

MINISTRY OF EDUCATION AND SCIENCE OF
THE REPUBLIC OF KAZAKHSTAN

SULEYMAN DEMIREL UNIVERSITY
SDU BUSINESS SCHOOL

УДК 331.5 (574)

«Approved»

Head of department

«Economics and Business»


PhD Azimbekova Aigerim

«__» _____ 2018

THESIS WORK

Theme: «Impacts of youth unemployment on the economic growth. Kazakhstan as case study»

Specialty «6M050600 - Economics»

Submitted by Student

1st course, group

«6M050600 - Economics»

Aigerim Kadyrova

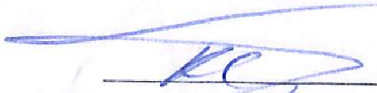


(signature of the student)

Scientific Supervisor

PhD, professor

Tatibekov B.L.



(signature of the supervisor)

Kaskelen, 2018

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ABSTRACT

Youth unemployment is one of the central issues not only in Kazakhstan, but also in the whole world. It might negatively affect every aspects, dimensions and directions of our life. The present work is aimed at investigating the relationship between youth unemployment and economic growth of Kazakhstan. Real GDP rate was taken as the measure of economic growth and Okun's law was taken as the basis of the study. Literature review on relevant topic was conducted in order to propose hypothesis. By conducting literature review, possible explanations and roots of youth unemployment were learnt. Statistical data on both youth unemployment rate and real GDP rate from 1991 till 2017 was carefully examined and tested via using Excel program. Regression analysis (Ordinary Least Squares) and correlation test were chosen as the research instruments to interpret the data. Similarly, a field survey was conducted on correlation between youth unemployment and economic development. Chi-square test was applied to draw appropriate conclusions from field survey. The results of the study, however, show that there is no significant relationship between those economic variables and our proposed hypothesis was rejected. This can be explained in terms of highly dependence of Kazakhstani economy on natural resources such as oil and gas. Despite the fact that correlation is not so high, some possible recommendations to reduce youth unemployment rate were suggested at the end of the work, since there are still thousands of young educated people who fail to get job after their graduation.

АБСТРАКТ

Молодежная безработица является одним из центральных вопросов не только в Казахстане, но и во всем мире. Это может негативно повлиять на все аспекты, размеры и направления нашей жизни. Настоящая работа направлена на изучение взаимосвязи между безработицей среди молодежи и экономическим ростом Казахстана. В качестве показателя экономического роста была принята реальная ставка ВВП, и в качестве основы исследования был принят закон Окуна. Для выдвижения гипотезы был проведен обзор литературы по соответствующей теме. Проведя обзор литературы, были изучены возможные объяснения и корни безработицы среди молодежи. Статистические данные по уровню безработицы среди молодежи и реальному уровню ВВП с 1991 по 2017 год были тщательно изучены и протестированы с использованием программы Excel. Регрессионный анализ (Обычные наименьшие квадраты) и корреляционный тест были выбраны в качестве инструментов исследования для интерпретации данных. Аналогичным образом была проведена полевая съемка по соотношению между безработицей среди молодежи и экономическим развитием. Тест на хи-квадрат был применен для получения соответствующих выводов из полевых исследований. Однако результаты исследования показывают, что между этими экономическими переменными нет существенной взаимосвязи, и предлагаемая нами гипотеза была отвергнута. Это можно объяснить с точки зрения высокой зависимости экономики Казахстана от природных ресурсов, таких как нефть и газ. Несмотря на то, что корреляция не так высока, в конце работы были предложены некоторые возможные рекомендации по снижению уровня безработицы среди молодежи, поскольку еще есть тысячи молодых образованных людей, которые не могут получить работу после окончания учебы.

АНДАТПА

Жастар арасындағы жұмыссыздық тек Қазақстанның ғана емес, сонымен қатар бүкіл әлемдегі басты мәселелердің бірі болып табылады. Ол біздің өміріміздің барлық аспектілеріне және бағыттарына теріс әсер етуі мүмкін. Магистрлік диссертацияның мақсаты жастардың жұмыссыздығы мен Қазақстанның экономикалық өсуі арасындағы байланысты зерттеу болып табылады. Экономикалық өсу индикаторы ретінде жалпы ішкі өнімнің (ЖІӨ) нақты бағамы алынды және зерттеу Оукен заңына негізделі отырып жүргізілді. Гипотезаны болжау мақсатында әдеби шолу жүргізілді және ол арқылы жастар арасындағы жұмыссыздықтың себептері айқындалды. 1991-2017 жылдар арасындағы ЖІӨ мен жастар жұмыссыздығының деңгейі зерттелді. Статистиканы зерттеу барысында регрессиялық және корреляциялық талдау жүргізілді. Сонымен қатар, сауалнама жүргізілді. Алайда, зерттеу нәтижелері экономикалық айнымалылар арасында ешқандай елеулі байланыс таппады. Оны Қазақстан мемлекетінің мұнай және газ сияқты табиғи ресурстарға тәуелділік тұрғысынан түсіндіруге болады. Дегенмен, жылдан - жылға жұмыссыз жастардың көбеюіне байланысты, жұмыссыздықпен күресу шаралары мен жолдары ұсынылды.

