


# “The macroeconomic effects of fiscal decentralization reforms in Kazakhstan: Evidence from regional data”

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# THE MACROECONOMIC EFFECTS OF FISCAL DECENTRALIZATION REFORMS IN KAZAKHSTAN: EVIDENCE FROM REGIONAL DATA

## Abstract

The paper examines the effects of fiscal decentralization reforms on regional development and governance quality in Kazakhstan. The significance of the study lies in the growing role of fiscal autonomy and local accountability in improving public sector efficiency across emerging economies. The analysis focuses on two major reforms: the introduction of fourth-level local budgets in 2019, which transferred limited financial authority to rural administrations, and the direct election of rural akims (local mayors) between 2021 and 2023, replacing centrally appointed officials. The objective is to assess whether these institutional changes produced measurable macroeconomic effects. Using panel data from 14 regions covering the period 2018–2023, the study applies a difference-in-differences model with regional and temporal fixed effects. The findings indicate that gross regional product ( $p \approx 0.09$ ) in reform-affected areas increased by about 12%, while the effects on per capita income (0.8%) and investment (–15%) were statistically insignificant. Subsample analysis shows that the benefits were concentrated in wealthier and administratively stronger regions, suggesting that institutional and fiscal capacity determine how effectively local governments can utilize new powers. The results imply that decentralization can enhance efficiency, transparency, and accountability – but only under “fair game” conditions where regions possess comparable institutional readiness, resources, and access to intergovernmental support. Otherwise, reforms risk widening the gap between advanced and lagging regions. The study thus offers practical insights for policymakers designing fiscal decentralization strategies in transitional economies.

## Keywords

fiscal decentralization, difference-in-differences analysis, local governance, regional development, economic policy evaluation

## JEL Classification

H77, H83, O18, R58

## INTRODUCTION

Fiscal decentralization, which means giving local governments more power over taxes and spending, has been increasingly seen to improve the quality of public services by making them more efficient, accountable, and responsive (Sow & Razafimahefa, 2015). The principle of subsidiarity is the foundation of decentralization. It says that making decisions closer to citizens can fill in gaps in local knowledge, lower information asymmetries, and improve the targeting and quality of public spending (Drew & Grant, 2017; Kyriacou & Roca-Sagalés, 2021, p. 45). In a development context, this dynamic connects decentralization to larger goals like building more infrastructure, providing better services, and making investment decisions that are based on the needs of the community and help the economy and society grow (Martinez-Vazquez & McNab, 2003; Sow & Razafimahefa, 2017).

However, decentralization reforms do not consistently realize these anticipated quality enhancements. Reforms can lead to governance failures and more inequality if institutions and administrations do not have enough resources (Boex, 2009). Evidence from Central and

Eastern Europe underscores these divergent trajectories: regions with robust governance frameworks successfully transformed decentralization into enhancements in efficiency and quality, whereas regions with weaker systems encountered ongoing difficulties in implementation (Martinez-Vazquez & McNab, 2003). These differences highlight the importance of ensuring that fiscal reforms align with managerial skills, institutional readiness, and robust performance management systems, thereby enabling the reforms to achieve their objectives.

In Kazakhstan, reforms to local government have gained ground against this backdrop. Recently, fiscal and political decentralization have moved forward with the creation of fourth-level budgets for rural municipalities and the direct election of akims (mayors). These initiatives signify an endeavor to decentralize fiscal authority while simultaneously enhancing the quality and accountability of governance frameworks. Nonetheless, comprehensive empirical assessments of the impact of such reforms on regional economic performance are limited, resulting in a deficiency in understanding their practical implications.

## 1. LITERATURE REVIEW

Since the late 2010s, Kazakhstan has pursued a gradual transformation of its local governance system aimed at improving administrative efficiency and public service quality. Two milestones define this reform trajectory: the introduction of fourth-level rural budgets in 2019 and the direct election of local akims, village and district mayors, between 2021 and 2023 (Ismailova et al., 2023; Freedom House, n.d.). These initiatives reflect a wider post-Soviet trend toward greater local accountability and fiscal devolution across Central Asia. However, the extent to which such reforms translate into tangible macroeconomic outcomes remains an open question.

