KASE confirmed the AIFC Governor's announcement.

In January 2024, Governor of the AIFC reported "Our deadline is March. The implementation will also take time: re-signing shareholders, negotiations, and possibly transitioning to new systems. There are also private shareholders involved. For KASE, it's our banks, brokers, and the Moscow Stock Exchange. For AIX, it's the Shanghai Stock Exchange, Nasdaq, and the Silk Road Fund. We are currently discussing the model. This is not simple; it's a rather complex market. In the case of KASE, it's the stock market. There are settlement infrastructures after trades. We are now working on how to best connect these in a way that benefits the country and creates a unified liquidity pool without breaking the functioning models." To sum up, the Governor highlighted several critical points where the parties must find principal agreement. It is the composition of shareholding. Different ownership structures entail great debates to the process of negotiation.

Unfortunately, the Government did not release any decision by March 2024. The process of discussions had been delayed. On Apr 12, 2024 the Governor of the National Bank of the RK, T.Suleimenov, announced that involved parties had elaborated a decision, which was being considered by the President. He also announced that consolidation should be finalized by the end of the year. However, there were no details about the structure and following steps of merger.

On June 12, 2024 MOEX, one of KASE's shareholders, was included on the sanction list by OFAC. This occasion made merger impossible. On the same day the Governor of the National Bank reported: "The creation of this entire stock exchange holding structure is now practically

unfeasible, given that one of the shareholders is under sanctions. Therefore, as long as this situation persists, the topic of merger is on hold. A direct question, a direct answer. We cannot complete the merger and cannot even think about it, because KASE has a sanctioned shareholder." On Jul 18, 2024, the CEO of the KASE confirmed that the question of merger is not considered anymore.

In conclusion, the parties failed to prevent one of the main risks - KASE's shareholders are highly exposed for the introduction of sanctions. Toxic shareholders were not even subject of consideration before inclusion to the sanction list. Nonetheless this risk was addressed at the preliminary stages. It should be noted that since the beginning of the war in Ukraine one of the major AIX shareholders, Goldman Sachs, decided to sell its share in the authorized capital of AIX due to increased geopolitical risk and association to Russian business. Affiliation with a sanctioned Russian entity most probably will cause outflow of international shareholders of AIX. This can be a big drawback as each of them provided vital facility and expertise for operation of the stock exchange. It can be said that the involved parties failed the planning stage as the process was triggered.

4.2 Operation of stock exchanges

KASE has more than 30 years of experience and enrolled a greater number of participants, thus it is one of the domestic market players with higher liquidity for regional investors. Foreign exchange transactions, currency pairings, bonds, and stocks, must be facilitated as a general requirement. However, KASE has problems connected with the technology used by it and transparency of operations. One interviewee noted:

"KASE enjoys higher liquidity and a local dominance but it lacks completely transparent information and uses outdated technologies. It requires modernization, especially with reference to a growing number of sanctions across the globe. On the other hand, AIX is operating under the AIFC regulation, which grants international investors better technological framework due to the NASDAQ systems usage. Unlike most other international trader training programs, AIX is specifically intended to be consistent with international norms and best practices and encounters issues with low volume and number of options for trading." It should be noted that one NASDAQ being a one of the AIX shareholders contributed the charter capital with its IT systems.

Some of the interviewees mentioned this poor liquidity position as a reason for slow development of AIX. One respondent explained: "In turn, the presence of new technologies, the support of

English law, and a relatively high stock with regard to the key OECD countries makes AIX less competitive but for the reduced liquidity and the number of instruments.”

Below is the chart outlining some key features in the functioning of stock exchanges.

Table 1. General comparison of stock markets.

Aspect	AIX	KASE
<i>Market structure</i>	Initial focus on attracting international investors and foreign issuers. Investment instruments: equities, debt securities, ETFs, and global depository receipts (GDRs).	General focus on the domestic financial market. Investment instruments: equities, bonds, foreign currencies, derivatives, and government securities. ETFs were recently added.
<i>Trading Platform</i>	Based on NASDAQ's matching engine technology, which applies international trading standards and high trade execution speed. For the purposes of settlement, clearing and recordkeeping AIX uses Avenir software, another platform recognized internationally.	Used to utilize in-house trading technology. Since 2019 applies trading facility, which was designed and developed by MOEX.
<i>Listing Requirements</i>	Listing requirements are more flexible to attract international companies. Depending on listing instrument and approach certain requirements can be waived and simplified.	Listing requirements are based on regulation developed on the basis of RK legislation. Regulations are usually strict and cannot be waived.
<i>Types of Securities Listed</i>	Includes equities, bonds, ETFs, ETNs, GDRs, and other instruments aimed at international investors.	Includes equities, corporate bonds, government securities, and derivatives. Primarily focused on

