UDC 336.74:336.22
DOI https://doi.org/10.32782/2312-7872.3.2026.30

Yurii Khrushch
PhD Student,
Lesya Ukrainka Volyn National University
ORCID: https://orcid.org/0009-0003-1790-3855

INSTITUTIONAL CAPITAL AND FISCAL CAPACITY IN OVERCOMING DISBALANCES: EVIDENCE FROM ESTIMATED EQUATIONS

Abstract. *This article investigates the role of institutional capital and fiscal capacity in overcoming macroeconomic disbalances during post-conflict recovery in Ukraine. We evaluate the impact of institutional and fiscal effectors on macroeconomic stabilisation and derive policy proposals from our dynamic models. Literature treats institutional quality as an endogenous variable, difficult to operationalise for medium-term policy. We extract institutional capital as a latent principal component from observable indicators, introducing it into a nonlinear autoregressive distributed lag model with an error correction term. The novelty lies in quantifying the delay between institutional changes and macroeconomic responses. Factor analysis reveals that institutional capital quality (PC5) explains 6.9 % of the variance, whereas state fiscal capacity (PC2) explains 14.6 %. Despite its smaller share, PC5 emerges as a central driver of real GDP growth. Our estimation demonstrates that PC5 at a two-year lag has a significant positive coefficient on real GDP growth (+5.7799). This lets us claim that institutional reforms yield macroeconomic dividends with a two-year delay. The marginal return of the GDP growth circuit to PC5 is +2.64, second only to structural modernisation. The model reveals a trade-off, since institutional capital enters the trade balance and inflation circuits negatively. Conversely, the fiscal capacity component exhibits limited aggregate effectiveness, yielding marginal returns of −0.50 on inflation and −0.34 on investment, while exerting a neutral effect on GDP growth. This indicates that an aggressive fiscal-capacity push alone cannot serve as the primary lever for recovery. The practical significance materialises in three proposals: creating an "institutional oasis" regime for service exporters with arbitration under European Union law, implementing a netting procedure for tax liabilities alongside digital administration of value added tax, and adopting the Markets in Crypto-Assets Regulation and the Organisation for Economic Co-operation and Development Pillar Two rules. These interventions raise institutional quality and fiscal efficiency for the fastest-responding segments, securing stabilisation without exhaustive nationwide reform.*

Keywords: *macroeconomic disbalances, institutional capital, fiscal capacity, post-conflict recovery, distributed lag model, tax administration, state capacity.*

Problem statement. Economic recovery demands mobilising resources while enforcing rules. Models identify institutional quality as the determinant of prosperity. Since stabilisation programmes rarely use institutional variables, this omission is acute in transitional economies; so we address this directly.

For Ukraine, resolving disbalances means generating fiscal space without suppressing private initiative; so we argue that the state must manage between funding recovery and taxation that drives capital underground. Here we estimate specific delays of policy interventions, deriving our recommendations from our equations.

For the purposes of this study, institutional capital and fiscal capacity must be distinguished analytically. The former concerns the credibility and implementation of economic rules; the latter concerns the ability to mobilise and administer public revenue. A higher tax burden cannot, by itself, be treated as evidence of better administration. The comparative framework of the OECD examines administrative, operational and organisational practices alongside revenue-related indicators [10]. Accordingly, the policy question is not simply how to collect more resources, but how to strengthen public capacity without undermining the private activity on which sustainable revenue depends.

Measurement creates a second difficulty. Governance indicators aggregate heterogeneous sources and explicitly report uncertainty, reflecting the difficulty of observing institutional quality directly [8]. In this article, principal components provide a compact representation of related effectors, but their interpretation remains conditional on the underlying indicators and their loadings. Moreover, a component explaining a large share of statistical variation need not have the largest association with growth, investment or external adjustment. Separating variance explained from macroeconomic relevance is therefore essential to the research problem.

The application to Ukraine also requires a distinction between the timing of institutional change and the timing of an observed macroeconomic response. The study asks whether institutional and fiscal components

© Yurii Khrushch, 2026
Стаття поширюється на умовах ліцензії відкритого доступу (CC BY 4.0)

enter different equations with different signs and lags, and whether these patterns suggest complementary or competing policy priorities. International recovery episodes are used as a comparative benchmark, not as an assumption that post-crisis and post-war conditions are identical. The resulting estimates are interpreted as conditional model-based relationships. They can inform the sequencing of policy proposals, but they do not establish that a specific legal or administrative reform will mechanically generate the estimated change in a latent component.

