

Brief information about the project

Title	AP23488218 «Study the influence of oil revenues' distribution between accumulation and use for current purposes of the socio-economic development of Kazakhstan»
Relevance	Oil and other natural resources play a key role in the economy of Kazakhstan. In 2021, according to the World Bank (2023), oil rent (% of GDP) amounted to 14,8%. In 2022, energy exports accounted for 61% of all merchandise exports. Oil and gas revenues are accumulated in the National Fund of the Republic of Kazakhstan (NFRK), created in 2000 following the example of the Norwegian Pension Fund. The NFRK performs stabilization and savings functions. The problem lies in the distribution of oil revenues for current and long-term purposes, and their impact on the dynamics of socio-economic indicators of Kazakhstan in the context of external influences. Using funds for current purposes will reduce savings for future generations. However, it can increase the economic potential of the country, which will create more favorable socio-economic conditions in the future.
Goal	To study the impact of the distribution of oil revenues between accumulation and current goals on Kazakhstan's macroeconomic and social indicators in the face of adverse external influences.
Tasks	<p>1 Study of the efficiency of distribution of resource income for accumulation and use for the country's economic development.</p> <p>1.1 Studying the world experience of the influence of rich reserves of oil, gas and other resources on the socio-economic development of the country from the point of view of the so-called “resource curse”.</p> <p>1.2 Comparative analysis of the performance of sovereign wealth funds in oil and gas-producing countries.</p> <p>1.3 Carrying out a statistical analysis of the significance of oil revenues, their accumulation in the National Fund of Kazakhstan, and their use for current purposes of the country’s socio-economic development.</p> <p>1.4 Creation of a statistical database and their processing to model the impact of the distribution of oil revenues on the socio-economic development of Kazakhstan, preliminary assessment of the functional form of relationships between variables.</p> <p>2 Studying the impact of the distribution of oil revenues between accumulation and use for current purposes on Kazakhstan's macroeconomic and social indicators based on the dynamic stochastic general equilibrium (DSGE) model.</p> <p>2.1 Mathematical substantiation of the DSGE model of an open economy, considering oil production and the use of part of oil revenues for current purposes.</p> <p>2.2 Econometric estimation of parameters and calibration of the DSGE model using data from the economy of Kazakhstan.</p> <p>2.3 Model simulation to assess the responses of indicators to economic and technological shocks in the economy.</p> <p>2.4 Assessing the impact of the distribution of oil revenues between accumulation and use for current purposes on reducing the vulnerability of the country's economy from adverse external factors.</p> <p>3 A study of the impact of the distribution of oil revenues between accumulation and current goals on the socio-economic indicators of Kazakhstan based on the vector error correction model (VECM).</p> <p>3.1 Estimating long-term relationships between non-stationary time series of socio-economic indicators using the cointegration method.</p> <p>3.2 Construction of a vector error correction model to predict the behavior of socio-economic indicators.</p> <p>3.3 Comparative analysis of modeling and forecasting results under various scenarios for the distribution of oil revenues.</p> <p>3.4 Conclusions and recommendations for the distribution of oil revenues for accumulation and use for current purposes, indicating benefits and risks.</p>

Expected and Achieved Results	<p>- for 2024: a comparative analysis and statistical assessment of the efficiency of resource revenue distribution between accumulation and use for the country's economic development, a critical analysis of world experience on the impact of rich reserves of oil, gas and other resources on the country's socio-economic development, an analysis of the significance of oil revenues, their accumulation in the National Fund of Kazakhstan and use for current purposes of the country's socio-economic development. An article was published in the materials of the international conference.</p> <p>- for 2025: an assessment of the impact of oil revenue distribution between accumulation and use for current purposes on the macroeconomic and social indicators of Kazakhstan in the context of internal and external shocks was carried out based on the dynamic stochastic general equilibrium (DSGE) model, the responses of indicators to economic and technological shocks in the economy will be assessed based on the DSGE model simulation. An article was published in a journal recommended by the CQASHE MSHE RK.</p> <p>- for 2026: a vector error correction model will be built to predict the impact of the distribution of oil revenues between accumulation and current goals on the socio-economic indicators of Kazakhstan, recommendations will be developed on the distribution of oil revenues between accumulation and use for current purposes, indicating the benefits and risks for the economy of Kazakhstan. An article will be published in a journal recommended by the CQASHE MSHE RK, and an article in a peer-reviewed scientific publication indexed in the Social Science Citation Index and included in the 1st (first) or 2nd (second) quartile by impact factor in the Web of Science database and (or) having a CiteScore percentile in the Scopus database of at least 65 (sixty five).</p>
Names and Surnames of Research Group Members with Their Identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and Links to Corresponding Profiles	<p>1. Mukhamediyev Bulat Mintaevich – Head of the project, Doctor of Economic Sciences, Professor. Researcher ID P-5157-2014, Scopus Author ID 56069126000, ORCID ID https://orcid.org/0000-0002-1490-302X</p> <p>2. Khitakhunov Azimzhan Arsenovich – PhD. Researcher ID AAS-4417-2020, Scopus Author ID 57105557800, ORCID ID https://orcid.org/0000-0003-3455-563X</p> <p>3. Mukhamediyeva Aliya Bulatovna – Candidate of Economic Sciences. ORCID ID https://orcid.org/0000-0002-0359-6052</p> <p>4. Temerbulatova Zhansaya Serikovna – PhD. Researcher ID AAR-5264-2020, Scopus Author ID 57211475705, ORCID ID https://orcid.org/0000-0002-3205-0948</p> <p>5. Sabikenova Aidana Aidoskyzy – student. ORCID ID https://orcid.org/0009-0000-4493-6669</p>
Publications list with links to them	<p>1. Mukhamediyev, B., Khitakhunov, A., & Temerbulatova, Zh. (2025). Resource Curse and Dutch Disease: Economic, institutional, and social impacts in perspective. Eurasian Research Journal, 7(2), 115-133. https://doi.org/10.53277/2519-2442-2025.2-01</p> <p>2. Темербулатова Ж., Мухамедиева А., Сабикенова А. (2024). Статистический анализ роли нефтяных доходов в экономике Казахстана. Сборник статей XIII Международной научно-практической конференции «Научный исследования 2024», С. 46-52. https://drive.google.com/file/d/1WB_XM05j_IPCZFan8Ed4qebzjUwAR7nz/view?usp=sharing</p>
Patent information	-