	Offers green bonds and Islamic finance instruments.	traditional securities and debt instruments. It has strong REPO segment
<i>Investor Base</i>	Main target is foreign liquidity, which includes international and institutional investors. There is a one-stop window operating within AIFC, which simplifies interaction with foreign investors and issuers.	Primarily designed for local retail and institutional investors and issuers. Throughout the time commenced efforts to attract foreign investment. However, the composition of actors is still dominated by domestic participants.
<i>Clearing and Settlement</i>	Services on clearing and settlement services through AIX CSD, which operates under international standards (T+2 settlement cycle). An option for multi-currency settlements is supported. Record-keeping is made by AIX Registrar, a subsidiary of AIX.	Clearing, settlement and record-keeping services are provided by the KACD, subsidiary of the KASE. Settlement cycle can be T+0 or T+2 depending on the market segment.
<i>Language and Legal System</i>	All communication is conducted in English, which is the official language of the AIFC. Legal and regulatory documents are in English too. Follows the AIFC legal framework, which is based on principles of English common law.	Operates in Kazakh and Russian, as Kazakh is the state language and Russian is the official language in Kazakhstan. Legal system is based on legislation of Kazakhstan. Legal documents and regulations are in the Russian or Kazakh languages. Both can be applied interchangeably.
<i>Strategic Focus</i>	There is an aim to be a bridge between East and West, providing a	Focus on developing the domestic capital market. It tries to enhance

	platform for international listings and regional investors. Drives development and innovation, including fintech and green finance. Having Chinese companies among shareholders, there is a Belt and Road initiative.	local companies' access to capital.
<i>Incentives for Issuers</i>	There are guaranteed tax exemptions. AIFC jurisdiction offers flexible regulation, customer oriented approach and transparent operations.	There are guaranteed tax exemptions. Several instruments might have simplified listing requirements.

Table below illustrates key differences between the AIX and KASE on membership eligibility requirements.

Aspect	AIX	KASE
Number of issues	219	725
Number of issuers	131	256
Trading members	56	45
Trading volume (2024)	USD 927 mln.	USD 30 bln
Opened CSD accounts	1,8 mln.	3 mln

Capital raised	USD 5.9 bln. (since 2018)	USD 4.625 (during 2024)
-----------------------	---------------------------	-------------------------

4.3 AIX experience on attracting foreign investors

AIX has established itself as a significant player in the financial ecosystem by leveraging several key factors for success:

Effective Regulatory Framework: There are numerous official and legislative aspects that made AIX easy and open for foreign participants, including conducive flexible regulatory frameworks from the country.

High-Profile Relocations: It has been possible to record achievements such as the redomiciliation of more significant companies like Polymetal. This has enhanced trading activity and exchanges within the market proving AIX ability to accommodate large successful companies.

Global Appeal: The access to the AIX also offers potential benefits to international participants, and to gain the market’s favor and liquidity as well as to widen its space.

Enhanced Market Reputation: Specific successes in establishing AIX, such as Polymetal, detailed in the relocation have enhanced the credibility of its regulators and operating model.

Taken together these factors identify the relevance of AIX and its emerging role in regional and global financial markets.

4.4 Possibility of Merger Between KASE and AIX

Other issues discussed during the interviews were the possible merger of AIX and KASE whereby the views observed were obviously different. It was also postulated that joining the exchanges would enhance the liquidity situation by centralizing the market with the intent of drawing a bigger crowd of interested investors. A merger could also lead to a situation where operational costs are cut through offloading of those operations which are similar but can be done by one instead of two organizations. Nevertheless, a number of interviewees cast doubt on the possibility of a merger owing to the legal contrast the two exchanges have. One of the respondents explained: KASE

operates under the law of RK with AIX going under the English law. Such a difference contributes to making mergers legally cumbersome and even unbeneficial. KASE might threaten some of AIX's legal shield, and thus merging with it might be a potential issue for the exchange. A number of the interviewees also opined that rivalry between KASE and AIX is also healthy as it fosters innovative efforts and enhancement of service delivery. They stated that a merger could reduce the competitive pressure as both of the exchanges could be less sensitive to market calls. Furthermore, some interviewees posed the idea that the presence of a certain company damaging AIX in order to get a merger may pose negative effects on foreign investor credentials on AIX. "If AIX merges with KASE, foreign investors may eliminate the legal transparency and protection that the AIFC operates under the English law, thus affecting AIX's attractiveness".