Analysis of recent research and publications. Acemoglu and Robinson argue that prosperity is governed by inclusive economic rules [4, p. 74], and Roubini and Sachs place taxation at the foundation of statehood [14, p. 109; 16, p. 10], and governance indicators capture state effectiveness [8, p. 4]; yet Rodrik objects that such indices are endogenous and slow-moving [13], making them poorly suited for policy [12, p. 3]. Recent studies delineate taxation limits [5, p. 224; 6, p. 5], alongside cross-border complexities [10, p. 21; 11, p. 15]. Since existing models assume away temporal delays between reform and outcomes, we conceptualise institutional quality as a dynamic, actionable variable; its dividend materialises with a structural lag.

The positions we build on split along a measurement line. Acemoglu and Robinson read long-run prosperity as the outcome of inclusive political and economic rules that constrain elite expropriation, and their account is historical rather than dynamic, so the mechanism linking one particular reform to one particular year of output growth stays implicit [4, p. 74]. Roubini and Sachs, working on deficits in industrial countries, treat the ability to tax and to consolidate as an expression of the underlying political settlement, which turns fiscal outcomes into observable traces of institutional strength [14, p. 109]. The fourth damage and needs assessment applies that logic to Ukraine, costing reconstruction against an administrative capacity that has itself been damaged [16, p. 10]. Kaufmann, Kraay and Mastruzzi then supply the instrument, aggregating perception-based sources into governance indicators with reported margins of error [8, p. 4].

Rodrik's objection is the one we take most seriously. He argues that aggregate governance indices are endogenous to growth itself and shift too slowly to guide a medium-term programme, and that the functions which matter – secure property rights, regulatory quality, conflict management – are delivered by very different institutional forms in different countries [13]. His earlier statement of the same argument puts the practical question plainly: a reformer needs to know which institutional function to buy first, not a composite score [12, p. 3]. We accept that diagnosis and draw the opposite methodological conclusion. Rather than importing an index, we extract institutional quality as a latent component from annual effectors observed inside a cluster of episodes that did stabilise, and we let the estimation assign the timing instead of fixing it by assumption. Our improvement is thus not a new theory of institutions but a change in how an institutional variable enters a dynamic policy model.

The fiscal side of the discussion is structured differently. Calomiris examines the conditions under which fiscal dominance returns and unremunerated reserve requirements begin to work as an implicit levy on the banking system, which sets a ceiling on how much a fiscally weak state can extract before intermediation suffers [5, p. 224]. Cerovic, Gerling, Hodge and Medas build early-warning models for fiscal crises and show that the indicators predicting distress in emerging economies are not those that predict it in advanced ones [6, p. 5]. The administrative layer of the same problem appears in the comparative review of tax administrations, where filing burden, digital services and compliance cost separate collection capacity from statutory rates [10, p. 21], and in the country survey for Ukraine, which ties revenue performance to administrative modernisation rather than to higher rates [11, p. 15]. Global minimum taxation adds an external constraint that a small open economy cannot legislate away [9, p. 8].

Research objective. Here we evaluate the impact of institutional capital and fiscal capacity on macroeconomic adjustment and derive policy proposals for Ukraine.

Presentation of the main research material.

Theoretical design and methodology. While standard stabilisation programmes focus on monetary tightening and fiscal consolidation, treating institutions as exogenous [13], institutional rules dictate incentives for investment and tax compliance [4, p. 74], and fiscal capacity reflects the social contract [14, p. 109]; we thus treat institutional quality as a latent variable extracted from observable effectors, and within our distributed lag specification, we estimate the delay between structural reform and macroeconomic response rather than assuming it away [12, p. 3]. This alters the result entirely.

Using annual data from fifty recovery episodes [1; 2, p. 36; 3; 15, p. 236], we apply Ward's clustering to identify adjustment trajectories based on nine standard disbalance indicators [15, p. 236]. Principal component analysis extracts five latent components explaining 68.8 % of total variance from thirty-two effectors. State fiscal capacity (PC2) has an eigenvalue of 4.66, covering 14.6 % of variance, while institutional capital quality (PC5) possesses an eigenvalue of 2.21, explaining 6.9 %. Though it is the

smallest share, we read this as making its macroeconomic significance striking. We note a limitation: since the minimum per-indicator Kaiser-Meyer-Olkin measure stands at 0.273, this indicates weak representation for several effectors.