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1. INTRODUCTION

Why European countries are believed to have much more developed economies compared to those of Central Asians? What steps should Kazakhstan take to enter the list of 30 the most industrially developed countries of the world? These questions should be carefully examined and all the possible obstacles should be neglected by Kazakhstani policymakers unless the state is indifferent to well-being of the future young generation. Despite the fact that unemployment cannot be considered as one of the biggest problems, the country still faces inadequacy of available working places. According to Eurasian Economic Committee, there were 94.6 thousand unemployed registered at public employment centers in 2017, which is approximately 1.4 times more than it was registered in previous year (Zhakupova, Z. 2017). Unemployment, however, is never equally distributed among population - there are always some groups of the citizens who are comparatively more exposed to the problem. Unevenness of unemployment distribution in the regions is not exception - South Kazakhstan and Karaganda regions as well as Almaty city are believed to have the highest rates in the country (Kazportal, 2015). Statistics shows that the number of unemployed women is two times more than those of men, which is explained in terms of absence of special-technical background that most employers require from candidates. Young people, however, are the most vulnerable to unemployment – they make up 41.2% of the whole unemployed people registered at employment centers and this says about lack of demand for inexperienced employees from employers' side and lack of interest for miserable wages from youth's side. Although both females and youth face lack of jobs, women are not taken as the target group of the study, since childcare is believed to be the main responsibility of them and it is absolutely okay for most Kazakhstani families to have the sole breadwinner in a family (OECD, 2017).

1.1. BACKGROUND

Kazakhstan has been implementing necessary regulations on the Labor Law since the state gained its Independence. “Labor Law of Republic of Kazakhstan” from 10th December 1999 and “Employment Act” from 23rd of January 2001 can serve as the first steps of the country in the struggle against the high unemployment. According to the “Employment Act”, unemployed low-income citizens who are passing professional training courses are eligible for the social assistance from the state. Government also issued an order “On measures to improve the state youth policy” in 9th of October, 1996 in order to reduce unemployment rate among young population (Kazportal.kz, 2015). What concerns recent policies, then, we can focus attention on “Employment Roadmap – 2020” and “About Employment of Population” legislations, which were enacted in 2011 and in 2016, respectively. In the framework of these programs, unemployed can get full information about trainings, jobs, and type of assistance that the state is willing to offer (OECD, 2017).

One should, however, note here that existence of all of these regulations and policies is not enough – future graduates should thoroughly understand socio-economic outcomes of the unemployment and pay strong attention to the specialties they are going to get, since unemployment is believed to have negative impact not only on unemployed individual himself, but also on economic growth of the whole country. Okun’s law is an argument for this– it states that 1% decrease in unemployment rate requires 2% increase in real GDP rate. According to the law, these two macroeconomic terms are indirectly proportional to each other – if GDP increase, unemployment decreases and vice-versa (Fuhrmann, R. 2018). In other words, provision of only 1% of unemployed people with jobs enables the country receive 2% of GDP growth in a year. It seems obvious that by decreasing unemployment rate, a country gains only advantages. First, people work and make money. Second, income levels in their families increase. Third, a society has a decrease in the number of poor people. Finally, government will spend less money on

social assistance and income level growth of the whole population will positively affect the market itself (Urmanov, A. 2017).

1.2. PROBLEM STATEMENT

As it was stated above, youth unemployment is believed to have deleterious impacts not only on those of unemployed, but on the state as well. Young people, who face troubles with finding job after their graduation, start to lose their confidence and become isolated from society. This, in turn, may lead to socio-political problems, which will negatively influence the economy of the country (Salvador & Leiner-Killinger, 2008). Statistical data shows that there were 92, 8 thousand young people in 2016 who couldn't find job in the country. Despite the fact that the number was decreased by 10% and reached 83, 7 thousand in 2017, youth unemployment remains to be one of the most serious issues adversely affecting the state income (Kaumetova, I. 2018).

The first drawback arises from unemployment among youth is a labor exploitation, because it will make youth to work in bad conditions for miserable wages. This may facilitate greed, dishonesty, and inhumanity among young people, which, in turn, will lead to revolts and socio-political instability in a society. Similarly, labor exploitation might result in increased number of crime and violence, since youth become unmotivated and start to search the easiest ways to feed themselves. These unemployed young people will lose their income in the short-run and their savings for retirement in the long-run. Furthermore, a significant youth unemployment rate leads to poverty and dramatic rise in debt, which is explained in terms of obligations of a state to pay compensations and unemployment benefits for jobless young people (Gleeson, P. n.d.).

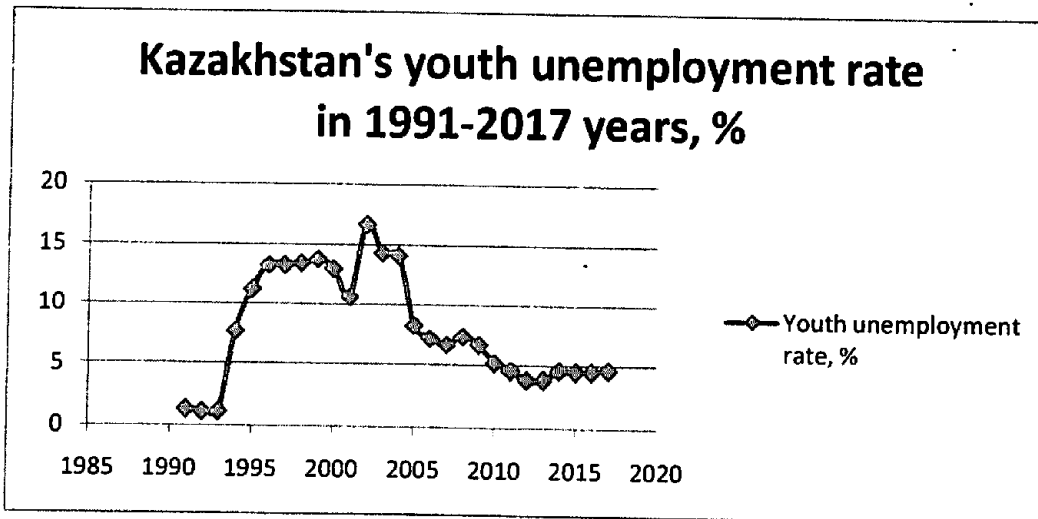
Aigul Nurkina, Majilis deputy of Kazakhstan, claims that imbalance between acquired professions of the youth and demand of the labor market can serve as the first

