

## Article

# Problems of Generating Productive Employment in the Youth Labor Market as a Dominant Risk Reduction Factor for the NEET Youth Segment in Kazakhstan

Zhibek Khussainova <sup>1</sup>, Maiya Gazizova <sup>1,\*</sup>, Gulzhan Abauova <sup>2</sup>, Zhanibek Zhartay <sup>1</sup> and Gulnur Raikhanova <sup>1</sup>

<sup>1</sup> Department of Economics and International Business, Karaganda Buketov University, University Street, 28, Karaganda 100024, Kazakhstan; khussainova\_zhibek@buketov.edu.kz (Z.K.); zhartai\_zhanibek@buketov.edu.kz (Z.Z.); raikhanova\_gulnur@buketov.edu.kz (G.R.)

<sup>2</sup> Department of Economics, Esil University, Zhubanov Street, 7, Astana 010005, Kazakhstan; abauova\_g@mail.ru

\* Correspondence: gazizova\_maiya\_1@buketov.edu.kz; Tel.: +7-7015379063

**Abstract:** NEET (not in employment, education, or training) unemployment is one of the newer, most relevant, and least studied modern features of the youth labor market, making it an urgent problem to be solved. The purpose of this study is to identify the barriers to creating productive employment in the youth labor market, with a view to reducing the NEET youth segment in Kazakhstan. Our aim is to identify the impact of employment and unemployment parameters in the youth labor market in order to reduce the NEET youth segment in Kazakhstan. The article analyzes the indicators of youth participation in the labor force, defines the features of the youth labor market based on segmentation by age, and identifies the dynamics of youth employment, including the type of economic activity. Particular attention is paid to the NEET youth category in Kazakhstan, providing a comprehensive analysis of the dynamics of the youth labor market for the period 2001–2021. The portrait of Kazakhstani youth in the category of NEET unemployment was determined based on an analysis of labor market indicators. Our study identifies the barriers to generating productive youth employment, allowing policymakers to reduce the NEET youth segment in Kazakhstan.

**Keywords:** youth; youth labor market; NEET; NEET unemployment; labor force; labor market indicators; unemployment rates; NEET youth segment risks; productive employment



**Citation:** Khussainova, Zhibek, Maiya Gazizova, Gulzhan Abauova, Zhanibek Zhartay, and Gulnur Raikhanova. 2023. Problems of Generating Productive Employment in the Youth Labor Market as a Dominant Risk Reduction Factor for the NEET Youth Segment in Kazakhstan. *Economies* 11: 116. <https://doi.org/10.3390/economies11040116>

Academic Editor: Ralf Fendel

Received: 5 February 2023

Revised: 8 March 2023

Accepted: 15 March 2023

Published: 12 April 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Today, young people are the most active component of civil society and the main object of the innovation process (Avdeeva et al. 2021). It is safe to say that young people are the future pillars of the state, increasing the development and competitiveness of the country, with the growth of public welfare depending on their future participation. At the same time, youth unemployment is one of the most urgent problems of modern times.

Today, NEET youth are of particular concern; that is, young people who are not employed or engaged in education because they are vulnerable to marginalization, social exclusion, poverty, etc. (Rudneva and Urpekova 2020). The NEET status of an adolescent affects their whole life, including their social and economic well-being (Bulanova and Artamonova 2022).

Analytical data provided by the International Labor Organization (ILO) in the report “Global Employment Trends for Youth 2020: Technology and the future of jobs” show that, since the publication of a previous similar study in 2017 (Global Employment Trends for Youth 2017: Paths to a Better Working Future 2017), there has been a global trend towards an increasing number of NEET youth (not in employment, education, or training), which is associated with two types of status—NEET unemployed (young people who are not working) and NEET inactive (young people who are not learning or acquiring skills) (Global

[Employment Trends for Youth 2020: Technology and the Future of Jobs 2020](#)). According to the ILO Report of 2017, the global NEET youth population in 2016 was 259 million, and data from the ILO Report 2020 showed that 267 million of the world's 1.3 billion young people had NEET status in 2019, with two thirds (or 181 million) being young women. A similar upward trend can be seen in the percentage of NEET youth as a proportion of the total youth population: in 2015, the percentage was 21.7% and, in 2020, it was 22.4% ([Global Employment Trends for Youth 2017: Paths to a Better Working Future 2017](#)). Thus, in addition to the features of today's market leading to objective unemployment due to the shift in employment paradigms (i.e., the growth of frictional unemployment), the observed alarming growth trends of the NEET youth segment indicate that the goals set by the global community to reduce unemployment rates among young people and provide them with productive employment remain unachieved at the present time.

The ILO report also shows that young wage earners are more likely than their older colleagues to be structurally unemployed due to production automation. At the same time, young people with higher education, who are less exposed to this risk, face another major employment challenge: the supply of young people with higher education and their share of the workforce is growing faster than the demand for workers with higher education, which inevitably leads to a reduction in their wages. In other words, due to the lack of qualified jobs for young people with higher education, their potential is not being used productively, wasting the resources invested in their education.

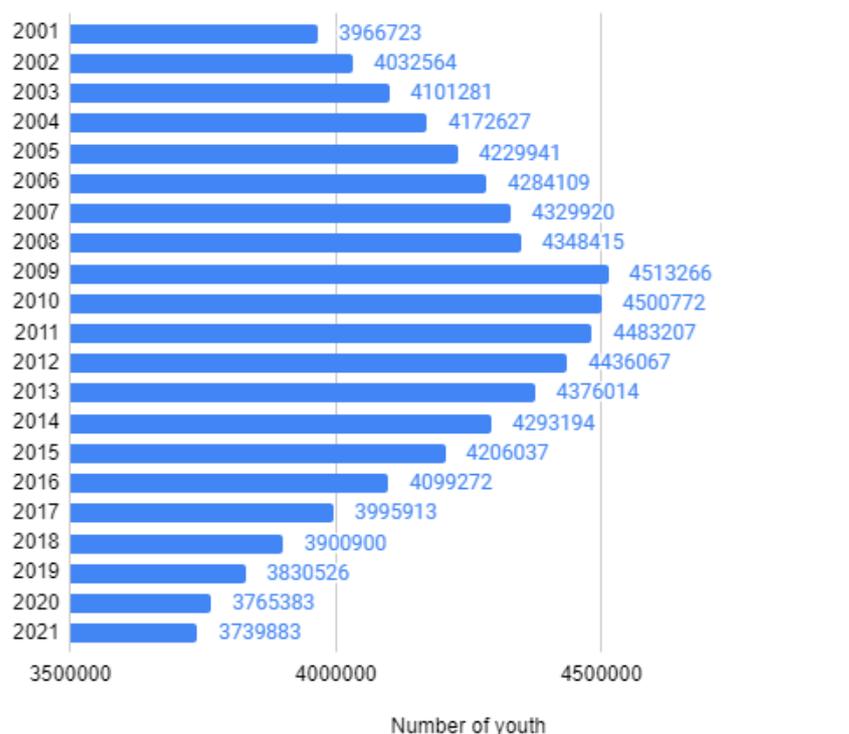
Thus, youth and adult unemployment rates have remained practically unchanged over the last decade, which once again shows how deeply entrenched extreme inequalities for youth have become in the labor market. However, the real scale of youth employment problems is much larger, with young people struggling to find high-quality jobs. Young people face rights violations and are forced to accept part-time work and employment in the informal sector. Young people's transitions to economic independence are becoming increasingly difficult and protracted.

According to the ILO report, for developing and emerging economies such as Kazakhstan, inefficient and unproductive youth employment continues to be a problem of low income and poverty connected to informal employment, where young people can find low-quality jobs fairly easily.

The long-term "scarring" effects of youth unemployment have a negative impact both on the trajectories and rates of national economic development and on the life trends of young people themselves, manifesting through reduced potential lifetime income, and an increased risk of precarious employment and job loss, as well as social pathologies such as poor health and psycho-emotional states, with an inclination towards asocial behavior, reduced fertility, etc.

The Law of the Republic of Kazakhstan dated 9 February 2015, No. 285-V ZRK "On State Youth Policy", defines those aged from 14 to 29 years as young people ([Law of the Republic of Kazakhstan "On State Youth Policy" 2015](#)).

Recently, there has been a downward trend in young people in Kazakhstan due to demographic shifts. Thus, in the last twenty years, the highest level of young people was observed in 2009, with people who were born as early as the 1980s. This period had the highest birth rates of the so-called "baby boom". In subsequent periods, the birth rate declined, resulting in a decreasing number of young people. Thus, as a consequence of generational substitution, the number of young people in Kazakhstan has steadily declined over the period under review (Figure 1).



**Figure 1.** Number of young people in Kazakhstan in the period 2001–2021. Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz), (accessed on 12 October 2022).

In the coming years, another change in the demographic structure is predicted (Kalabina et al. 2021), and the decline in the share of young people will be replaced by a positive trend: the small group of young people who were born between the mid-1990s and early 2000s will gradually transition to another age cohort, to be replaced by those born in the middle and second half of the 2000s, when the birth rate was relatively high compared with the previous generation. In the context of such demographic transformations, it is necessary for the state to prepare for the integration of many people from the younger generation, not only into the educational process but also into the labor market (National Report: “Youth of Kazakhstan—2021: 30 Years of Independence” 2021).