The first stage deserves more detail than a summary allows. We standardised the nine disbalance indicators before clustering, because they mix percentage rates, ratios to gross domestic product and a reserve-adequacy measure expressed in months of imports, and we used the Euclidean metric with Ward's linkage across fifty recovery episodes [15, p. 236]. Partition quality guided the choice of the group count: the silhouette coefficient rises from 0.134 at three groups through 0.162 and 0.176 to 0.196 at six, then falls to 0.192 at seven, so we retained six clusters. The cophenetic correlation of 0.735 is moderate, and agreement with a k-means partition of the same data reaches 56 %. The benchmark group is cluster 4 with eleven episodes, whose mean profile combines real growth of 5.78 % with gross capital formation at 19.18 % of gross domestic product and reserves covering 5.73 months of imports.

Factor extraction then ran on the successful cluster alone, over a window of five years before and fourteen years after the onset of each episode, giving 220 observations on 32 effectors with 5.3 % of values interpolated. We applied principal components with orthogonal Varimax rotation, which keeps the retained components uncorrelated and so allows the marginal returns in Table 1 to be read one component at a time. Sampling adequacy is acceptable in aggregate at 0.710, and Bartlett's test of sphericity rejects the identity correlation matrix, with a chi-squared statistic of 18 411.6 on 496 degrees of freedom and p below 0.001. The Kaiser criterion would keep nine components; we retained five, covering 68.8 % of total variance. For Ukraine the sample is 28 annual observations for 1996–2023 with 24 first differences and 2.7 % interpolated values, which forces a parsimonious specification of at most twelve parameters: a constant, the error correction term and the ten strongest regressors.

Econometric estimation of macroeconomic adjustment. Next, we integrate these components into a nonlinear autoregressive distributed lag model featuring an explicit error correction term:

$$\Delta y_{i,t} = \alpha + \lambda \cdot ECT_{i,t-1} + \sum_{j=1}^{5}\sum_{L=0}^{3}[\beta_{jL} \cdot PC_{j,t-L} +$$

$$+\gamma_{jL} \cdot PC_{j,t-L}^{2}] + \sum_{j=1}^{5}[\delta_j \cdot \ln\left(1+\left|PC_j\right|\right) + \theta_j \cdot |\, PC_j\,|^{\kappa}] + \varepsilon_{i,t}$$

where y is the circuit indicator, λ is the adjustment speed, PC_j are components, and $\kappa = 2.5$. Using the Metropolis-Hastings Markov chain Monte Carlo algorithm [7, p. 329], we estimate the parameters. Posterior distributions from the benchmark cluster serve as informative priors for Ukraine.

Estimation detail decides how much weight these coefficients can carry. For the benchmark cluster we drew four chains of 90 000 iterations, discarded the first 30 000 as burn-in and kept 240 000 posterior draws per equation, with Normal(0; 2.5) priors on structural coefficients and an inverse-gamma(2; 1) prior on shock variance [7, p. 329]. The largest Gelman-Rubin statistic stays at or below 1.016, the smallest effective sample size is 261, and acceptance rates fall between 0.21 and 0.35. Transferring those posteriors to Ukraine at prior scale 2, mid-way between full transfer and an almost uninformative prior, yields a maximum Gelman-Rubin statistic of 1.002 and acceptance between 0.24 and 0.30. The transfer sharpens some equations and loosens others: the highest posterior density interval narrows by 35.6 % for inflation and 12.5 % for investment, yet widens for growth, trade and services export, and we report that asymmetry rather than averaging it away.

At a two-year lag, PC5 has a positive coefficient of +5.7799 on real GDP growth, carrying a z-statistic of 2.3 and a 95 % highest posterior density interval of [0.7485; 10.6639] excluding zero. The z statistic lets us claim that institutional reform pays off with a twenty-four-month delay. The lag, which we read as the reason institutional reform is politically under-supplied, explains the political economy of stagnation – since incumbents bear the costs immediately while the macroeconomic dividends accrue later.