4.5 Potential issues

The AIX has quickly become an important market participant in Kazakhstan's financial landscape. For this reason, AIX has a unique selling proposition of providing its clients with solutions that follow global best practices as well as benefiting from a strategic partnership with internationally renowned exchanges such as Nasdaq and the Shanghai Stock Exchange. Such strategic collaborations have helped in raising the bar on transparency coupled with service delivery, which is pertinent for the development of investor relations at AIX. By embracing international laws, especially in the licensed region of AIFC, AIX has interested many foreigners institutional investors who put high value on regulatory guard. This global outlook is a prestige for AIX in the aspects of innovation and external trading.

One of the greatest struggles of AIX has been the lower liquidity in comparison to the KASE. Although AIX has shown a relative improvement over the past few months it is still relatively illiquid compared to KASE, particularly in the context of large scale frequent trades. This limitation, however, may be solved if AIX and KASE merge to reinforce the market by connecting the strengths of the two exchanges into one, efficient market for Kazakhstan's economy. On its part, KASE is Tip topology, locally based with higher liquidity especially in energy and financial industries, which could complement AIX international appeal coupled with an advanced technological framework.

KASE has remained the major market preferred by mega institutional investors mainly consisting of commercial banks and oil and energy majors including KazMunayGas and Halyk bank that

have offered strong liquidity and trading activities in the bourses. The liquidity concentration in a few KASE's big firms as mentioned before is a key advantage but remains disadvantageous for small firms. As a result the opportunity to diversify liquidity across a broader range of assets can be found in AIX's capability to attract international investment particularly technology and renewable investors. The merger would provide local market dominance of KASE and AIX's global investor base in unestablished sectors that subsequently support liquidity.

Also, KASE offers services to institutional clients within the country while AIX is for attracting international capital. That will not be easy due to differences between the regulation systems of the two exchanges as well as guarantee that the KASE will retain strong connection with the domestic market while attracting foreign capital at the same time. If successful, on the other hand, the merger could generate competitive pressure across sectors including technology and renewable energy, cutting down market control by a few giant firms.

This paper finds that, principally, AIX holds much value to the potential merger and will be instrumental in opening up more Kazakh firms to the international capital markets that are very important for the Kazakh economy's diversification. While the country depends majorly on natural resource exports, AIX's emphasis on international capital flow would feed the other sectors of the economy. The unified exchange can further develop the capital markets to establish these in Kazakhstan and make them more lucrative for a wide number of investors with better efficiency and competition.

Thus, the merger of AIX and KASE has intriguing opportunities for improving the liquid, diversified, and efficient financial markets in Kazakhstan. To achieve optimal outcomes, AIX's international image should be merged with KASE's liquidity to possibly create a more robust regional financial center for both domestic and foreign investors. Nonetheless, success will be a function of how both exchange's key issues: The issue of regulation and ensuring that the operational tenets and strengths of the two exchanges are preserved in the new structure are managed.

5. Conclusions

5.1 Research summary

Having examined different aspects of each stock exchange, it is obvious that KASE and AIX apply different approaches in the operations. This part was done under the objective of providing an

overview of AIX and KASE stock exchanges (jurisdictions, infrastructure, economics). Operation of two stock exchanges in Kazakhstan confirm the following problems: duplication of functions, complicated access to Kazakhstan stock market due to dual application requirements and excess costs for involved actors. Additionally, there was observed communication and planning strategy that was performed under the goal of AIX and KASE consolidation.

5.2 Practical implications

Taking into account analyzed data and findings, there are several practical implications arising from operation of two stock exchanges, which considerably complicated their consequent merger.

Cost of operation is an implication which is related to the regulator and the Government. Maintenance of two overlapping stock exchanges is costly for the state budget.

Language becomes an issue in the light of merger of stock exchanges, as AIX applies English and KASE - Russian and Kazakh.

