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Халықаралық ғылыми конференциясының еңбек жинағында әлеуетті мүмкіндіктер негізінде Қазақстанның ұлттық экономикасының бәсекеге қабілеттілігін жоғарылату және әртараптандыру жеделдетудің және ел экономикасының бәсекеге қабілеттілігін жоғарылату мәселелері қарастырылған.

В сборнике материалов международной научной конференции рассмотрены актуальные вопросы диверсификации национальной экономики Казахстана на основе потенциальных возможностей.

The collection of materials in the international scientific conference considers important issues of Kazakhstan's national economy diversification based on potential opportunities and development of recommendations for improving the competitiveness of the country's economy.

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4. Создание трехуровневой системы. 5. Проект, направленный на повышение финансовой грамотности	повысить конкуренцию на рынке. 6. Возможность небольших институтов вытеснить традиционных игроков
Слабые стороны	Угрозы
1. Низкий уровень финансовой безопасности банковской системы в период кризиса. 2. Недоразвитость финансовых рынков и инфраструктуры. 3. Зависимость банковской системы страны от иностранных финансовых ресурсов и от зарубежных инновационных технологий. 4. Снижение покупательной способности и ухудшение финансового положения населения. 5. Низкий уровень финансовой грамотности клиентов	1. Зависимость от внешней конъюнктуры. 2. Отставание во внедрении технологий. 3. Незащищенность от действий нерезидентов и спекулятивного капитала. 4. Уязвимость информационной инфраструктуры. 5. Значительная доля теневой экономики. 6. Коррупция и криминализация финансово-хозяйственных отношений. 7. Ограниченные возможности в части кредитования. 8. Значительное сокращение кредитования бизнеса по высоким ставкам

В связи с этим необходимо говорить об ужесточении надзора и регулирования со стороны Центрального банка Российской Федерации не только в области формирования капитала и резервов (Положения Банка России № 395-П от 28.12.2012, № 254-П от 26.03.2004, № 283-П от 20.03.2006), но и по по нормативам (например, введение H25 – максимального размера риска на связанное с кредитной организацией лицо или группу лиц). Пристальное внимание следует уделить соблюдению надбавок к капиталу (согласно Инструкции № 139-И 03.12.2012) и оценке экономического положения банка (в соответствии с Указанием Банка России № 2005-У от 30.04.2008).

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THE IMPACT OF OIL PRICE SHOCKS ON KAZAKH STOCK MARKET

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Nowadays oil is the lifeblood of the modern economy. Oil price movements and its interaction with economic activity remains the area of interest for researchers, especially due to events that have taken place in the last few decades, which have been characterised by abrupt changes in oil prices, followed by serious consequences for the world economy and financial

markets. These changes have also affected stock markets, generally considered as an indicator of the economic situation, since every political and economic change in the country are reflected in the share prices of companies. The increase and decrease of share prices signal about the changes in economic activity, growth, boom and recession cycles of the economy. Therefore, in a globalized world, it is crucial to understand the relationship between changes in oil price, financial markets and the economy, in order to achieve sustainable growth and development.

The large body of research that has been done on the investigation of how changes in the oil price affect macroeconomic variables and economic activity, have mainly focused on developed countries [Hooker, 1996; Hickman et al., 1987; Cunado and Perez de Gracia, 2003]. More recently, due to the role and growing influence of emerging markets such as China, India and other Asian countries with respect to global production and consumption, some researchers have directed their research to study the relationship between oil price and the macroeconomy within these emerging economies. Contrary to significant number of research studying relationships between oil price and macroeconomic variables, the impact of oil prices on stock markets have received relatively little attention. The majority of these studies are concentrated on developed, oil importing countries, and regardless of the methodology and data employed in their investigations, the obtained results show a negative relationship between oil price and stock market returns [Jones and Kaul, 1996; Sadorsky, 1999; Kilian, 2008; Park and Ratti, 2008]. In oil exporting economies, higher oil prices allow for the generation of additional income and wealth, thus leaving a positive effect on the economy of these countries, the inverse of this is what one expects in the case of oil importing economies.

Despite the fact that the relationship between stock market and oil price has received increased attention in the last decades, the relationship between oil price changes and stock markets of oil exporter economies is still ambiguous. This study's aim is to focus on examination of how the price of oil influences the Kazakhstan stock market, an oil exporting country, which economy is strongly dependent on the commodity prices in the international markets. According to the US Energy Information Administration [EIA, 2014], Kazakhstan is located on the 18th place in the ranking of major liquid fuels producers, with a production of 1.70 million barrels per day. According to the Oil & Gas Journal, [2014], Kazakhstan has as of January 2014 proved that it has crude oil reserves of 30 billion barrels, and such a reserve is considered as the 12th largest endowment in the world, and the second in Eurasia after Russia.

