CONTRADICTIONS OF THE INSTITUTIONAL AND ECONOMIC ENVIRONMENT OF THE DEVELOPMENT OF NEW MARKET COUNTRIES: THE EXPERIENCE OF KAZAKHSTAN

Abstract

The current cyclical transition, complicated by the COVID–19 pandemic, has revealed weak links in the economies of many countries, caused by systemic contradictions accumulated over 30 years. Kazakhstan, as a country that has been building market relations only since the end of the 20th century, found itself in the grip of not only economic and political, but also institutional costs. One of the problems hindering the economic development of the nation is the contradictions between the political ambitions of the authorities and the real results of the implementation of state programs, the loss of public trust. The purpose of the study is to assess the quality of economic growth in Kazakhstan. An attempt is made to provide an analysis of the institutional and economic environment and an econometric assessment of the real indicators of the country's development. The methodological basis was the scientific heritage in this area and new theoretical and methodological approaches of modern scientists in the study of issues of socio-economic development. The object of the research is economic development of Kazakhstan. Research results: based on the historical and logical analysis of theoretical and methodological approaches to the study of economic development and the constructed regression model of panel data, it is shown that an increase in the level of indicators selected in official statistics has a small effect on economic growth, that is, there is a discrepancy between the target indicators of state programs and actual results. Revealed the institutional features of Kazakhstan's development model that cause economic lag.

Key words: institutional and economic environment, business, market, economy, economic growth, social inequality, quality of life, population.

Introduction

For thirty years of sovereign development, Kazakhstan has become recognizable not only as country rich in natural resources, but also due to the achievements of talented youth at the world level
In sports, culture, art, as well as ambitious statements of the authorities. The international community is convinced of the rich competitive opportunities of society and high human potential. However, researchers cannot fail to notice the limited transformation of society’s capabilities into competitive advantages of the state: the real socio-economic state of the country is “veiled” in official statistics. The results of many adopted state development programs of the country remain as expected. State authorized bodies also report on huge amounts of funds invested by oligarchs abroad, embezzlement of state budget funds. The current institutional and economic environment has a contradictory impact on business development, and accordingly, entrepreneurs tend to behave opportunistically. A model of a simulated economy emerges.

The aim of the study is to assess the quality of economic growth in Kazakhstan. An attempt is made to provide an analysis of the discrepancies in expectations stated in government programs and real indicators of economic development in Kazakhstan.

**Literature review**

In connection with the emerging contradictions between the official indicators of economic growth and the real economic development of the country, it is necessary to clarify the difference between the concepts of “economic growth” and “economic development”.

Economic growth is a quantitative indicator that reflects the dynamics of macroeconomic indicators (GDP, inflation, employment). This indicator does not reflect the impact of dynamic growth on the environment, health, birth rate, life expectancy, education, social security of the population.

Economic development is an indicator of the quality of life, reflecting the increase in national wealth, growth in the number and expected duration of life of the population, the availability of benefits for all, legal and environmental security of life, and social progress. The world scientific community and international organizations are studying this indicator, comparing its level in different countries [1]. In the post-Soviet space, the issues of the quality of life are being actively discussed in connection with the ongoing systemic transformations in the political economy and the deterioration of the living conditions of most of the population [2].

The origins of the theory of economic development come from the works of ancient thinkers: philosophers, economists, who studied the nature and factors of the wealth of peoples, the incomes of different social strata. Thus, Smith, in his famous work “Research on the nature and causes of the wealth of peoples”, foreseeing the physical poverty of the population in developing countries in the 21st century, “gives a lesson” to capital owners and government authorities on the distribution of the product and the determination of the minimum consumption basket of an employee: “Man must always be able to exist by his labor, and his wages must at least be sufficient for his existence. Even in most cases it should slightly exceed this level; otherwise, it would be impossible for him to support his family, and the race of these workers would become extinct after the first generation” [3]. In this thought, we find an emphasis on the socio-demographic factor of economic development. Marx in Volume I of “Capital” developed it, defining labor as a commodity and proposing a formula for calculating its average daily value and a method for distributing new value to the worker’s income and the capitalist’s profit, which predetermined social stratification in a capitalist society [4].

In the 20th century, an impetus to the study of economic development and the role of the state in this process was given by American researchers – Arthur Lewis and Theodore Schultz – laureates of the Nobel Prize in 1979 for “innovative studies of economic development as applied to the problems of developing countries”. Lewis among the factors influencing real economic growth, considered institutional, associated with the existing forms of organization of a given society, with its political system and the nature of property relations. In his opinion, “Maintaining law and order is one of the main conditions for economic growth, and many societies fell into decay because the state was unwilling or unable to protect property owners from bandits or mobs” [5]. Schultz in his studies analyzed the reasons for the low quality of life in developing countries and the factors of the “economic miracle” of post-war Germany and Japan, substantiated that the prosperity of states wasn’t based on minerals and the wealth of banks, but on educated and healthy citizens [6]. A significant contribution to the study of the role of institutionalism in technological transformation and economic development of the countries of the non-Western world was made by such outstanding economists: De Soto [7], Nelson & Winter [8], Stiglitz [9], Todaro [10].
To assess the level of economic development in the modern world, international organizations use integral measurement methods – indices. In 1979, an index of the physical quality of life was created. The Quality-of-Life Index is a combined indicator that measures the achievements of countries of the world and individual regions in terms of their ability to provide their residents with a prosperous life. Since 2006, the world began to define a new international measure of “Happiness” – “International Happiness Index”, which takes into account the dream and desires of most people on Earth to be happy and healthy, to live a long and fulfilling life [11].

A new methodological approach to the study of economic development problems in order to achieve effective results of the implementation of government programs in improving the well-being of ordinary people was developed by the 2019 Nobel Prize winners in economics A. Banerjee, E. Duflo and M. Kremer [12].

Methodology

To assess the degree of influence of certain indicators on economic growth, a regression analysis was carried out. For this, data were collected from 15 countries for 2000–2018. Since the sample combines temporal and spatial data, a panel data regression model was built to analyze the effect of the considered explanatory variables on GDP. Using this model allow to determine unbiased estimates of the coefficients, use all available data, and generate the smallest standard errors. A significant difference between fixed and random effects is whether the unobservable individual effect includes elements that are correlated with regressors in the model.

The general equation of the econometric model is as follows:

$$GDP_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it}$$  \hspace{1cm} (1)

where $i$ represents the countries in the sample ($i = 1, \ldots, 15$) and $t$ represents time ($t = 2000, \ldots, 2018$). $GDP_{it}$ is the dependent variable and represents GDP. $\alpha_i$ is the unobservable individual specific effect, and $\beta$ is the vector of coefficients associated with the independent variables. $X_{it}$ is a vector of explanatory variables for country $i$ at time $t$, $\varepsilon_{it}$ is the error value.

To assess the interdependence of variables, the Pearson correlation was estimated, which allowed to determine how proportional the variability of two variables.

All data used were collected from the official website of the World Bank and the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan [13, 14].

Results and discussion

Real GDP growth over the years of Kazakhstan’s sovereign development

Since Kazakhstan, like all the countries of the post-Soviet space, was a dependent link in a single national economic complex, the collapse of the former Soviet Union led to the bankruptcy of the national economy. The country could survive in the first years of sovereign development only through the sale of natural resources. All subsequent years, the export of raw materials continues, maintaining the low quality of economic growth predicted by Stiglitz in the theory of the “resource curse”.

The most important indicators of economic development are GDP per capita, birth rate, life expectancy, literacy and education, health care, employment, gender balance, free time.

To assess the impact of these indicators on economic growth, an analysis of panel data was carried out. The sample contains data for 15 countries of the former Soviet Union for 2000–2018. The dependent variable in the model is GDP, and the independent variables are life expectancy, birth rate, health and education expenditures, and employment.

Using the collected panel data, 2 regression equations with fixed and random effects were constructed. The general equation adapted to the sample is described by equation (2):

$$GDP_{it} = \beta_1 Lifeexpectancy_{it} + \beta_2 Birthrate_{it} + \beta_3 HealthExp_{it} + \beta_4 EducationExp_{it} + \beta_5 Employment_{it} + \alpha_i + \varepsilon_{it}$$  \hspace{1cm} (2)
The results of econometric calculations performed using the STATA statistical software package with the dependent variable GDP are shown in Table 1.

Table 1 – Panel regression models with dependent variable GDP

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>0.066*** (0.007)</td>
<td>0.067*** (0.007)</td>
</tr>
<tr>
<td>Birth rate</td>
<td>0.062*** (0.008)</td>
<td>0.058*** (0.0086)</td>
</tr>
<tr>
<td>Health expenditures</td>
<td>0.026*** (0.012)</td>
<td>0.026* (0.012)</td>
</tr>
<tr>
<td>Education expenditures</td>
<td>-0.026*** (0.0049)</td>
<td>-0.026*** (0.005)</td>
</tr>
<tr>
<td>Employment</td>
<td>0.009* (0.005)</td>
<td>0.011** (0.005)</td>
</tr>
<tr>
<td>Cons</td>
<td>4.353*** (0.445)</td>
<td>4.318*** (0.549)</td>
</tr>
<tr>
<td>Individual effects</td>
<td>FE</td>
<td>RE</td>
</tr>
<tr>
<td>Number of observations</td>
<td>203</td>
<td>203</td>
</tr>
<tr>
<td>Fisher test for significance coefficients</td>
<td>F(5, 183) = 105.24 [0.0000]</td>
<td>F(5, 183) = 105.24 [0.0000]</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.742</td>
<td></td>
</tr>
<tr>
<td>Wald statistics</td>
<td></td>
<td>Chi2(5) = 479.58 [0.0024]</td>
</tr>
</tbody>
</table>

Notes:
1) compiled by the authors on the basis of research
2) *, **, *** – the significance of the coefficients at 10%, 5% and 1% levels, respectively;
3) FE – fixed effects, RE – random effects;
4) F-test for the significance of individual effects: F(14, 183) = 945.57, Prob > F = 0.0000;
Hausman test: Chi2(5) = -8.24, chi2<0

The second column of the table shows the results of the panel data model with fixed effects using the least squares method, and the third column shows the results of the panel data model with random effects using the least squares method.

Coefficients of the variables Life expectancy, Health expenditures, Education expenditures presented in Table 1 are significant at the 1% level. The coefficient of the variable Birth rate is significant at the 5% level, and the coefficient of the variable Employment is significant at the 10% level. According to the results, the evaluated panel data regression model with fixed effects is statistically significant, as evidenced by the rather high coefficient of determination $R^2 = 0.742$ and the Fisher test. In calculations for panel data with random effects, the Wald statistics Chi2 (3) serves as an indicator of the quality of the estimated models instead of the coefficient of determination. Its value given in Table 1 confirms the statistical significance of panel regression with random effects.

The F-test confirms the presence of individual effects. Since the set of countries included in the study is the same for all years, it is generally recommended to use a panel regression model with fixed effects. The Hausman test was performed, which confirmed the preference of using a panel data model with fixed effects over a panel data model with random effects.

The equation of the estimated model is as follows:

$$GDP_{it} = 0.066 \cdot Life\_expectancy_{it} + 0.062 \cdot Birthrate_{it} + 0.026 \cdot Health\_exp_{it} - 0.026 \cdot Education\_exp_{it} + 0.009 \cdot Employment_{it} + 4.353 + \varepsilon_{it}$$

As expected, increases in Life expectancy, Birth rate, Health expenditures and Employment contribute to economic growth. The result of econometric analysis showed that 1% increase in Health expenditures will lead to an increase in gross domestic product by 0.026%, and as a result of a 1%
increase in Life expectancy, GDP will increase by only 0.066%, and the estimates of the coefficients of these variables are significant at the level of 1%. Also, GDP will increase by 0.009% with 1% increase in Employment.

All these indicators reflect the quality of life and well-being of the population; as a result of the analysis of panel data, it can be concluded that social support measures from the state and measures aimed at ensuring employment of the population do not have the desired effect and contribute to economic growth to a very small extent.

A comparative analysis of macroeconomic and socio-political indicators testifies to the contradictions of economic development in Kazakhstan. So, according to the Committee on Statistics of the Republic of Kazakhstan and the World Bank, there is an increase in the value of GDP in 2020 compared to 1993 by 7.3 times, with a decrease in the value of the national currency against the US dollar by 63 times. Figure 1 reflects the gap in the dynamics of changes in the value of GDP and the price of the national currency.

Figure 1 – Dynamics of the value of GDP and the exchange rate of the national currency in Kazakhstan for 1993–2020

Note – compiled by the authors.

Figure 1 shows the outstripping rate of depreciation of the national currency, which reduces the real incomes of the country and the population – basic indicators of the quality of life in society. Under the influence of the volatility of oil prices, the national currency is getting cheaper, and during a pandemic it rapidly devalues, provoking an increase in the consumer price index for food, a decrease in the purchasing power of consumers, a drop in demand and bankruptcy of small, medium and large businesses. The following figure shows the interdependence of the tenge exchange rate and oil prices during the crisis years.

Figure 2 – Dynamics of the tenge exchange rate and oil prices during the crisis years

Note – compiled by the authors based on [15, 16].
Figure 2 shows that GDP growth rates directly depend on the level of oil prices. The rapid increase in oil price volatility was observed during the 2008 financial crisis, when the indicator fell by 36%, while the tenge fell by 22.5%. A similar situation was observed in 2015, when the fall in oil prices reached 54.5 percent, which resulted in the devaluation of the tenge by 91%. The COVID-19 quarantine crisis was accompanied by record drop in oil prices by 64% and 12.5% decline in the national currency. Having analyzed the dynamics of the GDP level during the crisis years, it can be concluded that dependence on oil prices impedes a stable proportional GDP growth. The decline in GDP primarily indicates a drop in entrepreneurial activity and a weakening of the economy [17].

Unfortunately, the requirements for limiting the volume of the article do not allow revealing a more complete picture of the problems of economic development in Kazakhstan.

Conclusion

To assess the degree of influence of factors reflecting the life quality of the population, a regression analysis of panel data was carried out. As a result of the econometric assessment, it was revealed that, in fact, an increase in these indicators has a small effect on economic growth. This result reveals a discrepancy between the target indicators of state programs and actual results.

Taking into account the peculiarities of Kazakhstan development as an emerging market country, it is important to define the principles of economic policy strategy and tactics.

First, we should refuse to “directly” copy the experience (not to be confused with the exchange of experience) of the historical prescription of other states. If Kazakhstan continues to move along the beaten path of more developed countries, it will remain in the rut of “always catching up with countries”.

Secondly, it is necessary to openly accept the challenges of modernity, the processes of globalization with all its internal contradictions and use the accumulated potential, including intellectual, own competitive capabilities, both in the system of production factors and in the system of economic relations.

Thirdly, it is necessary to overcome innovative passivity and take into account that economic growth is the ability of multiplicative growth of all sectors and spheres of the economy. So, if in countries of a developed market, innovative activity is increasing at the expense of satellite enterprises, on which new commercial products are tested, taking into account domestic and external demand, then in Kazakhstan in 30 years there is no single large competitive industrial production with a network of venture enterprises has been created.

Fourthly, when developing models of constructive actions, one should proceed not only from the language of numbers, but to a greater extent from economic logic, understanding of cause-and-effect relationships, social and economic dependencies. The growth of labor productivity should not lead to a reduction in free working time, a deterioration in the way of life due to excessive intensity and duration of work, discrimination against women and youth, or to demographic problems. Consumption growth should not burden future income if there are no prerequisites for stable employment and sustainable income growth.

Fifth, the priority factor of economic development in the conditions of modern technological transformation is knowledge and competence, the quality of the social environment. Decent education is an indicator.

REFERENCES


2 Balobanov A.E., Golubev S.V. Kachestvo zhizni-klyuchevoy parametr sovremennoy strategii mirovogo goroda [Quality of life is a key parameter of the modern strategy of the world city]. Doklady uchastnikov yubileynogo X Obscherosiyskogo foruma liderov strategicheskogo planirovaniya (17-18 oktyabrya 2011 g, Sankt-Peterburg). [Reports of the participants of the jubilee X All-Russian Forum of Strategic Planning Leaders (October 17-18, 2011y, St. Petersburg)], 2011. [in Russian].
Противоречия институционально-экономической среды развития новых рыночных стран: опыт Казахстана

Аннотация
Современный циклический переход, осложненный пандемией COVID–19, выявил слабые звенья в экономике многих стран, обусловленные накопленными за 30-летие системными противоречиями. Казахстан как страна, выстраивающая рыночные отношения лишь с конца XX века, оказался в тисках не только экономических и политических, но и институциональных издержек. Одной из проблем, сдерживающих экономическое развитие нации, являются противоречия между политическими амбициями власти и реальными результатами реализации государственных программ, потеря общественного доверия. Целью исследования является оценка качества экономического роста Казахстана. Предпринята попытка дать анализ институционально-экономической среды и эконоиметрическую оценку реальных показателей развития страны. Методологической основой стало научное наследие в данной области и новые теоретико-методологические подходы современных ученых в исследовании вопросов социально-экономического развития. Объект исследования — экономическое развитие Казахстана. Результаты исследования: на основе историко-логического анализа теоретико-методологических подходов к исследованию экономического развития и построенной регрессионной модели
панелдік тандау және панелдік дәректердің регрессиялық моделі негізінде ресми статистикада таңдалған іздеікштерден анықталған және дайындалған қосылымдар қосылған. Экономикалық жетілдірілген қазақстандық даму моделінің інституционалдық ерекшеліктері анықталды.

Тірек сөз: институционалдық-экономикалық орта, қасиет, нарық, экономика, экономикалық осу, елеуметтік тәсіл, омір сүру қызметі, ұлт.

М.С. ТУЛЕГЕНОВА,*
*е-mail: ms.tulegenova17@gmail.com
П. ГИЗЕ,*
*е-mail: t.giese@hszg.de
Ж.С. ТЕМЕРБУЛАТОВА,*
*е-mail: t.zhansaya.s@mail.ru
А.Ж. БАЙМУХАМЕТОВА,*
*е-mail: aifer-@mail.ru
1әл-Фараби атындағы Қазақ ұлттық университеті, Қазақстан, Алматы к.
2Циттау / Гёрлиц қолданбалы ғылымдар университеті, Германия, Циттау / Гёрлиц

ЖАҢА НАРЫҚТЫҚ ЕЛДЕР ДАМУЫҢЫҢ ИНСТИТУЦИОНАЛДЫҚ-ЭКОНОМИКАЛЫҚ ОРТАСЫНДАҒЫ ҚАЙШЫЛЫҚТАР: ҚАЗАҚСТАН ТӘЖІРИБЕСІ

Андатпа
COVID–19 пандемиясымен куралған қазіргі қаңтарға жұмыс бере жатқан мемлекеттердің экономикасында 30 жыл ішінде жинақталған жұмыс жасау қызметін қамтамасыз етіп, қазақстанның қызметін қамтамасыз етіп, қазақстандық экономика әлеуметтік-экономикалық мәселелерге көмек көрсетеді. Қазақстан экономикасындағы экономикалық қарсықтүрмәлік қорсеткіштері эконометриялық бастауларға ерекет келтіреді. Қазақстандық экономикасына қарсықтүрмәлік қорсеткіштері эконометриялық бастауларға ерекет келтіреді. Қазақстандық экономикасына қарсықтүрмәлік қорсеткіштері эконометриялық бастауларға ерекет келтіреді. Қазақстандық экономикасына қарсықтүрмәлік қорсеткіштері эконометриялық бастауларға ерекет келтіреді.