Every country has unique contexts that contribute to developing NEET youth, including challenges to the education system and labor market and general attitudes towards socialization. Therefore, there is a need to systematize the objective and subjective factors causing the increase in NEET youth in a particular country if we are to address this problem. However, despite the urgent need to study NEET youth and develop policy mechanisms to minimize this demographic, such research is currently rare, both in Kazakhstan and abroad. Therefore, based on Kazakhstan’s local realities, it is important to investigate the socio-economic factors that contribute to the growth of the NEET youth segment and to assess the consequences and risks of long-term NEET status, identifying areas for the formation of productive employment in the youth labor market, which is the dominant macroeconomic factor that might decrease NEET youth levels. Minimizing this category is not only a macroeconomic problem but also a problem of transforming the entire fabric of social development, from the humanization and professional diversification of education and changes in the quality of human capital, to resolving problems of social equalization amidst the growing movement towards an inclusive economy.

## 2. Literature Review

The scientific literature notes that the transition from school to work constitutes an urgent problem. Researchers use different indicators to analyze this situation—for example, as above, the rate of youth unemployment. A negative aspect of modern unemployment

is the social isolation (in education and employment) of youth (Liszka and Walawender 2018). To overcome youth unemployment, international statistics use a special category of youth who are “neither in employment nor in education and training” (NEET). NEET is a common indicator in comparative studies of youth inactivity during the school-to-work transition because it covers the many varied employment pathways available in different countries (Berlin et al. 2020). Unlike the unemployment rate, defined as the share of the unemployed among those actively engaged in the labor market (working or looking for work), the NEET rate measures the share of NEET people among the entire population within the same age group (Contini et al. 2019).

The indicator reflects the share of the population that does not study and does not work, which is estimated in relation to the entire population aged 15–24 years, making it more informative in comparison with the above-mentioned population statistics (Zudina 2022). Its use enables an analysis of the difficulties in interactions between the educational sphere and the labor market (Education Indicators in Focus. How Difficult Is It to Move from School to Work? 2013); the young people in this group can be described as vulnerable, prone to involvement in informal employment (Education at a Glance 2013), and excluded from the labor market and from society as a whole (NEETs. Young People not in Employment, Education or Training 2012).

The last three years have seen a high level of research activity on youth socialization and employment. Specifically, this research includes works on the labor market and employment (Magopets and Korneeva 2021; Aloshyna and Kozenkov 2022; Katamadze et al. 2023; Paresashvili et al. 2021), human capital development (Zaderei 2020; Chaudhary 2021; Mushkudiani et al. 2020; Lipovka et al. 2021; Badjanova et al. 2020; Petrova et al. 2019; Alwaely et al. 2021; Kvieskienė et al. 2021), and the problems of youth inclusion in the education system (Spivak et al. 2021; Chernukha et al. 2021; Goletiani et al. 2021; Sushchenko et al. 2021; Zagorodnya et al. 2020; Petrova et al. 2020; Linde and Mariana 2018).

NEET is a problematic concept in terms of its measurement, construction, and application in policy (Ralston et al. 2021). The number of NEET youth is a key indicator of the state of youth labor markets and opportunities for youth in general. However, this group is diverse because people can be NEET for many reasons, and understanding the importance of these reasons is crucial for developing targeted policy interventions (Holmes et al. 2021). At the beginning of the twenty-first century, the scale of the NEET problem has dramatically increased, becoming a long-term social problem, with future young people more likely to remain unemployed and economically inactive compared with those that previously received vocational education (Batrakova 2021).

There are different NEET youth classifications depending on the reasons young people fall into this group, determining the likely duration of their stay in this state, as well as their level of need for state support (Mussida and Sciulli 2023). There are two categories of young people included in NEET: the unemployed with no education and training, and the inactive with no education and training (both defined according to the ILO methodology) (Elder 2015).

There are several key factors behind the NEET phenomenon that cause socio-economic disparities among the youth population, resulting in specific groups being left behind. These include gender discrimination, low wages, precarious jobs, vulnerability to the effects of the financial crisis, persistent unemployment, ineffective education-to-work transitions, and poor on-the-job training. In addition, the distributional effects of skill-insensitive technological change, the reduced effectiveness of tax and benefit systems to redistribute market income, non-standard forms of employment, and the lack of social protections in between jobs all have the potential to increase NEET rates (Maynou Pujolras et al. 2022). The motivational factor is also a determinant of job search intensity, which is a highly important variable in terms escaping NEET status (Ripamonti and Barberis 2021).

Addabbo et al. identified gender as an important element in understanding the NEET problem, with women having the highest risk of becoming NEET. In turn, Pesquera and Strand confirmed this situation and added a factor for age groups to illustrate the increased

risk that occurs when the two factors combine. The age group approach was also used by Caroleo et al. when demonstrating the relevance of dividing NEET youth into two age cohorts, showing that the youngest cohort (19–24) is in transition to the so-called adult stage (Alonso et al. 2022). The authors studied the effects of COVID-19 on NEET identity and found that this process had a small effect, which is also temporary in nature, and no corresponding effects on NEET identity generation processes were found. However, O.V. Zabelina and others argued that the global crisis complicates the labor market for young people, because they are more likely to be in temporary and part-time employment, meaning they face a higher risk of losing their jobs and earnings. Therefore, the COVID-19 pandemic has “pushed” many young people aged 18–29 into unemployment, with younger workers (compared with those aged 30–34) more likely to stop working (Zabelina et al. 2021).

To find a solution and return the younger generation to education and the labor market, factors such as a lack of personal abilities, coping skills, and low motivation must also be addressed, because the NEET youth problem not only entails certain losses for the individual but also for society and the economy as a whole (Kõiv et al. 2022).

The problems of self-determination (Diachok et al. 2020), low academic achievement, parental unemployment, lower socio-economic status, low self-confidence, poor mental health, and young parenthood are risk factors associated with NEET status (Henderson et al. 2017).

The main negative consequences of NEET status identified by researchers include reduced prospects of permanent employment (Crawford et al. 2011; Cockx and Picchio 2013), increased future risks of low-skilled and low-paid employment (Gregg and Tominey 2005; Wadsworth 2013), and poverty (Coles et al. 2002).

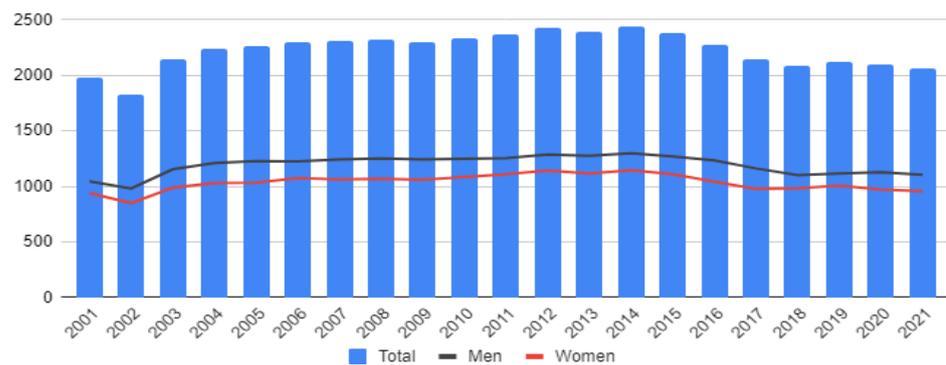
Thus, based on the above review of the scientific literature, we concluded that the number of works in the domestic field of science devoted to NEET youth research is limited, reducing the effectiveness of numerous state initiatives in the field of youth employment. Therefore, given the realities of Kazakhstan, it is important to investigate the determinants of NEET youth in the Republic of Kazakhstan on the basis of labor market indicators for young people.

### 3. Materials and Methods

The socio-economic space of NEET youth is associated with two types of statuses—NEET unemployed (unemployed youth whose population increases dramatically during crises and negative economic shocks) and NEET inactive (inactive youth who are outside the education system). The status of NEET unemployed refers to a transition from being unemployed to working, and the NEET inactive status involves a transition from not learning to studying. In this regard, this paper offers an analysis of the economic activity of young people, in particular their participation in the labor force. Focusing on youth employment, the research used statistical data provided by the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, as well as OECD Statistics.

### 4. Results

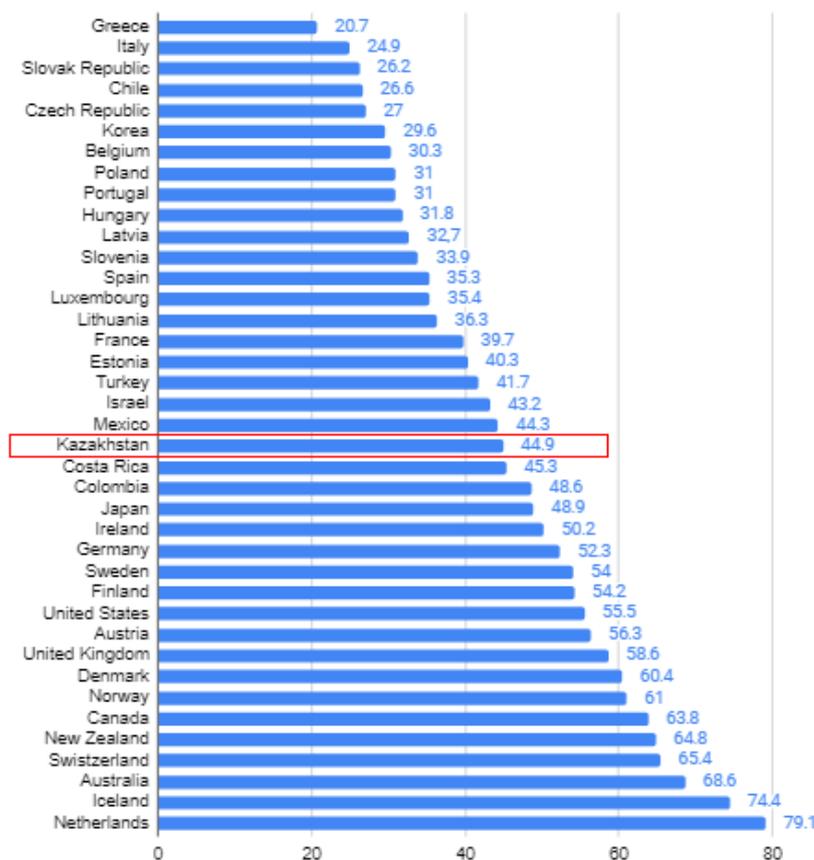
According to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, young people represent about a quarter of the country's economically active population. It should be noted that there has been a steady 15% decline in the number of young people in the total economically active population since 2012 (Figure 2).



**Figure 2.** Indicators of youth (15–28 years old) participation in the labor force by gender (per thousand people). Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

Youth participation in the labor market is constrained by the growing demand for higher education and the increasing duration of education, in addition to the need to combine training and work, including part-time and distant work (Alshanskaya 2020). On the other hand, it is necessary to draw attention to the gender gap in the participation of young people in the labor market. Thus, according to the data presented in Figure 2, the economic activity of men is significantly higher than that of women.

International comparisons of the participation of youth aged 15–24 show similar levels to Kazakhstan (44.9%), with the average among OECD countries being 45.4% (Figure 3).



**Figure 3.** Youth (15–24 years old) participation rates in the labor force by country (as a percentage of the total labor force of the relevant age group). Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz), <https://stats.oecd.org/> (accessed on 12 October 2022).

Youth participation rates in Kazakhstan are far inferior to those in Iceland (74.4%) and the Netherlands (79.1%), which attribute high value to the economic activity of young people. However, Kazakhstan's youth labor force participation rate exceeds that of Turkey (41.7%), France (39.7%), Korea (29.6%), Spain (35.3%), Italy (24.9%), etc.

The most important stage in the lives of young people is their entry into the labor market. The integration of young people into society directly depends on their ability to realize their knowledge, skills, and competencies in the labor market.

Table 1 presents data on gross domestic product and indicators of the economically active population, including those aged 15–28, as well as the values of total employment and youth employment over a twenty-year period.

**Table 1.** Dynamics of GDP and labor market indicators for the period 2001–2021.

	Gross Domestic Product, KZT Million	Economically Active Population, Thousand People	Economically Active Population Aged 15–28, Thousand People	Employed Population, Thousand People	Youth Employment, Thousand People
2001	3,250,593.3	7479.1	2365.4	6698.8	1656.6
2002	3,776,277.3	7399.7	2429.6	6708.9	1563.2
2003	4,611,975.3	7657.3	2392.3	6985.2	1872.8
2004	5,870,134.3	7840.6	2445.0	7181.8	1960.9
2005	7,590,593.5	7901.7	2379.9	7261.0	1995.2
2006	10,213,731.2	8028.9	2275.5	7403.5	2038.4
2007	12,849,794.0	8228.3	2141.0	7631.1	2082.0
2008	16,052,919.2	8415.0	2087.6	7857.2	2127.0
2009	17,007,647.0	8457.9	2124.9	7903.4	2107.0
2010	21,815,517.0	8610.7	2099.8	8114.2	2180.4
2011	28,243,052.7	8774.6	2365.4	8301.6	2222.1
2012	31,015,186.6	8981.9	2429.6	8507.1	2298.9
2013	35,999,025.1	9041.3	2392.3	8570.6	2259.6
2014	39,675,832.9	8962.0	2445.0	8510.1	2341.1
2015	40,884,133.6	8887.6	2379.9	8433.3	2275.3
2016	46,971,150.0	8998.8	2275.5	8553.4	2182.7
2017	54,378,857.8	9027.4	2141.0	8585.2	2057.3
2018	61,819,536.4	9138.6	2087.6	8695.0	2007.9
2019	69,532,626.5	9221.5	2124.9	8780.8	2045.9
2020	70,649,033.2	9180.8	2099.8	8732.0	2019.4
2021	83,951,587.9	9256.8	2063.4	8807.1	1985.8

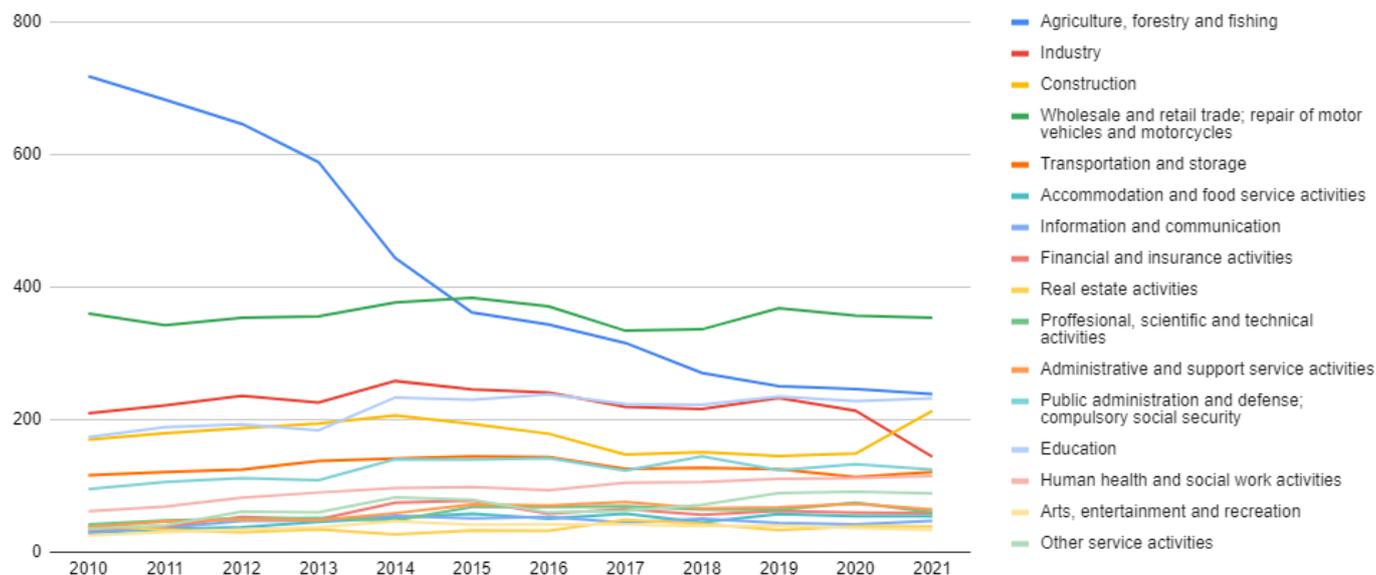
Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

Between 2001 and 2021, general population employment shows a positive trend in economic growth, while youth employment declines after 2019.

Most young people in Kazakhstan are employed in agriculture, forestry and fishing, wholesale and retail trade, education, and industry. At the same time, there has been a decrease in youth employment in almost all economic activities, especially in construction (2019—144.8 thousand people, 2020—148.5 thousand people, 2021—149.6 thousand people), in agriculture, forestry, and fisheries (2019—250.2 thousand people, 2020—246.1 thousand people, 2021—246.1 thousand people), and industry (2019—232.5 thousand people, 2020—213.3 thousand people, 2021—226.6 thousand people). Coronavirus has had an effect on labor market structures; however, the education and health sectors (including pharma-

ceuticals) remained the most stable employment sectors before and during the pandemic (National Report: “Youth of Kazakhstan—2021: 30 Years of Independence” 2021).

According to sociological research conducted by the Youth Research Center, the most attractive spheres for the younger generation are entrepreneurship, education, trade, health care, and public service. Moreover, some 70% of respondents preferred permanent jobs, while 9.2% of the young people surveyed chose freelance work and 9% chose telecommuting. Despite the popularity of certain professions due to technological trends, the structure of economic behavior among young people in Kazakhstan has not changed dramatically (Figure 4).