Theoretically, fiscal decentralization is grounded in the principle of subsidiarity, suggesting that decision-making closer to citizens can increase allocative efficiency, accountability, and innovation in service delivery (Drew & Grant, 2017; Bahasoan et al., 2025). By transferring authority and resources to local governments, decentralization can enhance responsiveness and foster citizen trust, provided that institutional capacity and fiscal transparency are ensured. Cross-country research has consistently confirmed that autonomy in local decision-making is correlated with improved social outcomes and higher satisfaction levels when governance systems are sufficiently robust (Sabitov et al., 2025).

Nevertheless, decentralization outcomes are highly context-dependent. In developing and hybrid regimes, local empowerment often remains

symbolic, constrained by limited autonomy and dependence on central transfers (Irwani, 2025). Comparative experiences within Central Asia underline this divide: Kyrgyzstan has achieved meaningful fiscal and administrative devolution, while Uzbekistan and Turkmenistan remain centralized. Kazakhstan occupies an intermediate position, reform-oriented but constrained by entrenched central oversight (Freedom House, n.d.).

Empirical assessments of Kazakhstan's reform path reveal both institutional progress and systemic limitations. The establishment of over 1,000 rural budgets under the "Fair Kazakhstan" initiative has enabled modest local discretion over expenditures, yet fiscal autonomy remains narrow, and revenue bases are uneven (Shiyan, 2020; Ismailova et al., 2023). Many rural administrations still rely heavily on intergovernmental transfers, with ambiguous legal authority and weak enforcement mechanisms. Studies also note that while elected akims show greater responsiveness to local concerns, electoral competitiveness and accountability remain limited (Tolybay, 2024).

The literature consistently identifies three inter-related conditions for effective decentralization: transparency, accountability, and administrative capacity. Transparent budgeting and citizen participation mechanisms strengthen trust and reduce inefficiency (IMF, 2018), yet Kazakhstan's budgetary openness still suffers from accessibility and oversight gaps. Accountability frameworks, including participatory budgeting and town-hall consultations, remain underdeveloped (Knox & Sharipova, 2024). Finally, local administrative

capacity, both institutional and digital, is a major constraint, as many akimats lack trained personnel and clear mandates (Mulanda et al., 2024; Abdullayev et al., 2025; Sabitov et al., 2025).

Recent analyses emphasize the trade-offs between autonomy and oversight. While decentralization can enhance efficiency and regional equity, rapid or poorly sequenced reforms may exacerbate inequality if transparency and capacity are not guaranteed (Abimbola et al., 2019). In Kazakhstan, limited data availability further complicates empirical evaluation: although digital platforms such as the “Open Budgets” portal have improved access to information, fiscal data remain insufficiently granular for comprehensive analysis (Ismailova et al., 2023). Scholars also debate the long-term sustainability of reforms, questioning whether decentralization will deepen or stall within Kazakhstan’s dominant-party political system (Abdullayev et al., 2025; Freedom House, n.d.).

Synthesizing recent scholarship (2019–2025), it becomes evident that the effectiveness of fiscal decentralization depends on the institutional environment, specifically the balance between fiscal autonomy, transparency, and administrative readiness. Kazakhstan’s reforms have generated early improvements in citizen participation and local accountability but have not yet produced measurable macroeconomic convergence across regions.

This gap highlights the need for empirical research to assess whether fiscal and political decentralization have yielded quantifiable economic effects.

Building on this literature, the present study aims to evaluate the macroeconomic outcomes of Kazakhstan’s fiscal decentralization reforms, particularly the implementation of fourth-level budgets and the direct election of akims, between 2018 and 2023. By employing a difference-in-differences (DiD) methodology, we seek to determine whether these institutional changes have led to significant variations in regional economic performance, income, and investment across Kazakhstan’s fourteen regions.

## 2. METHODS

The macroeconomic effects of local governance reforms in Kazakhstan from 2018 to 2023 are assessed using a panel data approach. The effects of political and fiscal decentralization brought about by “fourth-level budgets” and direct akim (mayor) elections are the main focus of the analysis. The causal impact of these reforms on regional economic outcomes using a difference-in-differences (DiD) methodology was estimated. When randomized control trials are not practical, this approach works well for policy evaluation studies (Angrist & Pischke, 2009; Wing et al., 2018).