Table 1 – Marginal returns of macroeconomic circuits to a unit increase in components

Circuit	PC1	PC2	PC3	PC4	PC5
Inflation	0.00	−0.50	0.52	0.00	−0.18
Real GDP growth	−0.96	0.00	0.00	3.80	2.64
Investment	1.00	−0.34	−6.37	5.33	0.00
Trade balance	1.15	0.00	7.85	0.00	−1.19
Services export	−2.38	0.00	−3.74	2.65	0.00
Exchange rate	0.00	0.00	0.00	0.00	0.00

Source: author's calculations based on the estimated nonlinear distributed-lag equations and principal-component scores presented in this article

The marginal return of GDP growth to PC5 is +2.64. As we find a distinct trade-off, PC5 enters the trade balance circuit negatively (−1.19) and the inflation circuit at −0.18.

For fiscal capacity (PC2), marginal returns are −0.50 on inflation, −0.34 on investment, and 0.00 on GDP growth. As fiscal capacity carries only a +0.17 normalised target return, our estimates do not support an aggressive fiscal push as the primary recovery lever, meaning a derived policy increment reaches only +0.051 standard deviations. Excessive extraction suppresses investment without delivering growth dividends. We therefore separate the size of a component from its usefulness. The exchange-rate equation possesses an adjusted R-squared of −0.759 alongside a Theil coefficient of 0.818, so it is indicative only and must not be used for policy inference.

Since Ljung-Box and Breusch-Pagan p-values exceed 0.05, meaning no residual autocorrelation or heteroskedasticity is detected, λ values beyond −1 for GDP growth imply an oscillatory but convergent adjustment, as the absolute value of one plus lambda remains below one. With our proposals, the forecast shows negative real GDP growth in 2031 at −3.88 %, and the exchange-rate circuit shows no gap as it moves from 3.33 to 3.33; rather than a defect, we read this negative growth as a diagnostic of structural persistence.

What do the two components hold in economic terms? PC2, with an eigenvalue of 4.66 and 14.6 % of variance, gathers the effectors describing the revenue side of the state and its claim on domestic output, among them the weight of government consumption, which in the benchmark profile sits at 15.38 % of gross domestic product. Its share is the second largest of the five, so the underlying variation is wide; wide variation is not the same as a large payoff. PC5 is the smallest retained component, at an eigenvalue of 2.21 and 6.9 % of variance, and it carries the slower-moving effectors of rule quality: enforcement of contracts, predictability of administration, the standing an exporter's legal environment enjoys abroad. The ordering of variance shares and the ordering of policy returns run in opposite directions here, and that inversion is our central empirical claim.

The target vector derived from the equations restates the point in units a ministry can budget against. Normalised aggregate returns are +0.17 for fiscal capacity and +0.25 for institutional capital, so effort spent on rule quality returns about half again as much as the same effort spent on extraction, even though fiscal capacity dominates the variance decomposition. Translated into annual increments, the derived vector asks for +0.074 standard deviations on PC5 against +0.051 on PC2. Neither increment is large in absolute terms. Both sit well below the +0.300 assigned to structural and technological modernisation, and both differ in sign from the −0.231 attached to external resilience, whose negative marginal returns on investment (−6.37) and services export (−3.74) outweigh its positive trade-balance entry. We read the small size of the two increments as the substance of the finding rather than a weakness of it, because the estimated equations reward steady annual movement in rule quality instead of one consolidation episode.

Limitations of the estimates. Four constraints bound what we claim. The minimum per-indicator Kaiser-Meyer-Olkin measure of 0.273 means that several of the 32 effectors share little common variance with the rest, so any single observable series inside PC2 or PC5 is weakly represented in the factor space; a statement about a component is therefore safer than a statement about one of its constituent indicators. The partition beneath the factor analysis is moderate rather than sharp: a silhouette of 0.196 at six clusters, a cophenetic correlation of 0.735 and 56 % agreement with k-means together indicate that recovery episodes form overlapping regions, so cluster 4 should be read as a plausible benchmark and not as a proven type. Annual data impose the third limit, since a two-year lag estimated on annual observations cannot separate a delay of eighteen months from one of thirty.

The fourth limit concerns which equations may carry policy weight. The inflation and growth equations are weaker than the investment equation, whose adjusted coefficient of determination reaches 0.696, so the fiscal-capacity result on investment (−0.34) rests on firmer ground than the inflation result (−0.50). Residual diagnostics are clean, with Ljung-Box and Breusch-Pagan p-values above 0.05 in every circuit, yet clean residuals on 24 first differences do not establish external validity, and the absence of any forecast gap in the exchange-rate circuit (3.33 to 3.33) follows from its zero marginal returns and its adjusted coefficient of determination of −0.759 rather than from currency stability. We do not claim that institutional capital causes growth. We claim that within this cluster and this specification the lagged association is positive, sizeable and distinguishable from zero.