and foremost reason of that widespread youth joblessness. According to the Committee on Statistics, 43 thousand specialists (27 thousand of which are university graduates) are going to graduate in Almaty this year. The problem is that most of them have chosen humanities and social sciences (economics, finance) as their major, when there is a huge demand for technical and marketing specialists in the city's labor market. This basically means that one third of future graduates may face job problems after graduation (Kazpravda.kz, 2017). Skills mismatch is another possible explanation for a dramatic increase in the number of young people who fail to find any job, since most employers require special skills from their candidates that those do not possess. In other words, companies want to hire someone who is already experienced in relevant field, which is quite impossible to see from recent graduates. What concerns youth themselves, then, most of them desire to immediately get a highly – paid job without any experience acquired. Thirdly, Kazakhstani youth are not well informed about presence of demand for their labor. Not talking about other regions, they are not even aware of the vacancies in their place of residence. They find it difficult to relocate anytime and enhance their reputation as developed countries are used to do with their volatile market conditions – they urge two-third of their employees constantly to learn new skills as mastering new technology and experience exchange. Furthermore, most of those developed countries have differentiated approach for different categories of people, especially for youth. In the framework of economic program, state basically joins entrepreneurs and assists youth in finding appropriate jobs. Government fully covers training expenses and subsidizes costs of the wages/salaries paid for youth. By doing so, they attract youth for the work and provide them with experience. This could serve as useful guideline for Kazakhstan (Kazportal.kz, 2015).

Figure 1 shows the dynamics of youth unemployment rate of Kazakhstan from 1991 till 2017, whereas Figure 2 gives information about the percentages of real GDP

rate for those years. From these tables, we can see that both of them had their highest peak in 2000s and lowest peak in 1992-1993s.

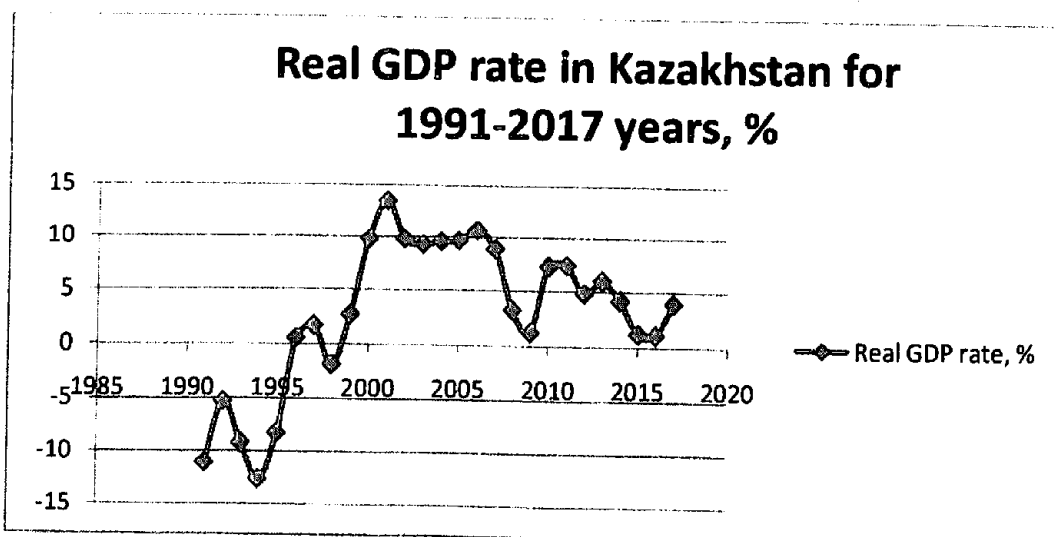
Figure 1. Youth unemployment rate in Kazakhstan for 1991-2017 years



Source: <http://stat.gov.kz/>

Retrieved on 29 April, 2018

Figure 2. Real GDP rate in Kazakhstan for 1991-2017 years



Source: <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=KZ>

Retrieved on 29 April, 2018.

1.3. RESEARCH QUESTION

The main research question is

“Is there any relationship between youth unemployment and economic growth of Kazakhstan?”

If yes, then, “How does youth unemployment influence economic development of the state?”

Specific research questions include:

- I. How does youth unemployment in rural sector affect youth unemployment in Kazakhstan?
- II. How does youth unemployment in urban sector affect youth unemployment in Kazakhstan?
- III. How does youth unemployment in rural sector affect economic growth in Kazakhstan?
- IV. How does youth unemployment in urban sector affect economic growth in Kazakhstan?

1.4. RESEARCH OBJECTIVE

The main objective of this paper is to examine the relationship between youth unemployment and economic growth of the country.