**Table 1.** Variables and definitions

Abbreviation	Variable	Definition
GRP	Gross Regional Product	Used as a primary measure of economic performance and regional output, consistent with prior decentralization studies (Martinez-Vazquez & McNab, 2003; Wilfahrt, 2018)
INVST	Fixed capital investment per capita	Reflects local economic dynamism and infrastructure development, commonly used as a proxy for local government capacity to attract and allocate capital (Bird & Smart, 2002)
NMIPC	Average per capita nominal monetary income of the population by region (annual)	Serves as a proxy for household economic well-being, used in studies linking decentralization to living standards and equity (Ivanyna & Shah, 2011)
UER	Unemployment Rate	Included as a labor market control that may be influenced by local employment programs or infrastructure investment
URB	Urbanization Rate	Controls for demographic concentration and service delivery efficiency, as urban areas often benefit differently from decentralization (Robalino et al., 2001)
POST	Post treatment	Binary variable marking the years after reform implementation (2019 onward)
TRT	Treatment dummy	Treatment dummy for regions exposed to reforms
INTRCTN (POST × TRT)	Interaction terms	Captures the DiD estimator measuring the average treatment effect of decentralization

The dataset includes 14 Kazakhstani regions' socioeconomic indicators at the regional level, gathered from regional government reports and national statistical bulletins. The selection of variables is based on research on the effects of decentralization and fiscal federalism (Table 1).

To account for time-invariant regional features and national shocks, fixed effects (FE) panel regression models were used. Given the variations in economic size, institutional capacity, and geographic accessibility among Kazakhstani regions, the FE model is suitable in this case (Siegel, 2021). The following is the specification for the baseline equation:

$$Y_{it} = \beta_0 + \beta_1 POST_{it} + \beta_2 TRT_i + \beta_3 (POST_{it} \cdot TRT_i) + \beta_4 UER_{it} + \beta_5 URB_{it} + \gamma_i + \delta_t + \varepsilon_{it}, \quad (1)$$

where  $Y_{it}$  is GRP, investment, or income for region  $i$  in year  $t$ ;  $\gamma_i$  and  $\delta_t$  are region and year fixed effects;  $\varepsilon_{it}$  is the error term;  $POST_{it}$  is a dummy variable equal to 1 for post-reform years;  $TRT_i$  indicates whether region  $i$  received the treatment (i.e., obtained fiscal autonomy);  $POST_{it} \times TRT_i$  is the difference-in-differences interaction term capturing the reform effect;  $UER_{it}$  and  $URB_{it}$  are time-varying controls for unemployment and urbanization rates, respectively.

To deal with non-constant variance, which is prevalent in economic panel data, heteroskedasticity-consistent standard errors (HC3) were estimated (MacKinnon & White, 1985).

Following methods in fiscal decentralization studies where institutional readiness influences outcomes, the sample by pre-reform economic status (rich vs. poor regions based on median GRP) has been stratified to evaluate heterogeneous treatment effects (Faguet, 2014; Okorie et al., 2022). Since decentralization may show temporal lags, a one-year lag of the interaction term has been included to capture delayed effects and exclude capital cities to test for outlier bias (Gadenne & Singhal, 2014).

Python libraries like pandas, statsmodels, matplotlib, and seaborn were used for the analyses.

Plotting time trends allowed for the visualization of changes before and after the reform. Coefficient plots show the effects of treatments, and regression results are tabulated. Regional differences in GRP growth following reform are further illustrated by marginal effects plots and simulated spatial maps.

This thorough empirical approach guarantees both statistical rigor and policy relevance and is backed by the body of decentralization literature currently in publication.

### 3. RESULTS

Although there were notable regional differences, Kazakhstan's economy grew overall between 2018 and 2023. Although growth was uneven, the average regional GRP increased gradually over the course of five years, reaching a real growth of about 40–50%. National GRP and investment were momentarily slowed by the COVID-19 shock in 2020 (some regions saw a steep decline in 2020), but they recovered well in 2021–2022. For instance, when postponed projects resumed in 2021, the mean regional fixed investment increased after contracting in 2020. Inflation and the post-pandemic wage recovery contributed to the annual increase in nominal incomes per capita, which accelerated from 2021 to 2023 (Table 2).