For Kazakhstan, oil has always been of great importance. The role of oil in the economy of the country is still very high, despite the government's attempts to diversify and modernize the economy. Oil prices are also essential for the country's foreign trade. According to the statistics of the Kazakhstan National Export and Investment Agency on exports of goods, in 2014, exports of oil (including both crude oil and oil products) amounted to more than 53.6 billion US dollars, with the total export being 78.2 billion US dollars. The share of oil in export is therefore more than half (68%). Recently, Kazakhstan's economy and the stock market are experienced a downturn, which has been caused by the oil price collapse of 2014-2015, as well as the economic conditions in Russia and China, the main trading partners.

During the last few years, the Kazakh economy has been under pressure due to the decrease in oil prices. This resulted in a revision of the budget, which was previously set at the price of oil when it was \$80 a barrel. The budget revision thus took into account recent oil price drop, the devaluation of the domestic currency Tenge in 2014, 2015 and eventually switched to a free float regime in August 2015, after the price of Brent crude dropped by 3.1% to \$47.28 a barrel, along with a devaluation of the Chinese Yuan and weakening of the Ruble [Bloomberg, 2015]. In light of the recent fall in the oil price, and its consequence on the Kazakh economy, it is thus very important to investigate the relationship between oil price fluctuations, economy, and stock market of the country, which relation is so vulnerable to and dependent on commodity price changes, particularly to oil price shocks.

By simply highlighting the above scenario, it can be seen that oil prices have a great impact on the country's economy, the Government activities and the results achieved by companies. Given this chain effect, it would thus be logical to assume that shifts and changes in the price of oil affect the financial markets. The initial hypothesis in this study is that there exists a direct link between oil prices and the Kazakhstan stock market (KASE). Considerations behind in support of this hypothesis are the following. Higher oil prices mean higher profits in energy sector. Knowing this, investors may overestimate the fair value of such companies and based on these optimistic expectations, they will be willing to buy more shares of these companies. As a result, by virtue of being more attractive for investors, the stocks of these companies should grow in value, and consequently, one observes a rise in the stock indices.

The Kazakhstan stock market is very young in comparison with well-established stock markets. The KASE was founded in the 17th November, 1993, after the introduction of Kazakhstan's own currency: the Tenge. The stock market in Kazakhstan is considered as young and dynamically developing, and is the most capitalised stock market in Central Asia. The KASE index comprises of nine equities of largest banks, oil, energy, mining and telecommunication companies. Two of the nine security issuers are large oil sector companies.

Figure 1 shows that the KASE index moves in the same direction as oil prices, during the period of study. A significant increase and peak in the KASE index, followed by a is drop possibly related with the rapid growth of oil price from 55\$ to \$142 a barrel, and then an abrupt fall to \$40 a barrel in 2008 [Hamilton, 2009].

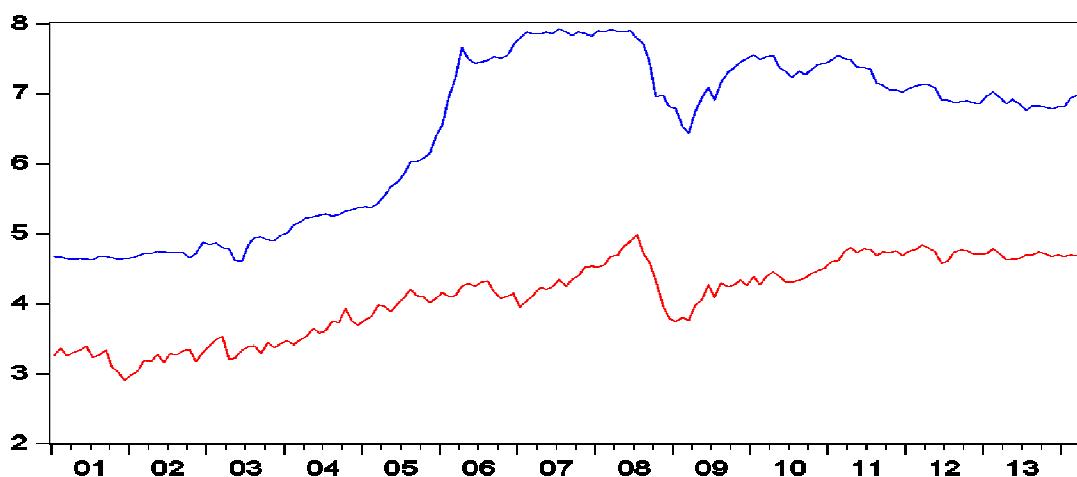


Figure 1 – Historical KASE index and oil prices

Several studies have investigated the vulnerability of the Kazakhstan economy to the Dutch disease, and the oil price impact on macroeconomic indicators [Egert B. and Leonard C., 2008]. In the Kazakhstan context there are only several researches investigated how macroeconomic variables react to oil price changes. However, no publicly available study has yet accentuated the attention on the oil price - stock market relationship. Therefore, the research objective is to combine two strands of literature: the relationship between the oil price and macroeconomy; and the relationship between oil price and stock market. Also the objective of this study is the investigation of the long-run and short-run relationship between the Kazakhstan stock market and oil price changes by incorporating several macroeconomic variables, such as exchange rate, inflation and interest rate, which sort of variables have been used in previous researches on this topic. The choice of these variables, with which we have aimed to test whether oil price changes affect the Kazakh stock market through transmission channels, particularly via exchange rate, motivated by Bjornland [2009]. The aim is then to contribute to the scarce and deficient empirical research on the relationship between the price of oil and the stock market in Kazakhstan.

Numerous previous researches investigating oil price effects on the stock markets of different countries, such as the US and European markets, as well as emerging, oil exporting and oil importing countries used the cointegration framework to study these relationships. For this reason, this study employs a cointegration, VAR analysis and vector error correction modelling concepts to investigate the existence of the relationship between oil price changes and stock market returns in Kazakhstan. The long-run relationship between stock market and oil price is examined by performing the Johansen cointegration test. Furthermore, VECM is estimated in order to study the long-run and short-run relationship between stock market and oil price shocks (Brooks, 2008, 2014). The short-run analysis is supplemented with a dynamic analysis that includes impulse response functions and variance decompositions.

By performing the Johansen cointegration test, it is revealed that there is at least one cointegration equation among the variables. The VECM is estimated by taking into account financial crisis period and shows that Kazakhstan stock market is positively influenced by oil price shocks, which is a common finding in oil exporting countries and is consistent with the studies on oil exporting economies [Bjornland, 2009; Park and Ratti, 2008; Arouri and Rault, 2009; 2011; Oskenbayev et al., 2011]. The analysis also revealed that exchange rate, inflation and interest rate contribute to the long-run relationship in the Kazakhstan stock market. Exchange rates exhibit a positive relationship with KASE, which can be explained by an increase in the competitiveness of the domestic products in the international markets. Exchange rate influences also increase of oil export leading to higher incomes and consequently rising stock prices.

However, as mentioned earlier Kazakhstan's practice has a mixed response to exchange rate shocks. For example, the KASE index experienced a downturn after devaluation of the national currency in February, 2009. However, it responded positively to currency depreciation in 2014, when the Tenge depreciated by 19% from 155 KZT to 185 KZT per USD. The results also show that inflation negatively affects stock returns in the long-run, possible due to the underdevelopment and risk factor present in the Kazakh stock market, which cannot yet serve as a hedge against inflation. These results are consistent with the theory, albeit some inefficiencies with regard the interest rate effect on stock market, which can be explained by a limited data availability on short-term interbank interest rate.

In contrast to the long-run analysis, the short-run analysis gives more modest results. The short-run analysis based on Granger causalities, impulse responses and variance decompositions, reveals the short-run relationship only exists between the stock market and exchange rate variable. However, the hypothesis of the exchange rate serving as a possible transmission channel of oil price changes on stock market is not confirmed, since oil prices do not exhibit a significant effect on the exchange rates.

Based on the findings of the study, it can be concluded that oil price movements can be considered as a more important indicator of the Kazakh stock market in the long-run. Moreover, despite the government's attempts to diversify Kazakhstan's economy, the country is still highly dependent on oil price changes. The recent oil price collapse of 2014-2015, followed by several devaluations of the Tenge, and the switching to a free float exchange rate regime, and the need to revise the budget of the country for 2015-2017, are proof for this. Additionally, the asymmetric oil price shocks analysis shows that negative oil price shocks have a larger effect than positive shocks. This in fact consistent with the present situation one finds in the Kazakhstan economy due to the recent oil price fall. In light of this, the results obtained from the study should be useful for policy makers, investors and portfolio managers that are interested in making investment in the Kazakh stock market.

This study, however, has several limitations and weaknesses which would need to be considered and resolved in future researches. The primary limitation in this study is the data constraint. The study analyses relatively small sample period due to the limited data availability of the stock market index because of the recent establishment of the stock market in 1993. Another

drawback of the study is the fact we used the average effective yield of the National Bank of Kazakhstan data as a proxy for the short-term interest rate, for which the last available data is January, 2015. This, as mentioned before in chapter 5, affected the results obtained from the long-run analysis.

Due to youth of the Kazakh stock market and the lack of studies that investigate the stock market in Kazakhstan, there is a large unexplored research area for further research. Further research may be conducted by using different models, empirical analyses or more well-specified models with a larger sample period or by adding other variables. Another good contribution to the limited literature on the Kazakhstan stock market is to implement other methodologies used by previous researches to investigate oil price and stock market relationships, such as the GARCH family models to investigate oil price volatility effects, or the use of regime-switching models as in other studies. Further research may also implement a methodology suggested by recent researches such as those of Kilian [2008] and Sadorsky [2012]. Following this approach one can also take into account the origins and causes of oil price changes, while investigating the impact of supply side and demand side effects on the changes of oil price and subsequently on the stock market.

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