Specific objectives include separately investigating the impact of urban and rural youth unemployment rates on overall youth unemployment in Kazakhstan first, then on the state's real GDP rate second and suggesting some recommendations at the end of the work.

1.5. PRACTICAL & THEORETICAL CONTRIBUTIONS

Despite the fact that there are many academic scholars and foreign authors who investigated a correlation between youth unemployment and economic growth of the state, there is a lack of information about relationship between economic development and Kazakhstani unemployed youth. So, first of all, the thesis is designed to deeply investigate the impact of youth unemployment on economic growth of Kazakhstan. Due to the fact that GDP is a measure of economic growth, it was taken as our independent variable. Secondly, application of both qualitative and quantitative research designs increased objectivity of the study – both methods indicate that there's no significant impact that youth unemployment has on economic development. To be precise, regression analysis and correlation tests were used to examine the statistics on GDP and unemployment rates in 1991-2017 years period. Similarly, chi-square test was taken as our instrument to analyze the responses obtained from field survey. Interestingly, the null hypothesis was expected to be supported, since the study was based on one of the popular laws in macroeconomics, on Okun's law. The results, however, show that it fails to apply to Kazakhstani case, because it didn't find a significant relationship between them. Finally, the thesis provides possible ways and measures for both policymakers and future generation to reduce youth unemployment at the very end of the work, which could serve as a helpful guideline for fighting against rising joblessness. One should never forget that it is our responsibility to invest in young generation and make sure that they are nourished with geniality and useful knowledge, since Kazakhstan's future is highly dependent on them.

2. LITERATURE REVIEW

Definition of main terms

First of all, let's conceptualize and understand the meaning of the term "unemployment" itself. According to Bureau of Labor Statistics, unemployment is a presence of people who haven't worked for the last month and who have been actively searching for a job. Likewise, individuals who are temporarily discharged and waiting for their work are also counted as unemployed. If the individuals are not in search of a job, however, then, they are not taken into consideration in the calculation of unemployment rate. Similarly, they are not included in labor force participation rate unless they start looking for a job (Amadeo, K. 2017). The same rules apply to youth unemployment. According to OECD, youth unemployment rate is a percentage of jobless 15-24 year-old young people who show willingness to get a job (OECD Data, 2017).

Types of unemployment

There are 5 types of unemployment such as

1. Frictional – it emerges when demand for certain products or services have been decreased and ex-workers are temporarily unemployed and need time to find another job.
2. Structural – is a long-term unemployment which is resulted from economic changes and staff reduction.
3. Cyclical – is largely affected by business cycles and deficiency in demand. This type of unemployment periodically emerges and vanishes.
4. Seasonal – is highly dependent on weather conditions. Many jobs such as tourism, agriculture and construction works require good weather and stop functioning in winter.

5. Disguised—is the last type of unemployment which occurs when there are more people engaged in a particular job than it is needed to fulfill that job or when employed people fail to use all their skills effectively due to easy jobs they are responsible for (Nipun, S. n.d.).

Causes of youth unemployment

National Treasury (2011) highlights main roots of youth unemployment:

1. Young people fail to meet *experience requirements* that many job givers want to see from candidates;
2. *Poor school performance* is the second main reason. One should, however, note here that schools also fail to provide students with required skills. What they give is an education, which is not enough to get appropriate jobs. Education of high quality means that students should be able to put their theoretical knowledge into practice after they receive that knowledge.
3. Employers offer *miserable wages* for those who have recently graduated.

There are many investigations already conducted on this topic, precisely, on the relationship between youth unemployment rate and economic growth of the state. Al-Habees and Rumman (2012) investigated the impact of unemployment on economic growth of Some Arab countries such as Sudan, Syria, Tunisia and etc. What unite these countries are their extremely high unemployment rates – 13, 7%, 8, 4% and 13%, respectively. Despite the fact that there exists some correlation between high unemployment rates and low economic growth, it is not worth overestimating and making an emphasis on the relationship between them. This insignificant impact of unemployment rate on economic growth of some Arab countries can be explained in terms of their oil based economies.

Chang –shuai Li and Zi-juan Liu (2012), in turn, conducted the research on Chinese case and observed relationship between unemployment, inflation and GDP rates. According to their study, unemployment does affect economic growth of the state negatively, but there is a positive relationship between economic growth and inflation rate in the long run. What concerns the short run, then, they concluded that the state can face both high unemployment rate and positive economic development simultaneously in the short term. The same investigation that includes both unemployment and inflation rates was also carried out by Chinedu (2015), whose aim of study was Nigeria in 1985-2010 time period. He used regression analysis test as his research method and found out that only inflation rate had a negative impact on the real GDP rate. Impact that unemployment rate has upon economic growth turned out to be statistically insignificant. He explains this pattern in terms of ghost employees, who came to Nigeria to work and counted as employed, but do not bring any benefit to the country.

Kareem (2015) claims that low youth unemployment rate and economic welfare of the country are directly proportional to each other, leastways this applies for Nigerian case. He explores 1985-2012 years of Nigerian economy via using regression analysis and granger causality instruments, and comes to the conclusion that it is not employment rate that significantly affects GDP, but it is GDP rate that actually has influence upon unemployment rate. Furthermore, he makes an accent on other factors such as inflation, interest rate and foreign direct investments, which should be taken into account as well while investigating such kind of cause-effect problem. Gocer, I. & L.Erdal (2015) also conclude that it is economic growth that affects youth unemployment, claiming that the impact is not so significant. The authors suggest there are more important factors than economic growth which have a great influence upon rising unemployment rate. Gocer, I. & L.Erdal take 18 European countries in 2006-2012 time series as their scope of study and apply both panel unit root and co integration test to interpret their findings.