Jurisdictions are another problem for the overall stock market of Kazakhstan. Two venues governed by polar regulations and principles introduce challenges for each actor of the framework. AIX's activity is regulated by AIFC acts (Market Rules, Financial Framework Regulations, Code of Conduct, AIX Business Rules, etc.). In turn, KASE's activity is regulated by the law on securities market, and internal regulations of the KASE. It was reported by respondents that AIX legislation provides more flexible regulation, which is convenient for business and issuers in particular.

Infrastructure represents one of the major issues in the light of merger. Both platforms were recently introduced, which involved significant financing. Termination of one of them can be treated as an unreasonable loss of funds. Another issue is identification of the software which is more effective for future application.

Shareholding raises questions on composition of owners in the future. AIX is owned by foreign large companies that are recognized internationally. In turn, KASE is owned by diverse companies and the National Bank of Kazakhstan. This represents an issue for planning of shareholding structure. This also potentially can cause additional losses for the Government if some of the owners decide to sell their shares.

Merger planning and Communication strategy was not transparent and clear to the market, this introduced additional vulnerability for the investors as they stayed in the state of uncertainty.

5.3 Limitations of the study

This research was subject to several limitations which affected findings and recommendations. There was not any literature covering the merger of stock exchanges operating in one country, but applying different legal frameworks. This research did not aim at evaluation of financial indicators of AIX and KASE. Not all of the market actors were able to be included in the data collection part due to high sensitivity of the topic.

6. Recommendations

Based on the findings the following recommendations are proposed:

Communication and planning strategy

The current management of KASE and AIX should elaborate and plan the communication strategy of their tasks and responsibilities to ensure that the roles of both organizations complement each other.

Integration scenarios

Depending on the purposes that the regulator will set towards the financial market, it is recommended to consider the following scenarios.

6.1 Scenario 1

The purpose is further development of the local market. Then it is recommended that KASE acquires AIX. Estimated implementation timeframe should be short-term. It will reduce costs for the operation of stock markets. It will simplify the listing process for all actors, meanwhile a unified strategy for operation of the stock market can be adopted. This will also make emphasis on local issuers and investors. All operations will be conducted in Russian. MOEX infrastructure shall survive for trading, settlement, clearing, and custodial purposes.

There are several risks associated with this scenario. It will create decreased trust to investment regulation in Kazakhstan from international actors, because AIX operated as part of AIFC, which enjoys certain benefits guaranteed to the international society of investors. There also might be decreased trust from local financial society due to changing policies and ongoing restructurings. This will also entail great losses due to unutilized investments in the creation of AIX and repayment of shares owned by foreign shareholders. Selling price might be considerably above market price. This scenario assumes that the shareholding issue will be resolved by buy-out of AIX shares. It means that there will be costs related to this operation.

6.2 Scenario 2

The purpose is the attraction of foreign capital and/or development of the local market. Then it is recommended that AIX acquires KASE entirely; or AIX acquires KASE's function of stock market operation; (most preferred and ease to implement). The implementation timeframe should be short-term. This will help to reduce costs for the operation of stock markets. It will also simplify the listing process for all actors in the market. Unified strategy for operation of stock market shall be applied. The emphasis will be made on foreign issuers and investors. However there are certain risks associated with this scenario. Difficulty in cooperation with state bodies outside AIFC left in the jurisdiction of RK. It will be necessary to update legislation due to the transfer of the stock market to the jurisdiction of AIFC. Difficulty in engagement with local issuers as AIFC jurisdiction is common law and run in English. It means that all documents should be translated into Russian. Local actors must have an opportunity to participate in the market, but language should not be a barrier. In the short term perspective there might occur some disputes related to discrepancies between Russian and English versions of documents. Also, KASE's shares shall be bought out, in case its shareholder will not desire to participate in further holding of shares. This will entail additional costs that have to be directed for obtaining shares. Additional implications might arise in case current KASE shareholders will desire to keep their participating interest. In this case, it is necessary to resolve the future management structure. Board of directors and management board shall be established in such a way that no one's interests are violated or misrepresented. The National Bank's representative must have a casting vote in cases of deadlock.