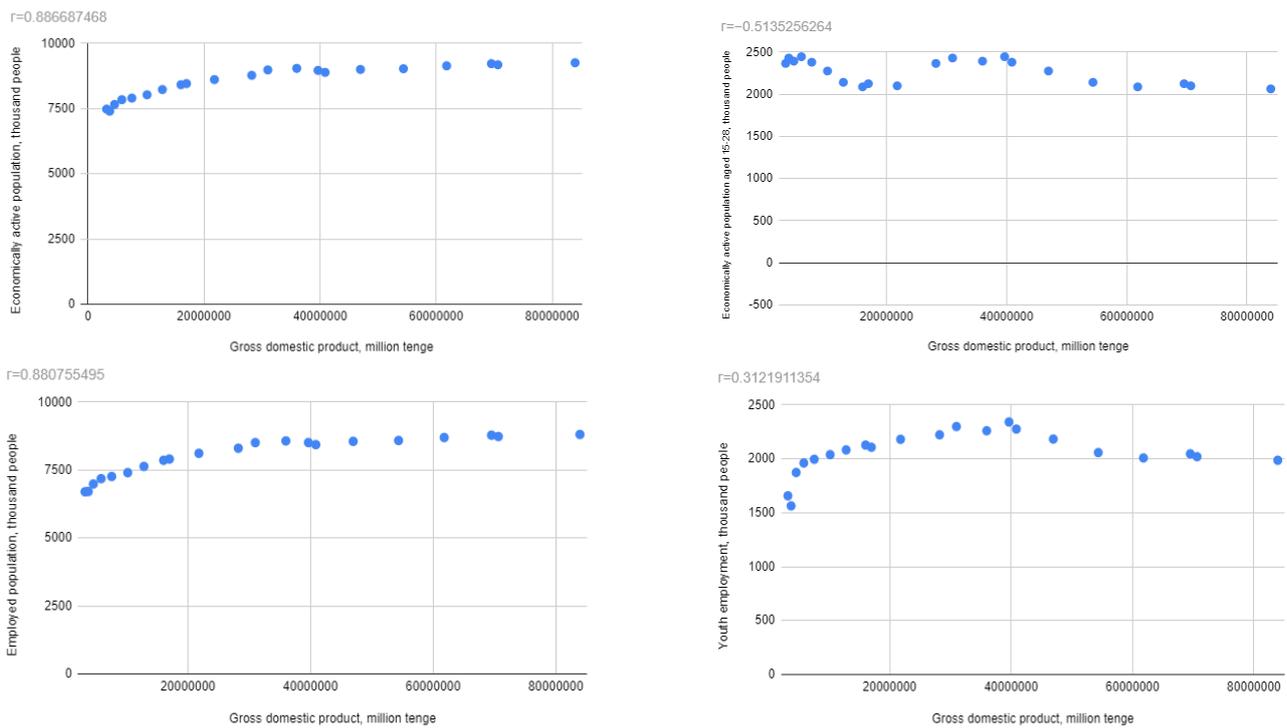


**Figure 4.** Employed youth by type of economic activity for the period 2010–2021. Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

Considering the status of youth employment, it is necessary to emphasize the significant increase in the share of wage employment, as this indicator was at the level of 828.4 thousand people in 2001; then, in 2021, it was 1565.1 thousand people, i.e., it nearly doubled. The opposite trend is seen in self-employment among young people; from 2001 to 2021 the value decreased by half, amounting to 828.2 thousand people and 420.7 thousand people, respectively. An overall reduction in the number of self-employed young people may be related to the effectiveness of government programs in the areas of employment, youth entrepreneurship (Zhartay et al. 2017), and innovation system development (Gordeeva et al. 2017; Moiseev et al. 2023), as well as the wider scale of innovation implementation (Mikhaylov et al. 2023; Varyash et al. 2020).

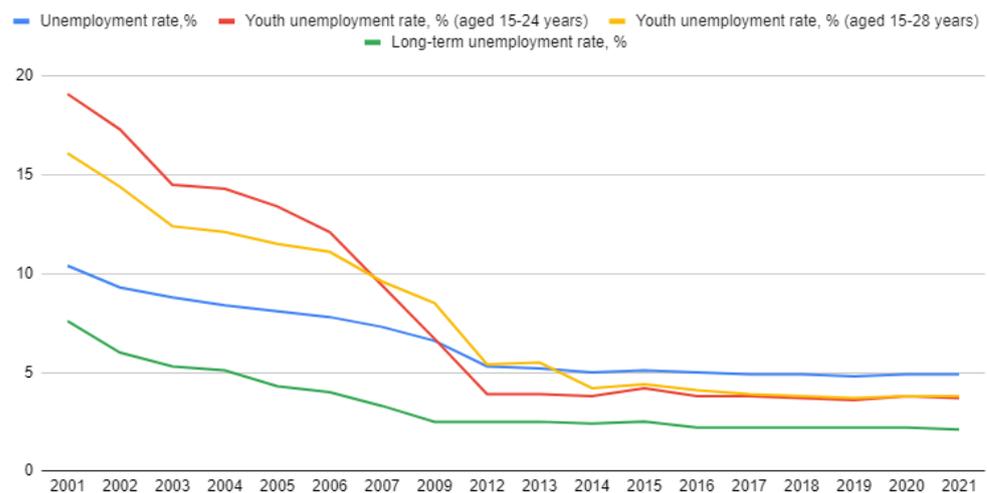
Correlation analysis was conducted and Spearman’s coefficient was calculated to identify the relationship between the dynamics of GDP and labor market indicators, including the values of the youth labor market (Figure 5).

According to the correlation analysis between GDP dynamics and labor market indicators, including the values of the youth labor market, there is a positive correlation variable. It is necessary to highlight the high Spearman rank correlation coefficient of labor market indicators for the total population, rather than just the indicators of young people.



**Figure 5.** Correlation analysis dynamics of GDP and labor market indicators, including the values of the youth labor market. Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

As trends in recent years show, youth unemployment has fallen much faster compared with the adult population. In 2021, youth unemployment was about 1.3 times lower than the state average. There are gaps in the gendered aspect of youth unemployment, with higher rates for women than for men; however, in recent years, the gap has narrowed more rapidly among young people compared with the rest of the country (Figure 6).

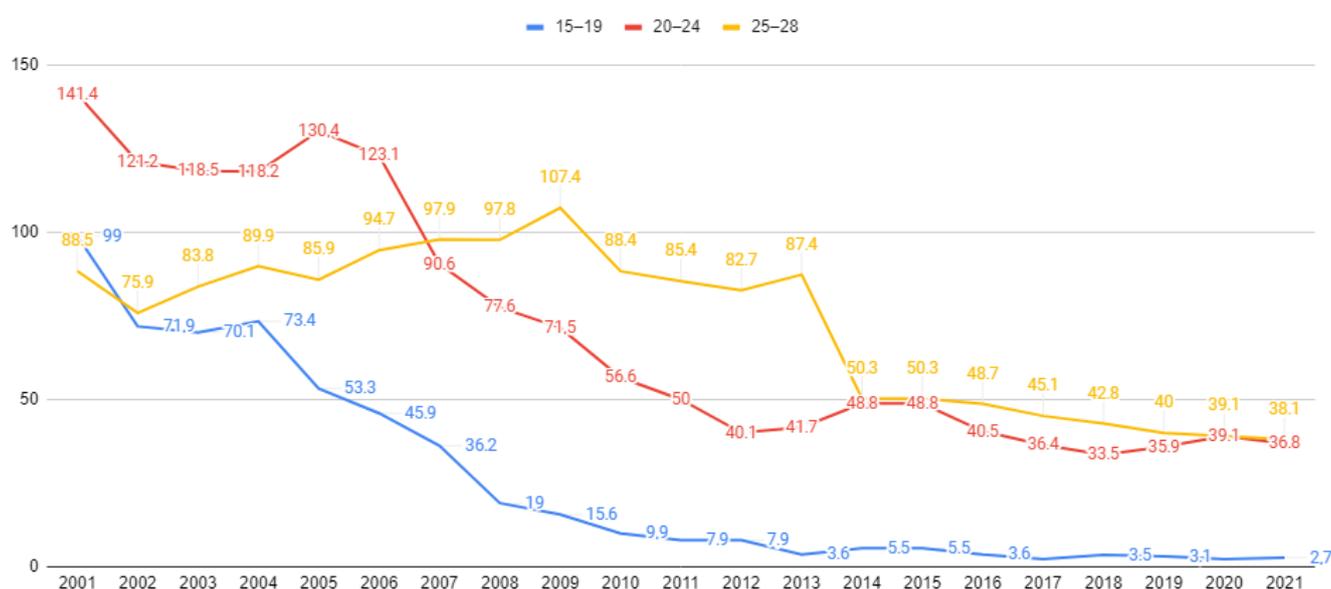


**Figure 6.** Dynamics of unemployment rates for the period 2001–2021. Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

According to international standards of labor statistics, the age limit for young people is 16–29 years old. This range is quite wide, which allows us to highlight the peculiarities of the youth labor market as part of the national labor market: namely, the fact that, due to age, educational, and professional heterogeneity, this market consists of three segments:

1. A youth labor market from ages 16 to 18. This sub-segment is characterized by the lowest level of competitiveness among young people in the labor market, which is associated with a lack of professional competencies, work experience, practical skills, and orientation to professional activities;
2. A youth labor market from ages 19 to 24. This sub-segment is characterized by the presence of professional education with insufficiently long and varied work experience;
3. A youth labor market from ages 25 to 29. The competitiveness of the third youth segment in the labor market is the highest, as these young people have not only the basic professional knowledge obtained in the educational institution but also, to some extent, experience in practical activities (Vedekhin 2022).

Equally important are the differences between the age segments of young people, which affect employment and unemployment, determining the specifics of the employment and unemployment characteristics of young people from different groups (Figure 7).



**Figure 7.** Unemployed population by age segments of youth per thousand people. Source: compiled by authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

The percentage of unemployed youth has decreased compared with previous years. This trend is clearly demonstrated in the age segment 20–24, i.e., for the 20-year period, the indicator decreased by more than 3 times. Compared with other age segments of young people, the lowest unemployment rates are shown by the 15–19-year-old group in all years under review. In addition, in recent years, the unemployment rates of the 20–24 and 25–29 age groups show an identical level. The International Labor Organization study notes that, during the COVID-19 pandemic, 1 in 6 young people (17%) who worked before the outbreak stopped working altogether, especially young workers between the ages of 18 and 24 (International Labour Organization 2020). The research analyzed youth unemployment according to their age segment and level of education (Table 2).

Thus, according to the table and the figure, we can create a portrait of unemployed youth in Kazakhstan who were registered with the state employment service. The data show that most unemployed youth are aged 24–29 years with higher, postgraduate, and secondary vocational (special) education. Graduates of higher education institutions are more likely to be unemployed than graduates of secondary vocational education. This situation is caused by the demand for labor specialists of working professions, as well as the requirements that workers with higher education may have for their future place of work (remuneration, conditions, career development, etc.) while not meeting all of the employer's preferences regarding the level of their professional competencies and work

experience (Vyazova 2021). It should be noted that, in recent years, a lack of work after graduation, propensities to resignation, and not being able to find work due to family (personal) circumstances are causes of youth unemployment.

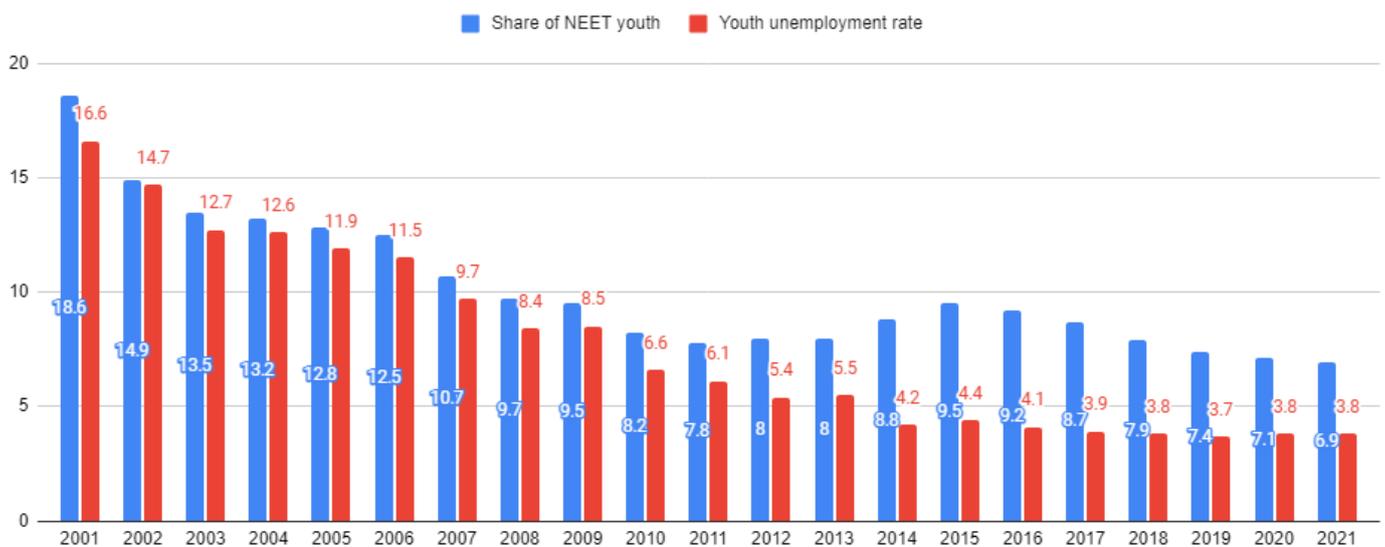
**Table 2.** Unemployed youth by age segment and level of education per thousand people.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average Value for the Period
Higher and postgraduate education											
16–19	-	-	-	-	-	-	-	-	-	-	-
20–24	11.9	10.1	9.3	13.6	15.2	11.8	9.4	11.1	11.5	14.1	11.8
25–29	28.7	26.2	28.4	29.9	27.7	25.5	24.7	26.3	28.9	26.8	27.3
Unfinished higher education											
16–19	0.3	1.8	0.6	0.7	1.2	0.3	0.3	0.3	0.2	-	0.6
20–24	3.5	7.4	5.5	5.3	4.7	2.7	2.9	2.4	2.5	-	4.1
25–29	8.9	6.9	10.2	4.3	3.7	1.5	2.2	2.0	1.0	-	4.5
Secondary vocational (special) education											
16–19	1.6	1.2	0.5	1.5	1.2	1.4	0.6	1.0	1.4	0.9	1.1
20–24	15.2	11.1	12.4	14.3	17.2	17.6	15.6	12.9	15.1	15.1	14.7
25–29	19.3	21.8	27.6	23.3	21.5	26.7	27.2	29.4	24.5	24.7	24.6
Primary vocational education											
16–19	0.3	0.4	0.7	0.4	0.2	0.3	0.1	0.3	0.2	0.1	0.3
20–24	2.1	3.5	2.5	1.6	1.3	1.7	1.3	1.6	1.1	2.1	1.9
25–29	6.1	4.1	9.7	3.6	3.7	2.9	2.5	2.0	1.6	1.8	3.8
Secondary general education											
16–19	3.1	3.3	1.4	1.9	1.7	1.2	1.0	1.4	0.9	1.2	1.7
20–24	14.5	8.9	10.9	9.5	9.6	6.1	6.7	4.9	5.3	7.8	8.4
25–29	39.5	32.2	27.8	18.8	16.5	13.8	14.6	9.6	8.0	7.3	18.8
Basic secondary education											
16–19	2.2	1.1	0.5	0.8	0.9	0.4	0.2	0.4	0.4	-	0.8
20–24	2.1	1.1	0.8	0.7	0.6	0.6	0.4	0.7	0.3	-	0.8
25–29	4.2	4.2	3.4	1.3	1.6	1.2	1.0	0.6	0.3	-	2.0
Primary education											
16–19	0.4	-	-	0.2	0.2	-	0.1	0.1	0.0	-	0.2
20–24	0.6	-	0.3	0.0	0.0	0.1	0.0	0.0	0.0	-	0.1
25–29	0.4	-	0.3	0.3	0.2	0.1	0.1	0.1	0.2	-	0.2

Source: compiled by the authors according to [www.stat.gov.kz](http://www.stat.gov.kz).

One of the most vulnerable youth groups is the NEET group (out of education and out of work), who are associated with high risks for potential employers, including perceptions regarding their potential due to exclusion from the educational sphere and problems with retraining and professional development (Ilyin 2018).

In Kazakhstan, the proportion of young people in the NEET segment has decreased from 18.6% to 6.9% over the past 20 years, a process facilitated by government programs and projects (Figure 8). In the world rankings, Kazakhstan is in the category of countries with the lowest share of young people (National Report: “Youth of Kazakhstan—2021: 30 Years of Independence” 2021).



**Figure 8.** Share of NEET youth and the youth unemployment rate in the Republic of Kazakhstan for the period 2001–2021, (%). Source: Compiled by the authors on the basis of <https://stat.gov.kz/official/industry/25/statistic/7> (accessed on 10 October 2022).

NEET youth consist of several social groups: young people who have education and certain skills but do not want to work; young mothers with young children, as well as single mothers; freelancers; rural youth without qualifications and experience who are engaged in subsistence farming; children from low-income families who have no opportunity to continue education after school; and asocial youth (those released from prison, suffering from drug or alcohol addiction, or undergoing rehabilitation). In addition, NEET youth in Kazakhstan can be classified according to the duration of their stay in this group: long-term unemployed (those who have not worked or studied for several years); economically inactive youth in connection with family responsibilities (these make up the majority of the long-term unemployed); and short-term unemployed (those who have had this status for less than a year).

## 5. Discussion

When assessing youth employment, it is necessary to highlight the characteristics of young people as subjects of the labor market. The undoubted advantages of youth in the labor market are specific to them compared with other age groups, namely, higher adaptability, significant variability as people with a wide range of training entering the market, a high level of mobility and the ability to learn and change job skills; a high level of digital literacy, which is advantageous for post-industrial work; and a propensity for transprofessionalism, which is characterized by worker flexibility and versatility, as well as a capacity for effective pre- and re-training.

At the same time, these characteristics can have negative short-term effects. In particular, the high variability of the labor market reduces the opportunities for young professionals to quickly gain practical experience, moving from theoretical knowledge to practical application. The ability to adapt and acquire transprofessional skills leads to the risk of losing full-time employment because retraining requires additional time. Therefore, from the employer's perspective, it is risky to hire young people in the labor market. The over-ambitiousness of young professionals, their willingness to look for more favorable jobs, and, therefore, labor insecurity, contribute to this risk. In addition, employers are wary of their lack of experience and, consequently, it takes longer to settle them into an optimal work regime. In developing countries, another problem concerns the mismatch between professional competencies and market needs: there is often a gap between theoretical knowledge and applied skills in a particular firm. Therefore, there is an inherent contradiction between the interests of these subjects.

Thus, the youth employment segment is the most controversial. On the one hand, young people have a lower professional status in the labor market. On the other hand, they are also the most strategically promising. Almost all young people in the labor market have an advantage in terms of information training and computer skills, and they are therefore more adaptable and mobile despite their level of education (if we distinguish a group of young people who have failed or do not want to receive special education). This group can work with a wide range of information programs and move freely within the country's regions. In addition, most of these young people are aware of the need for vocational training, as well as regular further training.

The following features of the youth labor market were highlighted as a result of this study.

(1) Uncertainty in the demand and supply of youth labor. This is due to the diversification of the professional orientations of young people, including their strategic and tactical uncertainty. Additionally, the entry of young people into the labor market often coincides with problems of self-determination and depends on the build-up of socio-cultural problems of youth development within the professional work setting, the need for interpersonal competition, and the need to cope with functional and routine duties.

(2) Higher risks of job loss, as well as limited employment opportunities for new entrants to the labor market due to a lack of work experience, as well as the difficulty of gaining this initial experience.

(3) The hidden scale of youth unemployment, including the NEET youth segment.

(4) The wide variability of the youth labor market, the lack of a constant focus on current market conditions, and the demand for additional jobs.

(5) A more pronounced gender asymmetry in the youth labor market, which manifests in a significant level of discrimination against women in recruitment, whereby, despite the predominance of women graduates, employers give a clear preference to men when hiring graduates.

In total, three important trends are evident, despite the low level of youth unemployment in the country: (1) the youth labor force is more likely to participate in informal employment than the adult population, i.e., the youth labor market is characterized by a predominance of informally employed workers—the most vulnerable category in a negative labor market dynamic; (2) there is a higher unemployment rate among young women than among young men; and (3) young people with low professional qualifications are more likely to be unemployed than other categories of young people.

The statistical indicators of employment and unemployment often do not reflect the problems of youth involvement in employment, including the development of productive employment in the youth labor market. These problems include:

(1) The instability of the global- and national-level macroeconomic situation, resulting in slowing economic, investment, and productivity growth; geopolitical uncertainty, including on the European continent; and the destabilization of global financial conditions and possible capital outflows from developing and transitional economies. Overall, global trends show that economic growth still does not lead to employment growth, with economic instability threatening to undo positive gains in youth employment.

(2) A lack of professional experience among young people, leading to excessive demands by employers on young professionals and skepticism about their ability to apply their knowledge and skills, as well as employers' lack of motivation to train young people, corresponding to their desire to attract more experienced adult workers. Therefore, when positions are vacant, young people are hired on a residual basis and are the first to be laid off when the company's economic situation deteriorates. Additionally, in times of crisis and stagnation, young people are the first to lose their jobs, income, and qualifications.

(3) The existence of a demographic mismatch between the number of economically active young people and the available jobs; a lack of appropriate jobs for entry-level skills; and readily available employment in the informal or underdeveloped sectors of the economy.

(4) Information asymmetry in the youth labor market, a lack of knowledge among young people about the modern labor market and their own professional development, an absence of channels for informing young people about the demands of the labor market, inadequate professional orientation among young people and the falling prestige of working professions, including in old industrial sectors, and the gap between the received vocational education and employers' demands for the labor force (Uteubayev et al. 2018). As a result, young people are employed outside their field of study and in informal or part-time employment, which reduces their current income and hinders the consistent development of their skills and experience.

These conditions exacerbate the challenges of developing productive employment and lead to expanding NEET unemployment.

Labor market efficiency in the context of modern productive employment is determined by a focus on post-industrial production and the formation of a "knowledge economy". It is this approach that determines productive employment, which is linked to the maximization of new industries and a reduction in traditional material production, as well as an information economy that forms a basis for development based on methods of foresight and strategic planning rooted in a broad data base. Thus, modern transprofessional competences dominate within productive employment, resulting in the growth of the post-industrial reproduction segment.

Productive youth employment also means taking advantage of both the professional and generational socio-cultural advantages of young people in a qualitatively new labor market. The characteristics of young people mean that they are more likely to meet the requirements of productive employment. Productivity growth in traditional industries is predominantly possible through youth employment because of the rapidity of task implementation, as well as their physical and moral capacities. Within the framework of the new post-industrial employment, it is the transprofessionalism of young people, their high-level IT education, and their desire for status growth that will dramatically increase the productivity of the labor market. Therefore, the emergence of new forms of employment (remote working, freelancing, start-up companies, etc.) can decrease the proportion of NEET youth in the population.

As such, the labor market, as the main institutional factor in the system of socio-economic relations, sets the basic vector of the economic behavior of young people. Improving the position of young people in the labor market is one of the priority goals of employment policy in Kazakhstan. The current state policy is comprehensively aimed at the social and economic support of its citizens, including young people. The social stimulation of youth is the basis for the further sustainable development of the country, largely determining its future. Therefore, the solution to reducing the NEET segment among young people must be comprehensive (Gazizova et al. 2022). Measures of state support for youth employment can focus on the development of a system of youth employment support measures in professional, scientific, and technical industries, as well as for agriculture, forestry, and fisheries, compulsory social security, human health and social work activities, education, public administration and defense, and other service activities (Gazizova et al. 2021). At the same time, it should be emphasized that state youth policy must focus on long-term, targeted work with various groups of youth, distinguishing them by various criteria: working youth, young families, young entrepreneurs, "NEET" youth, etc., (Sociological Portrait of NEET Youth in Kazakhstan 2019).

Youth labor market research is important for identifying youth employment problems and, in particular, for identifying factors related to NEET youth at the national and local level, facilitating the formulation of policies and programs to address these problems.

Further research on the problem must include a more detailed study of the causes and systemic factors that result in NEET youth. An analysis of the determinants affecting the level of NEET unemployment is extremely important because an understanding of the determinants, and therefore of the risk factors that can predict this phenomenon, will enable

policy makers to implement measures to combat the social and economic consequences of the exclusion of young people from social and labor settings.

The failure to solve the NEET youth issue in Kazakhstan could result in negative phenomena, such as a decrease in the level and quality of the nation's human capital as a whole; an increase in the regional differentiation of social capital and income; the inefficient allocation of society's resources and underemployment; a decrease in overall labor productivity and youth labor productivity, producing a slowdown in economic growth; a decrease in the reproduction of the population; the criminalization of youth environments in regions with youth unemployment, leading to a rise in antisocial behavior and the use of drugs and alcohol; the growth of social tensions, including the threat of extremist activity among youth groups and youth participation in mass riots; the growth of negative relations between young people from more developed regions and underdeveloped regions; and a decrease in public health indicators in the youth population.

## 6. Conclusions

The actualized quality of human capital is the most important factor in economic growth, and the socio-economic "enrichment" of this capital includes the development of individual intellectual competences, and the mastery of information tools and skills of global inclusion. The alternative is the impoverishment of human capital, which, by increasing the proportion of low-competency workers, stunts the development of the labor market. Strategically dangerous in this regard are young people in the NEET category. As this segment is currently increasing, there is a need to develop a comprehensive model for its minimization based on the convergence of the following components: productive employment to create motivation for NEET youth to work; post-industrial education to enable the development of professional skills in an information environment and globalized context; and inclusive development as a modern economic socialization constant.

Ignoring the phenomenon of NEET youth may lead to the development of long-term unemployment, which will intensify social and macroeconomic problems. This analysis takes the convergence of productive employment, post-industrial education, and an inclusive economy to a new level through the systematic use of modern NEET youth reduction tools. It expands the field of positive macroeconomic outcomes, leading to a multiplier effect of productive employment through human capital and inclusive growth (Khusainova et al. 2021).

Understanding the specifics of NEET youth as a social dependency group will allow future studies to clarify not only the channels for replenishing this group but also the reasons why young people remain in it. Given the significant impact of the factors identified in this paper, it is essential to develop and implement effective measures for future youth development (Zhu et al. 2022).

**Author Contributions:** Conceptualization, Z.K. and M.G.; methodology, G.R.; software, Z.K.; validation, G.A., Z.K., and M.G.; formal analysis, M.G.; investigation, Z.K.; resources, G.R.; data curation, Z.Z.; writing—original draft preparation, M.G.; writing—review and editing, Z.K.; visualization, M.G.; supervision, Z.K.; project administration, Z.K.; funding acquisition, Z.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the Committee of Science of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. AP09259065).

**Data Availability Statement:** All data used in the present study are publicly available.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Alonso, Carlos Pesquera, Práxedes Muñoz Sánchez, and Almudena Iniesta Martínez. 2022. Is there a uniform NEET identity in the European Union? *International Journal of Adolescence and Youth* 27: 207–20. [[CrossRef](#)]
- Aloshyna, Tetiana, and Dmytro Kozenkov. 2022. Analysis of supply and demand in the labor market of Ukraine: Regional aspect. *Access to Science, Business, Innovation in Digital Economy* 3: 177–84. [[CrossRef](#)] [[PubMed](#)]

- Alshanskaya, Anna Alekseevna. 2020. Problems of Youth Employment in the Labor Market in Kazakhstan. *Nur-Sultan: Kazakhstan Institute for Strategic Studies under the President of the Republic of Kazakhstan*: 100. Available online: [http://old.kisi.kz/images/izdanie/alsha\\_sait\\_pt.pdf](http://old.kisi.kz/images/izdanie/alsha_sait_pt.pdf) (accessed on 5 January 2023). (In Russian).
- Alwaely, Suad Abdelkareem, Yousif Nagwa Babiker Abdalla, and Alexey Mikhaylov. 2021. Emotional development in preschoolers and socialization. *Early Child Development and Care* 191: 2484–93. [CrossRef]
- Avdeeva, Anna P., Svetlana A. Grishaeva, and Zhibek S. Khussainova. 2021. Socio-psychological Characteristics of the Innovative Potential of Students as Indicators of Professional Elitism in a Digital Society. *Studies in Systems, Decision and Control* 314: 809–18. Available online: [https://www.scopus.com/inward/record.uri?eid=2-s2.0-85102254033&doi=10.1007%2F978-3-030-56433-9\\_85&partnerID=40&md5](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85102254033&doi=10.1007%2F978-3-030-56433-9_85&partnerID=40&md5) (accessed on 15 November 2022).
- Badjanova, Jelena, Dzintra Iliško, Svetlana Ignatjeva, Mariana Petrova, and Aleksandrs Gorbunovs. 2020. Evaluation and analysis of personality traits of Latvian and Bulgarian Inhabitants. *Periodicals of Engineering and Natural Sciences* 8: 1398–409.
- Batrakova, Lyudmila Georgievna. 2021. Youth unemployment in the regions as the most important socio-economic problem. *Socio-Political Studies* 2: 57–75. (In Russian). [CrossRef]
- Berlin, Marie, Antti Kääriälä, Mette Lausten, Gunnar Andersson, and Lars Brännström. 2020. Long-term NEET among young adults with experience of out-of-home care: A comparative study of three Nordic countries. *International Journal of Social Welfare* 30: 266–79. [CrossRef]
- Bulanova, Marina Borisovna, and Ekaterina Alexandrovna Artamonova. 2022. NEET youth: Consumer behavior in the new reality. *RUDN Journal of Sociology* 22: 113–25. [CrossRef]
- Chaudhary, Manoj Kumar. 2021. The impact of knowledge management and human resources strategies on the Nepalese banks' efficiency. *Access to Science, Business, Innovation in Digital Economy* 2: 78–90. [CrossRef]
- Chernukha, Nadiia, Mariana Petrova, Maryna Vasyliieva-Khalatnykova, Zoriana Krupnyk, and Yuliia Krasilova. 2021. The Role of the Sociocultural Environment of Inclusion in the Modern Educational Institution. *International Journal of Higher Education* 10: 211–22. [CrossRef]
- Cockx, Bart, and Matteo Picchio. 2013. Scarring effects of remaining unemployed for long-term unemployed school-leavers. *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 176: 951–80. [CrossRef]
- Coles, Bob, Hutton Sandra, Bradshaw Jonathan, Craig Gary, Godfrey Christine, and Johnson Julia. 2002. Literature review of the costs of being not in education, employment or training at age 16–18. Available online: <https://www.york.ac.uk/inst/spru/pubs/pdf/RR347> (accessed on 5 January 2023).
- Contini, Dalit, Filandri Marianna, and Pacelli Lia. 2019. Persistency in the NEET state: A longitudinal analysis. *Journal of Youth Studies* 22: 959–80. [CrossRef]
- Crawford, Claire, Kathryn Duckworth, Vignoles Anna, and Wyness Gill. 2011. Young people's education and labour market choices aged 16/17 to 18/19. Available online: <https://core.ac.uk/download/pdf/4162542.pdf> (accessed on 5 January 2023).
- Diachok, Nadiia, Chernukha Nadiia, Tokaruk Liudmyla, Udovenko Iuliia, and Petrova Mariana Mateeva. 2020. Practical-Oriented Concept as a Principle of Professional Education of the Future Professionals. *International Journal of Higher Education* 9: 272–82. [CrossRef]
- Education at a Glance. 2013. [Electronic Resource]. OECD. Available online: [https://www.oecd.org/edu/eag2013%20\(eng\)--FINAL%2020%20June%202013.pdf](https://www.oecd.org/edu/eag2013%20(eng)--FINAL%2020%20June%202013.pdf) (accessed on 10 January 2023).
- Education Indicators in Focus. How Difficult Is It to Move from School to Work? 2013. [Electronic Resource]. OECD. Available online: [https://www.oecd.org/education/skills-beyond-school/EDIF%202013---N%C2%B013%20\(eng\)--FINAL.pdf](https://www.oecd.org/education/skills-beyond-school/EDIF%202013---N%C2%B013%20(eng)--FINAL.pdf) (accessed on 10 January 2023).
- Elder, Sara. 2015. *What Does NEETs Mean and Why Is the Concept so Easily Misinterpreted? Work 4 Youth Technical Brief No. 1*. Geneva: ILO.
- Gazizova, Maiya Rivelevna, Khusainova Zhibek Seitovna, Vechkinzova Yelena Anatolyevna, and D. Sarzhanov Dauren Kazhabergenovich. 2021. Assessment of structural shifts in youth employment in Kazakhstan. *Bulletin of the Karaganda University Economy Series* 4: 41–50. [CrossRef]
- Gazizova, Maiya Rivelevna, Khusainova Zhibek Seitovna, Vechkinzova Yelena Anatolyevna, and Abauova Gulzhan Meiramovna. 2022. Characteristics and features of NEET youth in the context of country analysis. *Bulletin of the Karaganda University Economy Series* 2: 48–61. [CrossRef]
- Global Employment Trends for Youth 2017: Paths to a Better Working Future*. 2017. Geneva: International Labour Office—ILO.
- Global Employment Trends for Youth 2020: Technology and the Future of Jobs*. 2020. Geneva: International Labour Office—ILO.
- Goletiani, Ketevan, Mushkudiani Zurab, Gulua Ekaterine, and Janelidze Natela. 2021. Difficulties in managing diversity in Georgian educational organizations. *Access to Science, Business, Innovation in Digital Economy* 2: 123–37. [CrossRef] [PubMed]
- Gordeeva, Elena, Esengeldin Bauyrzhan, and Khussainova Zhibek. 2017. State programming of innovation development of economy: Macrostructural priorities, institutional and economic specification. *Journal of Advanced Research in Law and Economics* 8: 1767–78. Available online: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85045630969&doi=10.14505%2Fjarle.v8.6%2828%29.12&partnerID=40&> (accessed on 10 December 2022).
- Gregg, Paul, and Emma Tominey. 2005. The wage scar from male youth unemployment. *Labour Economics* 12: 487–509.
- Henderson, Joanna L., Lisa D. Hawke, Gloria Chaim, and National Youth Screening Project Network. 2017. Not in employment, education or training: Mental health, substance use, and disengagement in a multi-sectoral sample of service-seeking Canadian youth. *Children and Youth Services Review* 75: 138–45. [CrossRef]

- Holmes, Craig, Emily Murphy, and Ken Mayhew. 2021. What accounts for changes in the chances of being NEET in the UK? *Journal of Education and Work* 34: 389–413. [CrossRef]
- Ilyin, Vladimir Alexandrovich. 2018. *Social Vulnerability in the Regional Community: Exclusivity and Modern Mechanisms of Its Overcoming: Monograph/Author's Call under the Hands of V.A. Ilyina*. Vologda: FGBUN VolSC RAS. (In Russian)
- International Labour Organization. 2020. *Youth & COVID-19: Impacts on Jobs, Education, Rights and Mental Well-Being. Executive Summary of the Survey Report*. Geneva: International Labour Organization.
- Kalabina, Elena G., Maiya R. Gazizova, and Zhibek S. Khussainova. 2021. Structural Dynamics of Employment of Older People in the Eurasian economic union countries. *Economy of Region* 17: 842–54. [CrossRef]
- Katamadze, Giorgi, Tavdgiridze Lela, and Bolkvadze Maia. 2023. Child labour exploitation: Politics, law and social attitudes in Georgia. *Access to Science, Business, Innovation in Digital Economy* 4: 24–33. [CrossRef] [PubMed]
- Khusainova, Zhibek Seitovna, Zhartay Zhanibek Maratovich, Abauova Gulzhan Meiramovna, Lambekova Aigerim Nurlanovna, and Syzdykova Dinara Ibadollayevna. 2021. The nature of the NEET youth segment, its features and parameters in both domestic and global conditions. *Bulletin of the Karaganda University. Economy Series* 3: 40–53.
- Köiv, Kerli, Saks Katrin, Paabort Heidi, Lendzhova Vladislava, and Smoter Mateusz. 2022. A Service Model for Self-Directed Learning of NEET Youth at the Local Government Level. *Youth & Society* 54: 52S–68S. [CrossRef]
- Kvieskienė, Giedrė, Ivanova Ilze, Trasberg Karmen, Stasytytė Victorija, and Celiešienė Eglė. 2021. Modelling of social policy and initiatives under COVID-19: Rural NEET youth case study. *Social Sciences* 10: 393. [CrossRef]
- Law of the Republic of Kazakhstan “On State Youth Policy”. 2015. Dated 9 February, 2015 No.285-V. Available online: <https://adilet.zan.kz/rus/docs/Z1500000285> (accessed on 1 October 2022).
- Linde, Ivars, and Petrova Mariana. 2018. The challenges of formalization and modelling of Higher Education Institutions in the 21st century. Paper presented at CBU International Conference Proceedings 2018: Innovations in Science and Education, Prague, Czech Republic, March 21–23; pp. 303–8. [CrossRef]
- Lipovka, Anastasiya, Islamgaleyev Arman, and Badjanova Jelena. 2021. Innovation capability of women and men managers: Evidence from Kazakhstan. *Access to Science, Business, Innovation in Digital Economy* 2: 91–102. [CrossRef] [PubMed]
- Liszka, Damian, and Paweł Walawender. 2018. NEET youth—The concept’s presence in the European Union’s youth employment policy and why it is so problematic. *Humanities and Social Sciences Quarterly* 25: 179–93. [CrossRef]
- Magopets, Olena, and Tetiana Korneeva. 2021. Comprehensive evaluation of labour efficiency at macro- and mesoeconomic levels in Ukraine. *Access to Science, Business, Innovation in Digital Economy* 2: 50–77. [CrossRef]
- Maynou Pujolras, Laia, Ordóñez Javier, and Silva José. 2022. Convergence and determinants of young people not in employment, education or training: An European regional analysis. *Economic Modelling* 110: 105808. [CrossRef]
- Mikhaylov, Alexey, Dinçer Hasan, and Yüksel Serhat. 2023. Analysis of financial development and open innovation oriented fintech potential for emerging economies using an integrated decision-making approach of MF-X-DMA and golden cut bipolar q-ROFSs. *Financial Innovation* 9: 1–34.
- Moiseev, Nikita, Alexey Mikhaylov, Hasan Dinçer, and Serhat Yüksel. 2023. Market capitalization shock effects on open innovation models in e-commerce: Golden cut q-rung orthopair fuzzy multicriteria decision-making analysis. *Financial Innovation* 9: 1–25. [CrossRef]
- Mushkudiani, Zurab, Gechbaia Badri, Gigauri Iza, and Gulua Ekaterine. 2020. Global, economic and technological trends in human resource management development. *Access to Science, Business, Innovation in Digital Economy* 1: 53–60. [CrossRef] [PubMed]
- Mussida, Chiara, and Dario Sciulli. 2023. Being poor and being NEET in Europe: Are these two sides of the same coin? *The Journal of Economic Inequality*, 1–20. [CrossRef] [PubMed]
- National Report: “Youth of Kazakhstan—2021: 30 Years of Independence”. 2021. Available online: <https://eljastary.kz/upload/iblock/0e6/1xtjt7dlq0xu1a7hjm540sw3fxzdhycd.pdf> (accessed on 5 December 2022).
- NEETs. Young People not in Employment, Education or Training. 2012. Characteristics, Costs and Policy Responses in Europe [Electronic Resource]. Eurofound. Available online: <https://www.eurofound.europa.eu/publications/report/2012/labour-market-social-policies/neets-young-people-not-in-employment-education-or-training-characteristics-costs-and-policy> (accessed on 5 October 2022).
- Paresashvili, Nino, Tikishvili Mzia, and Edzgeradze Teona. 2021. Employees discrimination issues based on the statistical analysis using SPSS (Case of Georgia, Republic of). *Access to Science, Business, Innovation in Digital Economy* 2: 175–91. [CrossRef]
- Petrova, Mariana, Popova Lyubomira, and Dejniak Dorota. 2020. Children’s University activities as implementation of the third mission of higher education institution. *Strategies for Policy in Science and Education* 28: 161–71. Available online: <https://strategies.azbuki.bg/> (accessed on 15 January 2023).
- Petrova, Mariana, Tepavicharova Milena, and Dikova Lyudmila. 2019. Factors for development of the educational and professional qualification profile of the human resources in the machine building sector in Bulgaria. Paper presented at Sheregesh, X International Scientific and Practical Conference “Innovations in Mechanical Engineering” (ISPCIME-2019), MATEC Web of Conferences, EDP Sciences, Kemerovo, Russia, November 26–29; Volume 297.
- Ralston, Kevin, Everington Dawn, Feng Zhiqiang, and Dibben Chris. 2021. Economic inactivity, not in employment, education or training (NEET) and scarring: The importance of NEET as a marker of long-term disadvantage. *Work, Employment and Society* 36: 59–79. [CrossRef]

- Ripamonti, Enrico, and Stefano Barberis. 2021. The association of economic and cultural capital with the NEET rate: Differential geographical and temporal patterns. *Journal for Labour Market Research* 55: 13. [CrossRef]
- Rudneva, Evgenia Alekseevna, and A.G. Urpekova. 2020. Sociological Research "Social attitudes of NEET youth in Kazakhstan". Involved Expert: SIC "Youth", Nur-Sultan. p. 70. Available online: <https://www.eljastary.kz/upload/iblock/5f1/5f18fe2b8e797459e32336ae901d4f87.pdf> (accessed on 5 November 2022). (In Russian).
- Sociological Portrait of NEET Youth in Kazakhstan. 2019. Nur-Sultan: SIC "Youth". p. 188. Available online: <https://eljastary.kz/upload/iblock/070/070335beae9e8022edb61b5ec> (accessed on 1 November 2022). (In Russian).
- Spivak, Yaroslav, Omelchenko Svitlana, Petrova Mariana Mateeva, Kurinna Svitlana, and Kurinnyi Ian. 2021. Socio-Pedagogical Conditions of Future Social Specialists Training for Successful Professional Career. *International Journal of Higher Education* 10: 1–8. [CrossRef]
- Sushchenko, Olena, Akhmedova Olena, and Stryzhak Olena. 2021. The use of interactive training technologies in teaching academic disciplines for students of tourism specialities. *Access to Science, Business, Innovation in Digital Economy 2*: 28–39. [CrossRef]
- Uteubayev, Talgat, Petrova Mariana, and Lyubenova Irena. 2018. Training of qualified specialists in the process of their education in university: The role of the public-private partnership. Paper presented at CBU International Conference Proceedings, Prague, Czech Republic, March 21–23; vol. 6, pp. 491–95.
- Varyash, Igor, Alexey Mikhaylov, Nikita Moiseev, and Kirill Aleshin. 2020. Triple bottom line and corporate social responsibility performance indicators for Russian companies. *Entrepreneurship and Sustainability Issues* 8: 313. [CrossRef]
- Vedekhin, Alexander Yurievich. 2022. *Improving the Process of Promoting Youth Employment. Dissertation for the Degree of Candidate of Economic Sciences*. Moscow: Federal State Budgetary Institution "All-Russian Scientific-Research Institute of Labor" of the Ministry of Labor and Social Protection of the Russian Federation, p. 159. (In Russian)
- Vyazova, Natalia Sergeevna. 2021. Formation of a Mechanism for Managing Youth Employment Based on the Use of the Potential of Human Capital. Dissertation for the Degree of Candidate of Economic Sciences. Saint Petersburg. p. 151. Available online: <https://unecon.ru/sites/default/files/dissvyazovans.pdf> (accessed on 10 December 2022). (In Russian).
- Wadsworth, Jonathan. 2013. Youth and The UK Labour Market. *Growing up in Recession Britain. A MISOC Event Presenting New Research. Presentation Materials*. Available online: <https://www.iser.essex.ac.uk/wp-content/uploads/files/misoc/events/20130315/JWadsworth.pdf> (accessed on 15 January 2023).
- Zabelina, Olga Viktorovna, Asaliev Asali Magomedaliyevich, and Druzhinina Elena Sergeevna. 2021. Problems of the youth segment of the Russian labor market and new accents of youth employment support policy. *Labor Economics* 8: 985–1002. (In Russian). [CrossRef]
- Zaderei, Alina. 2020. Ensuring the sustainability of the human resources management system of maritime industry enterprises. *Access to Science, Business, Innovation in Digital Economy 1*: 146–56. [CrossRef] [PubMed]
- Zagorodnya, Alla, Chernukha Nadezhda, and Petrova Mariana Mateeva. 2020. Contemporary trends of professional training specialists in the economic field at higher education institutions of Poland and Ukraine. *Strategies for Policy in Science and Education* 28: 249–60.
- Zhartay, Zhanibek, Khussainova Zhibek, Abauova Gulzhan, and Amanzholova Botagoz. 2017. Prospects of development of silk road economic belt and new opportunities of economic growth. *Journal of Advanced Research in Law and Economics* 8: 2636–43. Available online: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85055048336&doi=10.14505%2fjarle.v8.8%2830%29.35&partnerID=40&-> (accessed on 1 November 2022). [CrossRef] [PubMed]
- Zhu, Na, Lisa D. Hawke, Matthew Prebeg, Em Hayes, Karleigh Darnay, Srividya N. Iyer, and Joanna Henderson. 2022. Intervention outcome preferences for youth who are out of work and out of school: A qualitative study. *BMC Psychology* 10: 180. [CrossRef] [PubMed]
- Zudina, Anna. 2022. What makes youth become NEET? Evidence from Russia. *Journal of Youth Studies* 25: 636–49. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.