Sarah Ayres (2013) examines youth unemployment in the U.S., and comes to the conclusion that poor participation of 16-24 year-old people in the labor market is one of the main reasons that has been badly affecting the American economy and making the country lag behind some European countries such as Germany, Denmark and Australia. What is sad is that black teenagers in the U.S. are much more exposed to unemployment than their counterparts, 43.1% and 25.1%, respectively. If the unemployment period is lasting for more than six months, then, the situation is really problematic for American youth. Difference between their wages and their counterparts' wages will make up \$22,000 in the next decade. This will make them to lose their confidence and start to commit crimes. Apart from the sayings above, both the state and taxpayers are going to suffer due to the healthcare provision, social assistance and revenue loss that unemployment entails (Ayres, S. 2013).

Sohn Min Jung & et al. (2010) share Sarah Ayres's position on possible consequences of long-lasting unemployment that young people face after their graduation. They also claim that negative effect of such joblessness might be for a lifetime, since employers pay a strong attention to a long period of time spent without avail. Hence, they may be offered miserable wages amount of which is substantially less than those of their counterparts. According to the authors, there is approximately 15% difference between their monthly salaries, whereas net loss in their lifetime income makes up almost 23 trillion won in overall. Furthermore, the authors continuously mention the amount of loss in tax revenues that youth unemployment entails. The number is extremely high – it is 8 million won, which results from single case of youth unemployment and 1.5 trillion won from overall youth unemployment. The last number is obtained by multiplying 20.000 young unemployed in South Korea to that of 8 million won. In fact, this is really a huge number that has a significant influence on the state economy. By leaving youth unemployed, the state actually puts itself under risk – both production and income level will suffer as the result. Young people will not have a

chance to possess useful professional skills and consequently will fail to provide their children with adequate knowledge (Min-Jung, S. & et al. 2010).

Jaradat (2013) makes in-depth analysis of youth unemployment and economic growth relations. He also examines 2000-2010 years of Jordanian economy via applying regression analysis. According to his findings, in order to increase GDP by 1%, we need increase inflation rate by 0.906% and decrease unemployment rate by 0.697%. From this, we can understand that GDP and unemployment rates are negatively related to each other (while GDP rate has a positive relationship with inflation rate) and that Jordanian economy perfectly suits Okun's law.

For the East African Community (2014), youth unemployment is believed to be the first and foremost problem that must be solved as soon as possible. The leaders of African countries such as Kenya, Uganda, and Zambia emphasize the negative impacts of youth unemployment on GDP growth and believe that provision of intrinsic education will choose the problem. According to them, unemployed young people tend to form dangerous terror groups and promote religious extremism. Increased terrorism has adverse effect on GDP rate, due to the government costs spent on security provision.

Putun, M. & et al. (2017) also claim that unemployment among youth negatively influences an individual himself, the society he lives in and the whole economy. They believe that unemployed young people are comparatively more exposed to the state of continuous unemployment rather than their counterparts, because they lack experience and high reputation. The authors take EU countries as the basis of their study and find out that decrease in both GDP and productivity are the results of long-term youth unemployment rate (Putun, M. & et al. 2017).

Nadia Ilyas (2015) investigates youth unemployment in the city of Rawalpindi in Pakistan and argues that lack of trainings, internships is the main cause of the problem. Recent graduates fail to meet job requirements and become psychologically attacked by

their relatives. This leads to social isolation, high crime and suicide rates, which, in turn, worsens the socio-economic instability of the state.

Khan, Khattak and Hussain (2012) also examines the influence of unemployment on economic growth of the country - they took Pakistan as their case study and analyzed the data range from 1960 to 2005 years. They claim that in order to decrease unemployment rate by 1%, it is necessary to increase real GDP rate by 7.25%. On the contrary, in order to get 1% increase in real GDP rate, unemployment rate must be decreased by 0.63%. Generally speaking, they have also found that unemployment and real GDP rates are indirectly proportional to each other.

By carrying out literature review, general information about the relationship between unemployment rate and economic growth of the state was gained. Although some of the research scholars find economic growth of a country as independent variable or causal factor of youth unemployment, most of them believe that there is a negative relationship between these two terms and seems obvious that economic prosperity of the state requires effective control of its unemployment rate. Finally, by taking all the literature read into account, now we can draw some reasonable parallels and propose null hypothesis.

2.1. PROPOSED HYPOTHESIS

Hypothesis 1: Youth unemployment has a significant influence upon economic growth in Kazakhstan.

Hypothesis 2: Youth unemployment in rural sector has a significant influence upon youth unemployment in Kazakhstan.

Hypothesis 3: Youth unemployment in urban sector has a significant influence upon youth unemployment in Kazakhstan.

Hypothesis 4: Youth unemployment in rural sector has a significant influence upon economic growth in Kazakhstan.

Hypothesis 5: Youth unemployment in urban sector has significant influence upon economic growth in Kazakhstan.

Dependent variable (DV) in the first hypothesis is the economic growth of Kazakhstan, which is influenced by Independent variable (IV) such as youth unemployment rate. As it was discussed earlier, real GDP rate will be taken as the measure of economic growth. Last four hypotheses were added in order to learn about impacts of both urban and rural youth unemployment on economic growth separately. They will provide us with the overall picture of the situation, so that we know in which part of the country youth are more exposed to unemployment. Similarly, we will understand whether they are urban or rural unemployed youth who have more negative impact on the country's stability.