6.3 Scenario 3

The purpose is joint operation of stock markets with the following merger into one. Then it is recommended to establish a management body, who will manage and coordinate operations of the both stock exchanges. It will also plan and implement integration processes. Implementation timeframe can be either short-term or long-term depending on availability of resources. The management body shall be responsible for elaboration of further steps and plans for potential merger. It will also perform functions for communicating updates to the public. Creation of the management body will ensure smoother merger without market shock and crises. It will work on unification of listing rules for both stock exchanges. Under unified policy it is necessary to unify fees for both stock markets. In the outcome there will be exclusion of duplications of functions

between stock markets. This scenario might entail the following risks: ongoing costs on operation of two stock markets and creation and operation of the management body and ongoing tension between two stock markets and resistance to consolidation. Nonetheless, those can be overcome by adoption of corresponding measures. Management structure shall be one of the major issues. If some of the existing shareholders resolve to withdraw from ownership, then its share must be bought out. If they decide to remain as a shareholder, then its interest must be considered and taken into account in the management bodies of the holding company. It should be noted that interest must be secured proportionally to the amount of shares each shareholder owns.

Conclusion

Integration process presents as a complex procedure, which hides a series of underwater stones that complicates the framework. Above mentioned options represent the most simple approach to the merger issue. The first option aims to develop the local market. Unfortunately, concentration on the domestic framework will harm the attractiveness of Kazakhstan on the international arena. The second and the third options strive to provide opportunity for all actors and must be studied and considered carefully. The aim of the options is to provide fair rules, which must ensure development of the market. It is just a stage in the development. Further enhancement of the market shall require further consideration and research.

7. Reference list

- Abdel Shahid, S. F., & El Serafie, H. O. (2002). World stock exchanges are integrating/consolidating/merging: what could be done by Arab exchanges? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.340980>
- Astana International Financial Centre. (2019). *Annual report on the activities of Astana International Financial centre*. <https://aifc.kz/en/annual-report>.
- Atameken Business Channel. (2023). The merger of Kazakhstan stock exchanges can be organized in a few months. *Kazakhstan General Newswire*, 1. <https://inbusiness.kz/ru/news/sliyanie-kazahstanskih-fondovyh-birzh-mozhno-organizovat-za-neskolko-mesyacev>
- Atameken Business. Kazakhstan General Newswire, n.d. *When will two stock exchanges merger?* https://inbusiness.kz/ru/tv_programs/exclusive/kogda-obedinyatsya-aix-i-kase-eksklyuzivnoe-intervyu-s-glavoj-mfca-renatom-bekturovym
- Booth et al. (2016) *The Craft of Research*, University of Chicago Press. *ProQuest Ebook Central*, <http://ebookcentral.proquest.com/lib/nyulibrary-ebooks/detail.action?docID=4785166>.
- Bryman, A., (2012). *Social Research Methods*, 468-478. Oxford: Oxford University Press, 2012.
- Charles et al. (2015). Stock Exchange mergers and market efficiency. *Applied Economics*, 48(7), 576–589. <https://doi.org/10.1080/00036846.2015.1083090>
- Committee on Governance of the Exchanges. (1999). *Report of the committee on governance of the exchanges*. https://www.mas.gov.sg/-/media/MAS/resource/publications/consult_papers/1999/18-January-1999-Report-Of-The-Committee-On-Governance-Of-The-Exchanges.pdf
- Cress C., (2012). *The Failed NYSE Euronext-Deutsche Borse Group Merger: Foreshadowing Future Consolidation of the Global Stock Exchange Market*. <https://scholarship.law.unc.edu/cgi/viewcontent.cgi?article=1329&context=ncbi>
- Dorodnykh, E. (2013). What Drives Stock Exchange Integration? *International Journal of Economic Sciences and Applied Research*, 6(2): 47-79. <https://research-ebSCO-com.ezproxy.nu.edu.kz/c/r2k2hr/viewer/pdf/rdobzlwqqn?route=detail>

- Espinosa-Méndez, C., Gorigoitia, J., & Vieito, J. (2019). Stock Exchange mergers: A Dynamic Correlation Analysis on Euronext. *Portuguese Economic Journal*, 19(2), 81–98. <https://doi.org/10.1007/s10258-019-00160-5>
- European Central Bank. (2007). *The stock market's changing structure and its consolidation: implications for the efficiency of the financial system and monetary policy*. https://www.ecb.europa.eu/pub/pdf/other/pp61-74_mb200711en.pdf
- Forbes Kazakhstan. (2023). The schedule for merger of AIX and KASE will be presented in March 2024. Kazakhstan General Newswire. https://forbes.kz/economy/finance/shemu_obyedineniya_kase_i_aix_predstavyat_v_marte_2024_goda
- Joseph, R., & Fernandez, M. (2016). Growth of stock market in the UAE through merger: A Comparative Study of GCC Stock Markets. *Accounting and Finance Research*, 5(3). <https://doi.org/10.5430/afr.v5n3p190>
- Hew, D. (2002). Singapore as a regional financial centre. AT 10 Research Conference. (pp. 1-25). https://www.nomurafoundation.or.jp/en/wordpress/wp-content/uploads/2014/09/20020307-08_Denis_Hew.pdf
- Hellström, J., Liu, Y., & Sjögren, T. (2016). Stock Exchange mergers and weak-form information efficiency: Evidence from the OMX Nordic and baltic consolidation. *EconPapers*. <https://econpapers.repec.org/RePEc:hhs:umnees:0923>
- Kokkoris, I., & Olivares-Caminal, R. (2008). Lessons from the recent Stock Exchange merger activity. *Journal of Competition Law and Economics*, 4(3), 837–869. <https://doi.org/10.1093/joclec/nhn002>
- Liu, Y., (2016). Stock exchange integration and price jump risks: The case of the OMX Nordic exchange mergers. <https://diva-portal.org/smash/get/diva2:925271/FULLTEXT01.pdf>
- Nielsson, U. (2009). Stock Exchange merger and liquidity: The case of euronext. *Journal of Financial Markets*, 12(2), 229–267. <https://doi.org/10.1016/j.finmar.2008.07.002>
- Official Website of the President of the Republic of Kazakhstan, n.d. President Kassym-Zhomart Tokayev's state of the Nation Address “Economic course of “Just Kazakhstan”

<https://www.akorda.kz/en/president-kassym-jomart-tokayevs-state-of-the-nation-address-economic-course-of-a-just-kazakhstan-283243>

Official Website of Astana Financial Services Authority, n.d. *Public register*.
<https://publicreg.myafsa.com/details/171140900016/>

Official website Astana International Exchange, n.d. *Overview. Astana International Exchange (AIX)*.<https://aix.kz/about-aix/overview/>

Official website Kazakhstan Stock Exchange, n.d. *History. Main stages of KASE's development*.
<https://kase.kz/en/history/>

Osborne, C. (n.d.). A look at the globalization of the exchanges and its effects on the United States market through an analysis of the NYSE and Euronext merger. *Pepperdine Digital Commons*. <https://digitalcommons.pepperdine.edu/jbel/vol1/iss2/9/>

Paltrinieri, A. (2012). Stock Exchange mergers in the emerging markets: A case study of the United Arab emirates. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2156090>

Teplova, T. V., & Rodina, V. A. (2016). Does stock exchange consolidation improve market liquidity? A study of Stock Exchange acquisition in Russia. *Research in International Business and Finance*, 37, 375–390. <https://doi.org/10.1016/j.ribaf.2016.01.016>

Wong, W., Wong, N., & Agarwal, A. (2006). The Disappearing Calendar Anomalies in the Singapore Stock Market. *The Lahore Journal of Economics*, 11 (2). 123-139. DOI:10.35536/lje.2006.v11.i2.a7

Xie W, Paulo Vieito J, Clark E, Wong W-K. (2020). Could Mergers Become More Sustainable? A Study of the Stock Exchange Mergers of NASDAQ and OMX. *Sustainability*. 12(20). <https://doi.org/10.3390/su12208581>

8. Appendices

Appendix #1

Interview protocol with stakeholders (prior to the merger)

Introduction of interview:

I appreciate your consenting to be interviewed. Our interview will be about the integration of two stock exchanges: KASE and AIX.

We invited you to take this interview as we believe you possess significant expertise and knowledge about activities performed at the stock market of Kazakhstan. Our master project as a whole focuses on the current performance of the stock market, observation of the merger of AIX and KASE, a post-merger observation. Our study does not aim to evaluate your techniques or experiences. Rather, we are trying to learn opinions of market subjects about the operation and conduct of stock market activities, and influence of possible merger.

The interview will take 15 minutes.

The data will be collected with hand-written notes.

1. How long have you been working in the sphere of the stock market?

2. Please briefly describe your role.

3. What are the main differences in conducting activities through AIX and KASE?

4. What advantages do AIX and KASE have?

For AIX: _____

For KASE: _____

5. What disadvantages do AIX and KASE have?

For AIX: _____

For KASE: _____

6. Can the benefits of combining exchanges increase the efficiency of the market?

Yes No

Please _____ provide _____ brief
comments: _____

7. What are the goals of the merger?

Please _____ provide _____ brief
comments: _____

8. How the merger can affect the performance of Kazakhstan's stock market?

Yes No

9. Do you expect market stability to improve or worsen after the merger of KASE and AIX?

Yes No

Please provide brief comments:

10. Can investors expect to expand their choice of investments after the integration of KASE and AIX?

Yes No

Additional comments _____

11. Can the changes associated with the merger make the brokerage activity more efficient or diverse?

Yes No

Additional comments _____

12. Are you afraid of possible negative consequences for your brokerage activity?

Yes No

Additional comments _____

13. What considerations should be taken into account prior to the merger of AIX and KASE?

14. How can Kazakhstan's stock market performance be improved?

15. Whose rules (AIX or KASE) are easier to apply during market transactions?

AIX KASE

Additional comments _____

16. Whose infrastructure is more effective for market transactions?

AIX KASE

Additional comments _____

Appendix #2

Interview protocol with stakeholders (after the merger)

Introduction of interview:

I appreciate your consenting to be interviewed. Our interview will be about the integration of two stock exchanges: KASE and AIX.

We invited you to take this interview as we believe you possess significant expertise and knowledge about activities performed at the stock market of Kazakhstan. Our master project as a whole focuses on the current performance of the stock market, observation of the merger of AIX and KASE, a post-merger observation. Our study does not aim to evaluate your techniques or experiences. Rather, we are trying to learn more about the operation and conduct of stock market activities in order to learn how stock market performance can be improved.

The data will be collected with hand-written notes.

1. How long have you been working in the sphere of the stock market?

2. Please briefly describe your role.

3. Do you believe the goals of the merger were reached?

Yes No

Please explain

4. How do you assess current stock market operation?

Excellent Fair Low Poor

5. What can be improved?

6. Do you observe any differences after the merger?

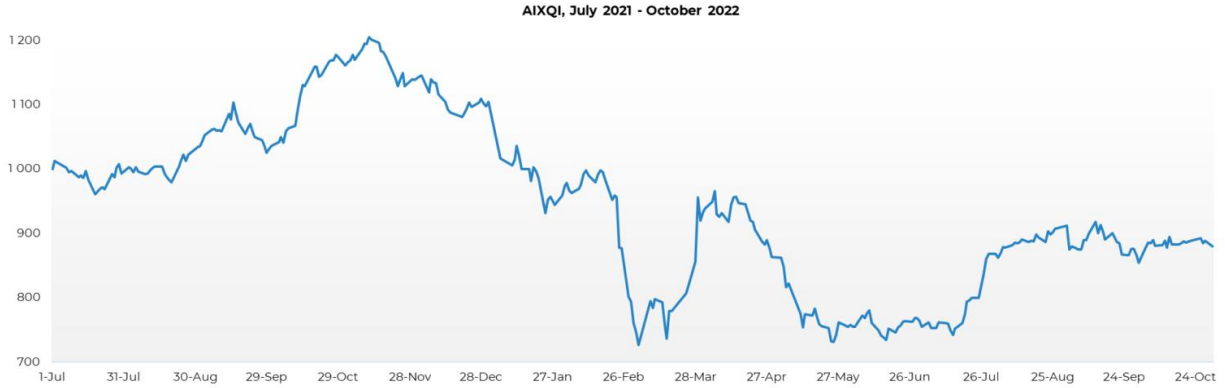
Yes No

Please explain

Appendix #3

Secondary market data observation (Market performance data)

AIX Index of market performance prior to merger



AIX Qazaq Index level as of 16/11/2023

	Level	Level change from previous day	% change from previous day	YTD % change
AIX Qazaq Index	1148.74	2	0.17%	21.13%



Key points on pre-merger market state: _____

KASE Index of market performance prior to merger

Published on TradingView.com, November 18, 2023 10:48:36 +06
Индекс KASE, D O: 4092.02 H: 4104.82 L: 4090.55 C: 4104.44



TradingView

Key points on pre-merger market state: _____

Stock exchange Index of market performance after the merger

[the chart to be added after the merger]