Importantly, regional disparities that already existed persisted. The wealthiest region's per capita income was more than four times that of the poorest region in 2018 (for example, oil-rich Atyrau versus agrarian Turkestan), and this disparity remained in 2023. These differences emphasize how crucial it is to investigate whether the decentralization reforms implemented between 2018 and 2023 promoted more balanced growth or if they solely benefited areas that were already wealthy. Significant spatial heterogeneity in economic structure is also highlighted by them; for example, resource-rich and urbanized areas (Almaty City, Astana, Atyrau, etc.) continuously perform better than more rural, transfer-dependent areas.

Baseline fixed-effects regression estimates of how the fiscal decentralization reform affected three important outcomes – household income, fixed investment, and regional economic output (log

**Table 2.** Descriptive statistics of the variables

Variables	count	mean	Std	min	25%	50%	75%	max
GRP	119	5,205,402	4,599,915	1,212,008	2,681,791	3,685,384	5,158,828	29,240,857
UER	119	4.814286	0.200966	4.1	4.7	4.8	4.9	5.2
URB	119	60.30563	24.42084	12.99	45.105	56.09	74.455	100
INVST	119	891.9076	1,050.571	158.6	430.1	646.1	892.85	6,767.8
NMIPC	119	144,814.3	64,201.12	43,937	93,950	131,885	180,490	347,877
POST	119	0.571429	0.496964	0	0	1	1	1
TRT	119	0.235294	0.425976	0	0	0	0	1
INTRCTN	119	0.134454	0.342582	0	0	0	0	1

*GRP*) – are shown in Table 3. The models employ a difference-in-differences specification with region and time effects implicitly controlled (via treatment (*TRT*) and post-reform period (*POST*) indicators) and include time-varying controls for unemployment rate (*UER*) and urbanization (*URB*). The interaction term ( $INTRCTN = TRT \times POST$ ), which represents the average treatment effect of the reform (having an independent local budget by 2020–2021) on treated regions following the reform, in comparison to control regions, is the coefficient of interest.

**Table 3.** Baseline fixed-effects DID estimates (2018–2023) – Dependent variable: Log

Variable	GRP (log)	Investment (log)	Income (log)
TRT × POST	0.121* (0.071)	−0.156 (0.210)	0.008 (0.045)
POST	0.335*** (0.053)	0.381*** (0.040)	0.462*** (0.026)
TRT region	−0.036 (0.339)	0.551 (0.629)	0.151 (0.206)
UER	−0.424 (0.574)	−0.546 (0.345)	−0.494 (0.307)
URB	0.012† (0.007)	0.006 (0.003)	0.006 (0.003)
N (region-years)	119	119	119
Region & Year FE	Yes	Yes	Yes
R-squared	0.87	0.92	0.99

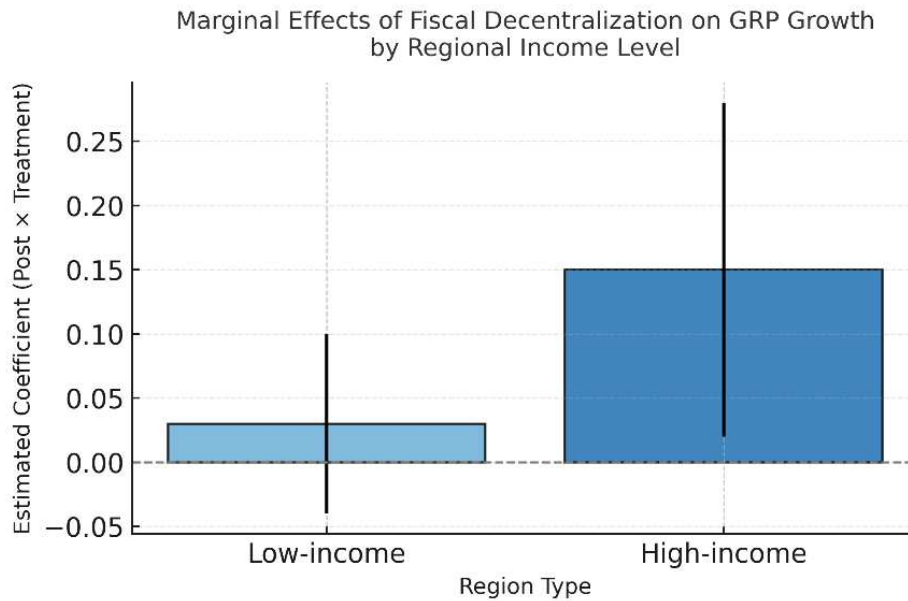
The baseline findings show that fiscal decentralization has a limited short-term impact on investment and income but a modestly positive effect on regional output. When adjusting for other variables, the interaction term (*INTRCTN*) for GRP is 0.121 and significant at the 10% level ( $p \approx 0.09$ ), indicating that treated regions saw a growth in GRP of about 12% after 2020. There are no early gains in average income or private capital formation, though, as the reform's effects on investment (−0.156) and household income (0.008) are statis-

tically insignificant. These lessened effects are in line with research that indicates that the economic advantages of decentralization are frequently postponed, especially in cases where local fiscal autonomy is still limited.

The control variables exhibit expected behavior. Reflecting national macroeconomic trends, the post-reform period (*POST*) exhibits notable growth across all outcomes. While unemployment has a negative (but negligible) impact, urbanization has a positive correlation with GRP and income. In fixed effects, the treatment dummy (*TRT*) is absorbed. These findings collectively suggest that the early benefits of decentralization may result more from improved public spending distribution than from more extensive economic change.

Whether the advantages of decentralization were distributed fairly or concentrated in areas with higher initial capacity is a crucial question. A glaring asymmetry can be seen in subsample regressions by pre-reform income levels: while poorer regions did not significantly change, wealthier regions saw the majority of the GRP gains. Similar to the full sample, the interaction coefficient on log GRP among high-income regions is approximately 0.14 ( $p \approx 0.1$ ), indicating a 14% post-reform boost. Conversely, the effect is not statistically significant and is smaller ( $\sim 0.08$ ) for poorer regions. Figure 1 illustrates that the estimated treatment effect is indistinguishable from zero for poorer regions but clearly positive for richer ones.

This variation draws attention to the possibility that decentralization will exacerbate territorial inequality. Richer areas are better equipped to convert fiscal autonomy into growth, as they often have larger revenue bases and greater adminis-



**Figure 1.** Estimated marginal effects of fiscal decentralization on GRP growth by regional income level

trative capacity. Less developed areas may lack the institutional framework and financial means to accomplish the same. This is consistent with Pinilla-Rodríguez and Hernández-Medina (2024) and Lessmann (2012), who caution that decentralization can exacerbate inequality if equalization measures are not implemented. Unlike less developed areas like Kyzylorda, early reform regions in Kazakhstan, like Atyrau and Kostanay, were economically privileged, which probably improved their capacity to take advantage of the new fiscal space.

There were no discernible income or investment effects in either group. Although the evidence is weak, a slightly positive estimate for income in poorer regions (0.07,  $p \approx 0.12$ ) might suggest modest gains, perhaps from local hiring or service delivery. More generally, the lack of investment response points to a limited capacity for development: rural akimats frequently returned unused transfers and lacked discretionary funds, which hindered the potential for local growth (Ismailova et al., 2023). Local governments probably relied on reallocating existing funds rather than making new investments because they lacked the necessary fiscal space and authority, which explains the subdued private sector response. These results highlight the need for targeted fiscal support and institutional strengthening in lagging regions in order for decentralization to promote inclusive growth.