3. METHODOLOGY

3.1. RESEARCH DESIGN

Due to the fact that the research is aimed at examining the relationship between youth unemployment rate and economic growth of the state, the paper will have both qualitative and quantitative data to test the hypothesis. Moreover, results of the study will be based on both primary and secondary data to ensure objectivity and reliability of the research.

3.2. SAMPLING & SAMPLING TECHNIQUE

Field survey was used as the primary data collection tool. Out of 75 respondents who participated, only 66 correctly completed the survey by answering to all questions. It should be noted here that these 75 respondents were randomly selected within Job Fair organized in Almaty city by more than 30 companies. In fact, most of them were unemployed or dissatisfied with their jobs at that moment. What concerns the questions included in the survey, then, there were anonymous close-ended questions, which were aimed at learning perceptions and thoughts of those unemployed regarding their situation. If the first four questions were addressed to learn demographic background of the sample, the last question was designed to get their opinions about the interdependence of youth unemployment and economic growth. The 5-point Likert scale was used to respond the last question and Chi-square test was applied as the tool to interpret the results.

3.3. STATISTICAL DATA ANALYSIS

In order to reduce bias and be sure about validity of the research findings, the data will be taken from official sites which provide reliable statistical information, such as www.stat.gov.kz and <https://data.worldbank.org>. If the former one contains

information on economics only on national level, the latter one is considered as international source of financial data. The null hypothesis will be tested by using youth (at the age of 15-24 years) unemployment rate from 1991 till 2017 and real GDP rate in those years. As it was mentioned earlier, youth unemployment rate will be taken as independent variable and real GDP rate as dependent variable. Finally, in order to statistically test proposed hypothesis, both regression (precisely, OLS (ordinary least squares) test) and correlation tests will be applied.

Similarly, remained four additional hypotheses will be also tested via regression. Statistics on rural and urban youth unemployment will be taken from www.stat.gov.kz as well. However, this time it will cover the years between 2012 and 2016 and real GDP rate for that time period will be tested, respectively.

4. RESULTS

Table 1. Demography of the sample

Variables		Amount	Percentage
Gender	Male	25	37,88%
	Female	41	62,12%
	Total	66	100%
Age	under 16	5	7,58%
	17-29	21	31,82%
	30-39	17	25,76%
	40-49	18	27,27%
	50 +	5	7,58%
	Total	66	100%
Education	High School	2	3,03%
	Specialized secondary	12	18,18%
	Bachelor's Degree	38	57,58%
	Master's Degree	11	16,67%
	PHD	3	4,55%
	Total	66	100%
Marital status	Single	19	28,79%
	Married	47	71,21%
	Total	66	100%

Source: Field Survey, 2018

According to Table 1, almost two third of the respondents are women and more than two third of them are married. Moreover, more than half of the respondents have completed undergraduate degree, whereas very small number (only 2 respondents out of

66) has the highest academic degree. Similarly, people whose ages are under 16 and above 50 years together make up only one sixth proportion of the sampled population.

Table 2. Field survey results

	Amount	Percentage	Expected	Residual
Strongly Agree	7	10,61%	13,2	-6,2
Agree	13	19,70%	13,2	-0,2
Neutral	8	12,12%	13,2	-5,2
Disagree	32	48,48%	13,2	18,8
Strongly Disagree	6	9,09%	13,2	-7,2
Total	66	100%		

Source: Student's calculations

Table 2 shows results of null hypothesis (which states that youth unemployment has a significant influence upon economic growth in Kazakhstan) testing. According to the results, the number of respondents who strongly disagree or disagree with this statement exceeds those who agree and strongly agree. Almost half of the respondents disagree and claim that there is no significant impact that youth unemployment might have on economic development of the state.

Table 3. Chi-square test based on the survey results

	Actual	Expected
Sum of strongly agree & agree responses	20	29
Sum of strongly disagree & disagree responses	38	29

Source: Student's calculations

Due to the fact that chi-square test is believed to be convenient method to examine 5-Likert scale survey questions, exactly this test was applied to assess the survey results and Table 5 can serve as an evidence for this. In order to carry out this test, all the “neutral” responses were omitted from the calculation and p-value was carefully inspected. So, the p-value we got from Chi-square test (calculated in Excel program) turns out to be 0,018102456, which is definitely less than the alpha value which is equal to 0.05. Despite the fact that 0,018102456 is not significantly small number, it still means that our null hypothesis is going to be rejected. Hence, according to the chi-square test, youth unemployment doesn't significantly affect economic growth of the state.

Table 4. Youth unemployment and economic growth Regression Analysis Results, 1991-2017

Dependent Variable: RGDP

<i>Regression Analysis</i>	
Multiple R	0,358343052
R-squared	0,128409743
Adjusted R-squared	0,093546133
Standard Error	6,737437658
Observations	27

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	167,1918637	167,1919	3,683202694	0,066447576
Residual	25	1134,826655	45,39307		
Total	26	1302,018519			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistic</i>	<i>P-value</i>
Intercept	-1,509221311	2,641462573	-0,57136	0,572858183
Youth unemployment rate, %	0,547968824	0,285524277	1,919167	0,066447576

Source: Student's calculations

While carrying out regression analysis, the first thing that should be carefully examined is p-value or significance F value – which is exactly the same number. If the p-value is less than alpha value of 0.05, it means that independent variable has statistically significant impact on dependent variable. If the value is more than 0.05, however, then, it says that there is no significant relationship between two variables. In this case, what we have is 0.0664 for the p-value, which is definitely more than 0.05. Therefore, this makes us to conclude that youth unemployment rate does not significantly affect real GDP value of the state. The second value to be inspected is R-squared, which is equal to 12.84% and this means that only one seventh of the change in the real GDP value can be justified by youth unemployment and remained 87.16% are explained by other factors. Moreover, it should be noted that the coefficient acquired 0.55 is positively signed, meaning that both variables are directly proportional to each other.