Derived policy proposals for post-conflict recovery. Targeted interventions flow from our findings. So, we argue that policy must be concentrated.

1. An «institutional oasis» regime for service exporters with arbitration under European Union law. Targeting PC5 (+0.074), this raises measured institutional quality for the fastest-responding segment without requiring nationwide judicial reform first, meaning the effect will materialise after the two-year lag.

2. Netting of tax liabilities and digital administration of value added tax. Targeting PC2 (+0.051), this improves fiscal capacity without raising rates, expanding the tax base by reducing compliance costs [10, p. 21; 11, p. 15].

3. Implementation of the Markets in Crypto-Assets Regulation, Financial Action Task Force standards, and the Organisation for Economic Co-operation and Development Pillar Two rules [9, p. 8; 11, p. 15]. Targeting PC5 (+0.074), this integration secures recognition of Ukrainian digital exports in European Union markets, even though the macroeconomic dividend will adhere to the two-year structural delay.

Conclusions. Resolving disbalances demands understanding how institutional and fiscal mechanisms interact with economic circuits. By treating institutional capital as a dynamic variable in our estimation procedure, we find that institutional reforms yield macroeconomic dividends with an estimated two-year lag. Institutional quality exerts a significant positive effect on real GDP growth (+5.7799 at lag 2), which is offset by trade-offs in the trade balance and inflation. Conversely, fiscal capacity possesses limited aggregate effectiveness with merely a +0.17 normalised target return, providing evidence against aggressive fiscal extraction during recovery, whereas our proposed institutional oasis, digital netting of tax liabilities, and international regulatory integration offer a pathway to enhance institutional quality and fiscal efficiency. Addressing the fastest-responding segments accelerates stabilisation without prolonged nationwide reforms.

Four extensions follow directly from the weak points we report. The effectors flagged by the minimum sampling-adequacy measure of 0.273 deserve separate treatment, either through better-measured proxies or through estimation outside the common factor space. The two-year lag should be re-examined on any institutional series observed more often than once a year, because our design cannot resolve delays inside a single year. The negative entry of institutional capital into the trade balance (−1.19) needs a study of its own: we suspect a composition effect, as better rule quality shifts activity towards services that the goods balance does not record, yet our specification cannot test that conjecture. The last question is the widest, namely whether the +0.25 normalised return to rule quality survives outside a cluster selected on successful stabilisation.

REFERENCES

1. State Statistics Service of Ukraine (n.d.) Statistical Information. Available at: https://www.ukrstat.gov.ua/operativ/oper_new_e.html

2. International Monetary Fund (2024) Ukraine: Fourth Review of the Extended Arrangement under the Extended Fund Facility. IMF Country Report, no. 2024/199. Washington, DC: International Monetary Fund. Available at: https://www.imf.org/en/publications/cr/issues/2024/06/28/ukraine-fourth-review-of-the-extended-arrangement-under-the-extended-fund-facility-request-551207

3. Svitovyi bank (n.d.) Ohliad: Ukraina [Overview: Ukraine]. Available at: https://www.worldbank.org/uk/country/ukraine/overview (in Ukrainian)

4. Acemoglu D., Robinson J. A. (2012) Why Nations Fail: The Origins of Power, Prosperity, and Poverty. New York: Crown Business. Available at: https://norayr.am/collections/books/Why-Nations-Fail-Daron-Acemoglu.pdf

5. Calomiris C. W. (2023) Fiscal Dominance and the Return of Zero-Interest Bank Reserve Requirements. *Review (Federal Reserve Bank of St. Louis)*, vol. 105, no. 4, pp. 223–233. DOI: https://doi.org/10.20955/r.105.223-33

6. Cerovic S., Gerling K., Hodge A., Medas P. (2018) Predicting Fiscal Crises. IMF Working Paper, no. 18/181. Washington, DC: International Monetary Fund. Available at: https://www.imf.org/-/media/files/publications/wp/2018/wp18181.pdf

7. Chib S., Greenberg E. (1995) Understanding the Metropolis-Hastings Algorithm. *The American Statistician*, vol. 49, no. 4, pp. 327–335. Available at: https://www.tandfonline.com/doi/abs/10.1080/00031305.1995.10476177

8. Kaufmann D., Kraay A., Mastruzzi M. (2010) The Worldwide Governance Indicators: Methodology and Analytical Issues. Policy Research Working Paper, no. 5430. Washington, DC: World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/3913

9. OECD (2021) Tax Challenges Arising from Digitalisation of the Economy – Global Anti-Base Erosion Model Rules (Pillar Two). Paris: OECD Publishing. Available at: https://www.oecd.org/en/publications/2021/12/tax-challenges-arising-from-digitalisation-of-the-economy-global-anti-base-erosion-model-rules-pillar-two_eed81a23.html

10. OECD (2024) Tax Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies. Paris: OECD Publishing. DOI: https://doi.org/10.1787/2d5fba9c-en

11. OECD (2025) OECD Economic Surveys: Ukraine 2025. Paris: OECD Publishing. Available at: https://www.oecd.org/en/publications/oecd-economic-surveys-ukraine-2025_940cee85-en.html

12. Rodrik D. (2000) Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development*, vol. 35, no. 3, pp. 3–31. Available at: https://link.springer.com/article/10.1007/BF02699764

13. Rodrik D. (2007) One Economics, Many Recipes: Globalization, Institutions, and Economic Growth. Princeton: Princeton University Press.

14. Roubini N., Sachs J. D. (1989) Government spending and budget deficits in the industrial countries. *Economic Policy*, vol. 4, no. 8, pp. 100–132. DOI: https://doi.org/10.2307/1344465

15. Ward J. H. (1963) Hierarchical Grouping to Optimize an Objective Function. *Journal of the American Statistical Association*, vol. 58, no. 301, pp. 236–244. DOI: https://doi.org/10.1080/01621459.1963.10500845

16. World Bank, Government of Ukraine, European Union, United Nations (2025) Ukraine Fourth Rapid Damage and Needs Assessment (RDNA4), February 2022 – December 2024. Washington, DC: World Bank Group. Available at: http://hdl.handle.net/10986/42908

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

1. State Statistics Service of Ukraine. Statistical Information. URL: https://www.ukrstat.gov.ua/operativ/oper_new_e.html

2. МВФ. Ukraine: Fourth Review of the Extended Arrangement under the Extended Fund Facility. IMF Country Report No. 2024/199. Washington, DC : International Monetary Fund, 2024. URL: https://www.imf.org/en/publications/cr/issues/2024/06/28/ukraine-fourth-review-of-the-extended-arrangement-under-the-extended-fund-facility-request-551207

3. Світовий банк. Огляд: Україна : вебсторінка // World Bank Group. URL: https://www.worldbank.org/uk/country/ukraine/overview

4. Acemoglu D., Robinson J. A. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Crown Business, 2012. 544 p. URL: https://norayr.am/collections/books/Why-Nations-Fail-Daron-Acemoglu.pdf

5. Calomiris C. W. Fiscal Dominance and the Return of Zero-Interest Bank Reserve Requirements. *Review (Federal Reserve Bank of St. Louis).* 2023. Vol. 105, No. 4. P. 223–233. URL: https://doi.org/10.20955/r.105.223-33

6. Cerovic S., Gerling K., Hodge A., Medas P. Predicting Fiscal Crises. IMF Working Paper No. 18/181. 2018. URL: https://www.imf.org/-/media/files/publications/wp/2018/wp18181.pdf

7. Chib, S., & Greenberg, E. Understanding the Metropolis-Hastings Algorithm. The American Statistician. 1995. Vol. 49, No. 4. P. 327–335. URL: https://www.tandfonline.com/doi/abs/10.1080/00031305.1995.10476177

8. Kaufmann D., Kraay A., Mastruzzi M. The Worldwide Governance Indicators: Methodology and Analytical Issues. World Bank Policy Research Working Paper. 2010. No. 5430. URL: https://openknowledge.worldbank.org/handle/10986/3913

9. OECD. Tax Challenges Arising from Digitalisation of the Economy – Global Anti-Base Erosion Model Rules (Pillar Two)//OECD Publishing, Paris. 2021. URL: https://www.oecd.org/en/publications/2021/12/tax-challenges-arising-from-digitalisation-of-the-economy-global-anti-base-erosion-model-rules-pillar-two_eed81a23.html

10. OECD. Tax Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies//OECD Publishing, Paris. 2024. URL: https://doi.org/10.1787/2d5fba9c-en

11. OECD. OECD Economic Surveys: Ukraine 2025 // OECD Publishing, Paris. 2025. URL: https://www.oecd.org/en/publications/oecd-economic-surveys-ukraine-2025_940cee85-en.html

12. Rodrik D. Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development.* 2000. Vol. 35, No. 3. P. 3-31. URL: https://link.springer.com/article/10.1007/BF02699764

13. Rodrik D. One Economics, Many Recipes: Globalization, Institutions, and Economic Growth. Princeton : Princeton University Press, 2007. 280 p.

14. Roubini N., Sachs J. D. Government spending and budget deficits in the industrial countries. *Economic Policy*. 1989. Vol. 4, no. 8. P. 100–132. DOI: 10.2307/1344465. URL: https://academic.oup.com/ep/article-abstract/4/8/99/2382103

15. Ward, J. H. Hierarchical Grouping to Optimize an Objective Function. *Journal of the American Statistical Association.* 1963. Vol. 58, No. 301. P. 236–244. URL: https://doi.org/10.1080/01621459.1963.10500845

16. World Bank, Government of Ukraine, European Union, United Nations. Ukraine Fourth Rapid Damage and Needs Assessment (RDNA4), February 2022 – December 2024. Washington, D.C.: World Bank Group, 2025. URL: http://hdl.handle.net/10986/42908

Хрущ Юрій
Волинський національний університет імені Лесі Українки

ІНСТИТУЦІЙНИЙ КАПІТАЛ І ФІСКАЛЬНА СПРОМОЖНІСТЬ У ПОДОЛАННІ ДИСБАЛАНСІВ: СВІДЧЕННЯ З ОЦІНЕНИХ РІВНЯНЬ

Анотація. *У статті досліджено роль інституційного капіталу та фіскальної спроможності в подоланні макроекономічних дисбалансів і формуванні передумов відновлення України. Мета роботи полягає в оцінюванні зв'язків інституційних і фіскальних чинників із макроекономічною динамікою та обґрунтуванні напрямів державної політики. Методологія поєднує кластерний аналіз п'ятдесяти епізодів відновлення, метод головних компонент та нелінійне моделювання з розподіленими лагами і механізмом корекції помилки. На основі тридцяти двох показників-ефекторів виділено п'ять компонент, які пояснюють 68,8 % сукупної дисперсії. Фіскальна спроможність держави пояснює 14,6 %, а якість інституційного капіталу становить 6,9 % дисперсії. Параметри оцінено баєсівським методом із використанням алгоритму Метрополіса–Гастінгса; результати еталонної групи застосовано як інформативні апріорні розподіли для України. Виявлено позитивний зв'язок інституційної компоненти з темпом зростання реального ВВП за дворічного лагу: оцінений коефіцієнт дорівнює 5,7799. Водночас частка поясненої дисперсії не визначає економічної значущості компоненти. Граничні віддачі фіскальної спроможності для інфляції та інвестицій становлять відповідно −0,50 і −0,34, що вказує на необхідність розмежовувати адміністративну ефективність і посилення фіскального вилучення. Наукова новизна полягає в поєднанні латентного вимірювання інституційних характеристик з оцінюванням*

відкладених макроекономічних зв'язків та міжконтурних компромісів. Практичні рекомендації охоплюють режим «інституційного оазису» для експортерів послуг, взаємозалік податкових зобов'язань, цифрове адміністрування ПДВ та узгодження регуляторних правил із міжнародними стандартами. Наголошено, що запропоновані заходи є напрямами політики, а не доведеними причинними наслідками окремих реформ. Обмеження дослідження пов'язані з річною частотою даних, коротким українським рядом, помірною відокремленістю кластерів і неоднаковою якістю рівнянь. Результати обґрунтовують доцільність поєднання інституційних змін із підвищенням якості податкового адміністрування замість орієнтації лише на нарощування фіскального тиску.

Ключові слова: *макроекономічні дисбаланси, інституційний капітал, фіскальна спроможність, післяконфліктне відновлення, модель з розподіленими лагами, податкове адміністрування, спроможність держави.*

Дата надходження статті: 04.09.2026
Дата прийняття статті до публікації: 12.10.2026
Дата публікації статті: 23.10.2026