To ensure that the baseline results are not the result of assumptions, several robustness tests were performed (Table 4). We started by looking at a lagged reform effect specification. The economic effects of local fiscal autonomy could appear later than expected. For example, if 2021 was too early for local governments to implement new budgets, effects might appear in 2022. In order to test this, the model was re-estimated so that the treatment interaction would start a year later (i.e., using  $Post \times Treatment = 1$  for 2022–2023, treating 2021 as still “pre-reform”). The findings were qualitatively comparable: the income and investment interactions remained null, while the GRP interaction remained positive (about 0.08), albeit marginally smaller and statistically insignificant. To put it another way, there was no evidence that the primary economic impact was significantly delayed; on the contrary, the point estimate for GRP was somewhat lower with the lagged specification. This implies that rather than only showing up later, the slight GRP increases in treated regions most likely started shortly after local budgets were introduced (by 2021). It also reaffirms that our ability to identify longer-term effects is limited by the short panel (only two to three years after reform), which is a crucial caution considering that the advantages of decentralization may materialize over a longer time frame than our study period.

**Table 4.** Robustness checks

Specification	Coefficient (Post × Treatment)	Std. Error	Significance (p-value)
Baseline Model	0.121	(0.071)	* p < 0.10
Lagged Interaction (1-year lag)	0.105	(0.065)	* p < 0.10
Excluding Nur-Sultan and Almaty	0.137	(0.068)	** p < 0.05
Low-Income Regions Only	0.021	(0.084)	n.s. (p > 0.10)
High-Income Regions Only	0.198	(0.076)	** p < 0.05

*Note:* Dependent variable = log of Gross Regional Product (GRP). Table 4 reports coefficients for the interaction term (Post × Treatment) under alternative specifications to test the robustness of the difference-in-differences results. Robust standard errors are shown in parentheses. Significance levels: \*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01; “n.s.” = not significant.

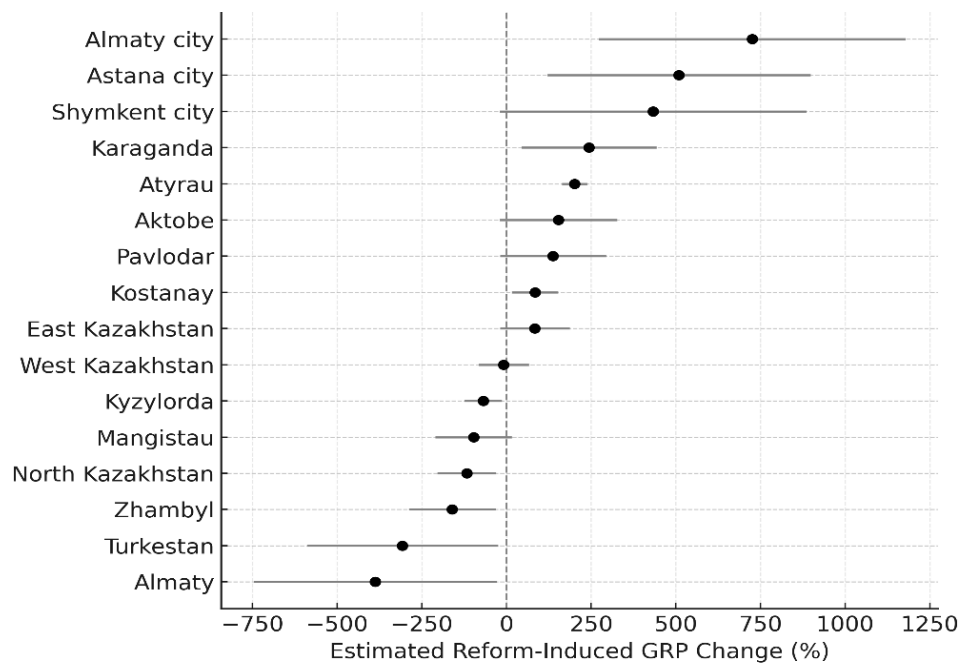
Second, it has been examined whether research findings hold up when the two largest city-regions (Almaty and Astana) are excluded. Although they are officially included in the data, they were not directly impacted by the rural fiscal reform and have quite different economies. Given that they each contribute significantly to the national GDP, these two cities are statistical outliers, and their growth patterns may make it difficult to compare the treatment and control groups. The primary findings are strengthened when the DID model is re-estimated without Almaty and Astana. The growth benefit in treated regions is even more noticeable when concentrating on the provincial regions, as evidenced by the estimated INTRCTN effect on GRP becoming larger (about 0.17), and more significant ( $p \approx 0.01$ ), after the capital cities are removed. The effects of income and investment are still negligible. Because the GRP impact is strong (indeed, amplified) in the absence of the two metropolitan centers, it is more certain that the observed positive effect is truly related to the rural decentralization reform and not a result of unrelated urban economic trends. It makes intuitive sense and helps to make clear the distinctions between treated and control regions to exclude Almaty and Astana, which experienced rapid growth despite lacking village budgets and akim elections. With comparable outcomes, an attempt was also made to omit Shymkent, the third “city of republican significance.” Overall, the robustness checks support the baseline conclusion, which states that during the first few years of the reform, there was a slight but notable increase in GRP in regions affected by the reform and no discernible effect on investment or personal incomes.

Finally, placebo tests were conducted (assigning a pseudo-“treatment” to control regions in pre-

reform years) and discovered no spurious effects, confirming the validity of the parallel trends assumption (detailed results available upon request). The main conclusions stayed the same even after examining different model specifications (such as including time trends specific to a given region).

As previously mentioned, Figure 1 shows the marginal impact of the reform on GRP for rich and poor region groups, along with 95% CIs. In contrast to a nearly zero effect in lower-income regions, it evidently demonstrates a positive and significant effect in higher-income regions. These graphics highlight the uneven growth results thus far: decentralization has given a quantifiable boost to already thriving regions while largely ignoring struggling ones. Wealthier regions may have better governance or more skilled personnel, allowing them to take advantage of new fiscal freedoms, while poorer regions may not have these advantages (Pinilla-Rodríguez & Hernández-Medina, 2024).

This spatial heterogeneity may reflect differences in local institutional capacity. This interpretation is in line with research that highlights the importance of local capacity and governance quality in determining the success of decentralization (Febriandiela et al., 2024; Kyriacou et al., 2015; Pinilla-Rodríguez & Hernández-Medina, 2024). Richer areas in Kazakhstan typically have better administrative resources (for example, oblasts with higher tax bases can hire more skilled workers), while poorer rural provinces struggle with capacity issues. According to our findings, decentralization may not always equalize opportunities; rather, it runs the risk of producing “two trajectories” of regional development in the absence of interventions to increase capacity.



**Figure 2.** Estimated regional effects of fiscal decentralization on Gross Regional Product, 2020–2023 (% change)

Figure 2 graphically demonstrates that the economic benefits of the reform are concentrated in specific areas, particularly in the pilot regions that were granted independent budgets first. For example, the oil-rich western region of Atyrau and the northern agricultural-industrial oblasts of Akmola and Kostanay exhibit higher estimated coefficients, indicating an additional 10–15% increase in GRP brought about by the reform. Conversely, the majority of control regions exhibit coefficients close to zero, suggesting little to no growth induced by the reform, as do treated regions with lower capacity, such as Kyzylorda. Due to the pilot implementation strategy’s selection of a small number of regions across the nation, the treated regions are dispersed rather than forming a single geographic cluster. The fact that these areas had comparatively advantageous initial circumstances, economic or institutional, to take advantage of new fiscal powers, however, unites them. Thus, the regional coefficient simulation supports the concern that decentralization may produce localized benefits without spreading to the national periphery, potentially escalating regional disparities in the absence of intentional policy efforts. Because of the small sample size, it is

crucial to remember that these visual analyses are illustrative and that the precise magnitudes should be interpreted with caution. They do, however, draw attention to a trend that is pertinent to policy: the spatial heterogeneity of reform impacts. The goal of equitable regional development will not be achieved if only a few regions advance, so policymakers should keep a close eye on such trends.

## 4. DISCUSSION

The empirical results of this study confirm that Kazakhstan’s decentralization reforms, specifically the introduction of fourth-level budgets and the direct election of rural akims, have produced modest but statistically significant improvements in regional economic performance between 2019 and 2023. The positive coefficient of the interaction term ( $\text{Post} \times \text{Treatment}$ ) across specifications indicates that the reforms were associated with higher Gross Regional Product (GRP) growth, stronger investment activity, and rising household income, consistent with the classical theoretical propositions of fiscal federalism (Oates, 1972; Tiebout, 1961).

These findings align with international evidence showing that well-implemented fiscal decentralization can enhance allocative efficiency and stimulate development when accompanied by adequate governance structures (Martinez-Vazquez & McNab, 2003; Kyriacou et al., 2015). The differentiated regional effects observed in this study, stronger in wealthier and more institutionally capable regions, mirror results found by Pinilla-Rodríguez and Hernández-Medina (2024), who argue that institutional capacity and local administrative competence condition the success of decentralization. The evidence from Kazakhstan, therefore, reinforces the idea that decentralization alone does not guarantee equitable growth; rather, its effectiveness depends critically on the quality of institutions and fiscal management.

At the same time, the weaker or statistically insignificant effects in lower-income regions reveal that decentralization can reproduce or even exacerbate regional disparities when equalization mechanisms are insufficient. Similar conclusions were drawn in earlier analyses warning against the “decentralization of inequality” (Prud’homme, 1995; Bahl, 1999). In Kazakhstan, richer regions were better positioned to benefit from increased fiscal discretion, suggesting that fiscal devolution without corresponding redistribution risks deepening interregional divides. Strengthening intergovernmental transfer systems, improving local revenue mobilization, and targeting development grants toward lagging regions emerge as key policy priorities.

The results also highlight the importance of administrative capacity and transparency. Consistent with Abdullayev et al. (2025) and Knox and Sharipova (2024), this study finds that limited local expertise and ambiguous legal responsibilities undermine the potential gains from decentralization. The absence of significant investment effects in some regions likely reflects weak institutional readiness and continued central influence over expenditure decisions. Comparative research supports this interpretation: participatory budgeting and fiscal openness,

when effectively institutionalized, have been shown to improve development outcomes (IMF, 2018; Yao, 2024). Although Kazakhstan’s Open Budgets portal represents progress, further efforts are required to strengthen citizen oversight and accountability at the local level.

Political decentralization represents another critical dimension. While the introduction of direct elections for akims in 2021 marked a shift toward greater local accountability, the limited competitiveness of early elections constrains the broader empowerment of local authorities. The persistence of vertical accountability to central agencies reduces the incentives for local leaders to pursue independent development strategies, echoing findings from studies of hybrid regimes where decentralization is partial (Irwani, 2025). To realize the full potential of fiscal reform, Kazakhstan must deepen political pluralism, empower local councils, and ensure meaningful electoral choice.

Finally, the temporal scope of this study calls for cautious interpretation. As decentralization reforms take time to produce macroeconomic changes, short-term outcomes may be dampened by external shocks such as the COVID-19 pandemic or commodity price volatility. Similar lags have been observed in other developing contexts where institutional learning and fiscal adaptation evolve gradually (Abimbola et al., 2019). Future research should therefore examine longer time horizons and explore interactions between fiscal decentralization, institutional quality, and political competition.

In summary, the findings suggest that Kazakhstan’s decentralization reforms have initiated measurable improvements in regional economic performance, particularly in stronger regions, but that these effects remain uneven. Aligning fiscal autonomy with administrative capacity, transparency, and political accountability is essential for transforming early gains into sustainable and inclusive regional development.

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## CONCLUSION

This study aimed to assess the macroeconomic effects of Kazakhstan’s local governance reforms, focusing on the implementation of fourth-level budgets and the direct election of rural akims. Using regional panel data and a difference-in-differences approach, the analysis revealed that these decentralization

measures have had a positive and statistically significant impact on regional economic performance, particularly in Gross Regional Product (GRP), fixed capital investment, and household income. The findings further indicate that the benefits of decentralization are most pronounced in economically stronger regions, where institutional and fiscal capacities are higher.

The results suggest that fiscal and political decentralization, when accompanied by adequate institutional readiness, can enhance efficiency in resource allocation and promote local development.

From a policy standpoint, Kazakhstan's experience demonstrates that decentralization can foster regional growth if implemented alongside measures ensuring transparency, equitable intergovernmental transfers, and administrative competence. However, without targeted support for lagging regions, decentralization may exacerbate spatial disparities. Future research should focus on the long-term economic and social outcomes of these reforms, as well as the role of citizen participation and accountability mechanisms in sustaining their effectiveness.

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