Table 5. Correlation Analysis Results

	<i>Youth unemployment rate, %</i>	<i>Real GDP rate, %</i>
Youth unemployment rate, %		1
Real GDP rate, %	0,358343052	1

Source: Student's calculations

According to correlation analysis, $r = 0.36$, which means that there is a medium (neither large nor small) effect of youth unemployment on real GDP rate. This is because r-value is more than 0.1 but less than 0.5. The coefficient is positive, so it can be concluded that higher youth unemployment rate is correlated with higher (not with lower real GDP rate as it was assumed in our hypothesis) real GDP rate.

Both regression and correlation tests show that there is an insignificant impact that youth unemployment rate has on economic growth of the state, claiming that suggested hypothesis in the very beginning of the paper is going to be rejected, since

coefficients obtained in both tests are positively signed and p-values gained are interpreted as insignificant.

**Table 6. Rural youth unemployment and overall youth unemployment (2012-2016)
Regression Analysis Results**

Dependent Variable: Overall youth unemployment

<i>Regression Analysis</i>				
Multiple R		0,761275984		
R-squared		0,579541125		
Adjusted R-squared		0,439388166		
Standard Error		0,506161642		
Observations		5		

<i>ANOVA</i>				
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	1,059401176	1,059401176	4,135061655
Residual	3	0,768598824	0,256199608	
Total	4	1,828		

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistic</i>	<i>P-value</i>
Y-intercept	1,168934607	1,760905181	0,66382598	0,554260135
Rural youth, %	1,972814107	0,970164033	2,033485101	0,13489018

Source: Student's calculations

What concerns other additional hypotheses regarding rural and urban youth unemployment impacts separately, then, the second hypothesis is going to be also rejected. P-value we got from regression analysis is 0.134, which means that it is less than our alpha value 0.05. Therefore, we can conclude that rural unemployment does not significantly affect overall youth unemployment rate of the state.

**Table 7. Urban youth unemployment and overall youth unemployment (2012-2016)
Regression Analysis Results**

Dependent Variable: Overall youth unemployment

<i>Regression Analysis</i>				
Multiple R		0,952654761		
R-squared		0,907551093		
Adjusted R-squared		0,876734791		
Standard Error		0,237344055		
Observations		5		

ANOVA				
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	1,659003399	1,659003399	29,45035675
Residual	3	0,168996601	0,0563322	
Total	4	1,828		

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistic</i>	<i>P-value</i>
Y-intercept	1,021794377	0,689685242	1,481537251	0,235062615
Urban youth, %	1,265641897	0,233219878	5,426818289	0,012278344

Source: Student's calculations

The effect of the urban youth unemployment was also tested via regression. However, we got the p-value more than 0.05 (i.e., 0.012). Hence, it makes us conclude that urban youth unemployment has a significant impact on overall youth unemployment.

Table 8. Rural youth unemployment and economic growth (2012-2016) Regression Analysis Results

Dependent Variable: RGDP

<i>Regression Analysis</i>				
Multiple R		0,73363545		
R-squared		0,538220973		
Adjusted R-squared		0,384294631		
Standard Error		1,731257848		
Observations		5		

ANOVA				
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>

Regression	1	10,4802388	10,4802388	3,496613808
Residual	3	8,991761205	2,997253735	
Total	4	19,472		

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistic</i>	<i>P-value</i>
Y-intercept	-7,708993387	6,022939431	-1,27993872	0,290569011
Rural youth, %	6,204996326	3,318315645	1,869923476	0,15826549

Source: Student's calculations

The Table 8 shows the relationship between rural youth unemployment and economic growth. Here again, we take a look at p-value, which is definitely more than 0.05. To be exactly, we extracted the p-value of 0.158 and this made us to reject our fourth hypothesis. Simply speaking, rural youth unemployment does not significantly affect economic stability of the country.

Table 9. Urban youth unemployment and economic growth (2012-2016) Regression Analysis Results

Dependent Variable: RGDP

<i>Regression Analysis</i>	
Multiple R	0,6881714
R-squared	0,473579876
Adjusted R-squared	0,298106502
Standard Error	1,848463565
Observations	5

ANOVA				
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	1	9,221547351	9,221547351	2,698870284
Residual	3	10,25045265	3,41681755	
Total	4	19,472		

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t-statistic</i>	<i>P-value</i>
Y-intercept	-5,259052989	5,371350213	-0,979093297	0,399737748
Urban youth, %	2,983933261	1,816343984	1,642823875	0,198962209

Source: Student's calculations

Finally, the last regression shows us the relationship between urban youth unemployment and economic development of Kazakhstan. According to the results, p-

value in this case is 0,199 and this also says that the correlation between these two variables is not significant as we thought it would be.

5. DISCUSSION AND CONCLUSION

In the very beginning of the research, it was clearly stated that the paper was aimed at examining the relationship between youth unemployment and economic development of the country. After survey and statistical tests conducted, now we can decidedly say that youth unemployment doesn't have a significant impact on economic development of the state. According to all Chi-square and regression & correlation tests, the null hypothesis is not going to be supported. It means that there are also some important factors apart from unemployment such as advanced technology, infrastructure, healthcare and education systems that should be controlled before youth unemployment. Furthermore, it is worth mentioning that Kazakhstani economy is highly dependent on oil and gas sector and this may be the main reason of our rejected hypothesis. Presence of natural resources such as oil has been positively affecting the country for many years by creating long-term economical stability. Kazakhstan takes 13th place from oil reserves and 26th place from oil production in the world. However, it takes 2nd place after Russia among CIS (Commonwealth of the Independent States) countries and is known as one of the crude oil exports in the global market (Ongdash, A. 2011).

What concerns other findings, then, we can see from the tables above that youth unemployment in urban sector has a significant impact on youth unemployment, whereas there hasn't been found any significant relationship between youth unemployment in rural sector and overall youth unemployment. Still, it should be mentioned that there were not found any significant correlation between economic stability of the state and both sectors separately. In other words, only one hypothesis is going to be supported and it states that youth unemployment in urban sector has a significant impact on youth unemployment. This can be explained in terms of agricultural sector in which more and more young people are involved and feed themselves. In addition, there are many farms and factories in villages that hire low-skilled youth for miserable wages. For them, there is no need to employ someone who is

experienced and well-educated, since they do not offer such important and difficult jobs for them. Moreover, it is hard enough to find such young professionals in rural areas and even if they live there, they won't agree to work for little salaries.

Even though other four hypotheses claiming significance of youth unemployment were rejected, Kazakhstani government must not underestimate influence of youth unemployment in modern society. Youth unemployment remains as both socio-economic and political problem and policymakers have to solve this issue by undertaking worthwhile steps as soon as possible. For instance, OECD (Organization for Economic Cooperation and Development) suggests some recommendations to deal with youth unemployment. As it was discussed earlier, most of Kazakhstani young people are hired for low-paid jobs, so that this situation makes them unmotivated and majority of them choose being unemployed rather than working for miserable wages. Hence, policymakers should make some adjustments in order to attract more and more young people to such kind of jobs. First, amount of minimum salary offered to youth must be properly calculated by taking all their possible expenses into account. In other words, it definitely must be more than living wage and there should always remain some profit from their monthly earnings. Second, amount of this minimum salary should vary from one region to another. This simply means that living standards of the North Kazakhstan, for example, cost much higher than that of the South Kazakhstan. Likewise, minimum salaries in villages and cities must not coincide with each other, since living expenses in countryside are much lower than in a town. Moreover, legislations protecting employees' rights need a strict control by social organizations. They must ensure that there is an official contract between employer and young employee, even though it is a temporary job in a construction field. Furthermore, these organizations must be eager and show willingness to help those youth in case they lose their current jobs. Apart from all of the recommendations mentioned above, Kazakhstani government should provide youth with adequate education and reliable information before they graduate. Adequate

education means that youth have to be aware of possible obstacles they might meet in their future career and be ready to solve those problems. Theoretical knowledge gained at university should be justified by practice. Inequality between city and village, private and public education systems should be liquidated and students must have access to internet resources to strengthen their knowledge. Reliable information means that the government agencies must regularly conduct meetings where they talk about the jobs in demand, so that future graduates make rational decisions regarding their specialties (OECD, 2017).

In conclusion, we can say that any significant relationship between youth unemployment and economic growth of Kazakhstan was not found. This can be explained in terms of abundance of natural resources such as oil and gas that the country possesses. However, this does not mean that there is no need to take control of rising unemployment and let the flow of circumstances prevail over human beings. Among all the possible solutions highlighted above, investment in human capital tends to remain as the least risky and safe way to deal with the problem.

6. SHORTCOMINGS & LIMITATIONS

Undoubtedly, as many academic works, this research paper has certain limitations and shortcomings. Lack of sufficient time series data, precisely, number of observations is the first and foremost limitation of the study, since a lot of researchers include hundreds observations to examine the data. In our case, only 27 observations from 1991-2017 were available to make a data analysis. However, it should be emphasized here that Kazakhstan gained its independence in 1991 and this fully justifies the time series used. The size of population sampled in the field survey can serve as the second limitation of the work. Again, there also might be more than hundred respondents to get more or less reliable responses. However, due to the fact that the thesis was not solely based on the survey results, it made us to think that the sample size was enough. Finally, there is no guarantee that all the respondents shared with their true feelings and perceptions. They might have been affected by time shortage or by their unwillingness to think thoroughly about the last question. Similarly, it should be noted that survey questions usually lack objectivity and it is always better to trust in statistical data. Nevertheless, this doesn't apply to our case, because the statistics also claims that there was no significant correlation between unemployment among youth and economic growth.

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APPENDIX

Survey Questions

- 1) Are you
 - a. Male
 - b. Female

- 2) Your age is
 - a. Under 16
 - b. 17-29 years
 - c. 30-39 years
 - d. 40-49 years
 - e. 50 and above

- 3) Your educational background
 - a. High School
 - b. Specialized Secondary
 - c. Bachelor Degree
 - d. Master Degree
 - e. PhD

- 4) Your marital status
 - a. Married
 - b. Single

- 5) Youth unemployment in Kazakhstan significantly affects economic growth of the state. Do you agree with this statement?
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree