Transformational Change: Challenges and Development Prospects. The Case of Ukraine

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Abstract: Background: The basic system transformation approaches can be described by definition of the main and decisive factors of transformational change. Research objectives: The aim of the study is to estimate how the GDP in Ukraine depends on the degree of economic, political, social transformation, as well as the overall indicators (market and democratic) reforms. Research design and methods: The source of information is the World Bank database, Heritage Foundation, and national statistics. The research methods include descriptive analysis, economic and statistical methods, and correlation analysis. Results: The study results identify factors which positively impacts the formation of new and renewed institutions and contribute to a more balanced political, social and economic growth. Conclusions: Development vector designation allows formulating a state development strategy by estimating the factors that might lead to a more sustainable strategy of political and social-economic development. Keywords: transformation, political and social-economic development, correlation analysis

JEL Codes: A14, O10, O11, C1


1. Introduction

The article analyzes basic system transformational change approaches and to define the main and decisive factors of transformational change. The paper represents an attempt to comprehend the concepts of systemic transformation, determines the impact of transformational changes on economic growth in a country, the necessity of widespread reforms in the formation of democratic institutions at the state and local levels. The hypothesis defines transformational changes and highlights what economic, political, social factors are related to determining the underlying transformations in society. The content of the paper includes descriptive analysis depending on typical attributes and applied methods of research, and application institutional approach. Further investigation of the development vector describes the size, directions of ongoing reforms. We estimate which types of reforms contribute to the vector of transformational changes. The source of information is the World Bank database, Her-
itage Foundation, and national statistics. The research methods include descriptive analysis, economic and statistical methods, and correlation analysis.

2. Literature Review

Institutional change is an essential part of institutional theory, which is reflected in change, speed of its implementation, the influence of institutional actors, political organizations, and formal institutions on the pace of institutional change development. North (1990), Ostrom (1990), Hodgson (2006), Wegerich (2001) analyze the institutional change and define the conditions for achieving a system a stable condition. The creation of institutions and the formulation and implementation of new norms and rules in society create balance in society. Tylecote (2015) points out the role of Acemoglu and Robinson in defining institutions. “Their grasp of history is uncertain, and of politics, a little crude: thus their Just So stories. Nonetheless, here are influential mainstream economists who have abandoned the assumption that institutions should be presumed to be functional, and who now make clear that economies can benefit greatly from activist states and (in a range of circumstances) lose much by trade. And they do dynamics, often persuasively: a major achievement” (Tylecote, 2015). The institutional process has evolutionary and cumulative character. The shift in the peripheral rules and their gradual change to higher-order rules. Cumulative change is determined by the degree of institutional development and is reflected in general changes in the operation rules. In the process of institutional change, a new state of equilibrium was emerging. The formation new system of institutions aims at reducing uncertainty and achieving a compromise between the divergent interests of the social actors.

According to Fadda, “Institutional change is a slow historic process, and it starts (because institutions are no longer efficient) when the technological or environmental conditions allow for such a change, or the aims of dominant groups support the change or still when power relations among the social groups change” (2002). Institutional change leads to a new set of rules and is accompanied by an asymmetric distribution of information among stakeholders. Shifts in the negotiating power of the parties involved in the institutional process had led to changes in the institutional environment in an attempt to establish a pre-establishing provision through the relevant rules. Consequently, economic agents that have been granted privileges lose any incentives to be engaged in productive activities. Van Zon et al. (1998) studies behavioral routines of the ruling elite and considers erosion of communist ideology and ossification of social and political structures over the past decades has developed an elite that is not interested anymore in the development of society and economy. The vertically organized structures of society and economy have been replaced by a complicated system of mutual relations. There was not a clearly expressed center. Representatives of the nomenclature controlled these structures from top to bottom. Hodgson (1995) comparing the evolutionary change of institutions to the Darwinian process of biological change, stresses out that institutions are path-dependent and strictly endogenous and the change of formal and informal rules and regulations always comes first before the other transformations take place. The transformation of post-Soviet countries was directed at creating an effective institutional system. The formation of the new transformational system must be based on the impossibility of altering the negotiating power of the parties, resulting in the inefficient use of institutions. Transformation is seen in quantitative terms as a major, far-reaching, profound change. The application of the transformation category involves two new operational criteria: qualitative change, and
a balance of change and continuity. The latter makes the transformation reversible in principle, although it requires very strong reasons.

To study transformation in the process of development we will present it in the form of the identity of the opposing points that it contains, as well as in the form of continuous-resolution and reproduction as a source of self-development of the system. The contradiction is the essential relation of the opposing points within the system, which makes it possible to achieve a specific identity of these moments, and which makes the modernization system an organic whole, continuously permitted and reproducible. The transformational system is characterized by unity of sustainability and variability, mutual conditionality and exclusion, positive and negative, interpenetrating and mutually rejecting interaction that disappears and emerges.

All of the features of the institutional process listed above point to the existence of internal opposing parties in its structure. The emergence of a contradiction, the passage of certain stages, the step of development, and its resolution create prerequisites for leapfrogging into a new state. This approach highlights deployment and conflict resolution phases. The resolution of contradictions within the institutional system included the identity of the institutional elements, their mutual identification through each other, and, ultimately, mutual negation. In the process of mutual negation, the opposing sides of the conflict become identical.

The continuous process of resolving and reproducing contradictions in the institutional framework forms the basis of the traffic process. Qualitative changes in the forms of functioning in the process of replacing the “old institutional order” with a new order in society were reflected in institutional change, which ensured a balance of mutual relations in society and continuity in the use of institutional forms. In the process of resolving a contradiction, an object acquires permanent, irreversible new features that change its nature. Development is seen as a natural consequence of the causes, driving forces, ways, and means of materializing irreversible changes in material and ideal objects. According to Douglass North, the distinction between institutional development and institutional change corresponds to the distinction between economic dynamics and economic development as a progressive process (North, 1990). Institutional development determines the long-term, regular functioning of norms, rules, and institutions in society and is irreversible. The institutional change is more temporary, reflecting the transition to a new institutional state of the system.

The contradiction between a functioning institutional system and a newly emerging system of norms, rules, and institutions, in our view, is a major institutional contradiction. It characterizes the object, determines its development from the moment it is created to the final process, makes the system self-moving organic integrity, and causes all other contradictions. In the course of the development of contradictions, differences are deepened and reversed, the existence of which may remain within the former unity for a short period.

Consider institutional differences between countries. Those differences were external contradictions, such as those between the institutional systems of industrialized countries, developing countries, and post-socialist countries. External institutional contradictions are associated with internal contradictions. At the top of the resolution of substantive and non-core, substantive and minor, external and internal contradictions, there is the end of the rejection by the new institutional order of the old system of norms, rules, institutions (organizations), the transition of opposing sides into each other, their identity. As a result, the contradiction was disappearing, leading to the self-reliance of the institutional system and a transition to a qualitatively new level of development. Transformation is aimed at reducing economic, political, social imbalances. It contributes to greater certainty in the relationships of economic agents.
and a state of equilibrium in a transformative economy. Political transformation is transferred from an old regime, for example, authoritarian to a new one, democratic mechanisms, and procedures. Such transformation includes the creation of national political parties, institutions, civic culture, etc.

Analysis of post-crisis processes in most post-socialist countries shows the predominance of forms of imitation of elements of market infrastructure, the application of behavioral patterns inherent in the command system, the copying of forms and elements of the structure of the market economy dually developed countries. Polanyi (2001) applies alternative methods to apply to changing conditions, that reflect interdependence group and public interests. Governments of states, citizens, and individuals are assigned an increasingly important role in the transformation. Shuanping (2015) argues that the national policies that respond to the recent economic crises come from the distinct understandings of the tags of the policies, which highly depend on the distinct national contexts, such as national interests, cultural background, political systems.

The study of works Habermas (1991), Herrendorf, Rogerson, Valentinyi (2013), Thomas & Hendrick-Wong, (2019) considers the interdependence structural, economic, political transformations. The scientists argue that all mentioned types are interdependent and reflect quantitative and qualitative changes. The above-mentioned approach defines the rational behavior of economically isolated agents. The changes in the political system are considered in collaboration with relevant reforms in the economic system, which affects the direction of its transformation. The applied method does not take into account the impact of other subsystems and analyses external factors. The following approach limits the research subject, excluding legal, social, cultural spheres, and others (Nosova, 2020a).

The main elements of social contradictions are the principled uncertainty of the choice between alternative directions of further development, the persistence of extra-economic (power) methods of governance. The high level of socio-economic costs of transformation, the significant proportion of the criminal underground sector in GDP, and an absence of a state policy defining the priorities of institutional progress, economic contradictions between agents demonstrate the absence of an effective legal system, neglecting the rule of law. The state does not possess the necessary characteristics of a special economic entity that personifies the whole of society. At the same time, the subjective interest of society is expressed in the need of society to ensure an enhanced reproduction of its potential. The transformational process has contradictory, unsystematic character. The transforming economies of the Eastern European countries were heterogeneous and had features of multi-model behavior. At the beginning of the economic reforms, the state had played a passive role, which had led to the underdevelopment of the legal foundations of private property and market and infrastructure institutions in most Eastern European countries. The application of traditional, sustainable, stereotypical business behaviors, including the old “routine” set, has ensured the continuity of the previous forms of behavior of the old institutional system.

That process had led to the formation of forms of forced behavior by investment agents: the spread of mutual bank insolvency, the non-fulfillment of specific obligations, the liability nature of the investment, the transfer of funds to offshore zones, etc. The analysis of deep-rooted processes in the world economic system as a way of resolving institutional contradictions makes it possible to define how Eastern European countries provide development in the post-crisis period. Successful transformation is accompanied by the resolution of contradictions, aimed at reducing economic imbalances and contributing to the achievement of a quali-
tatively new balance in society. The equilibrium of an economic system is based on the unity of transformation in various levels including achieving balances in economic, political, social systems. The establishment of an effective regulatory framework for the global financial market would provide a basis for preventing similar shocks in a future round of global development.

3. Material and Methods

Theoretical analysis of numerous studies on system transformation in East European countries tackles some fundamental questions about the prerequisites and factors for its successful implementation. The widespread econometric methods and techniques applied for modeling transformation in the works define phases and stages transformation modeling, human, political, and economic development empirical works, etc. (Nosova, 2020b).

The system transformation is estimated using correlation analysis data from 1991 to 2018 in Ukraine. The source of information is the World Bank database, Heritage Foundation, and national statistics. The estimation results single out factors that might lead to a more sustainable strategy of political and social-economic development. The study discusses the effects of transformation change on the country’s economic growth and suggests possible directions for state policy directing the process of change.

The choice of variable explains via estimation of system transformation factors using the three dimensions approach to system transformation (Merkel et al, 2019; Boaky 2007). The data of GDP and GDP growth are from the World Bank Database. The other data used are indicators of transformation in index form from various sources. From the World Bank, we also apply The Worldwide Governance Indicators (WGI) which “report on six broad dimensions of governance for over 215 countries and territories over the period 1996-2018: (I) Voice and Accountability; (II) Political Stability and Absence of Violence; (III) Government Effectiveness; (IV) Regulatory Quality; (V) Rule of Law; and (VI) Control of Corruption.” (Worldwide Governance Indicators).

Next to these indicators, we use data from the Transparency Index, the Economic Freedom Index by the World Heritage Foundation (WHF), and two indices by the V-Dem Institute in Copenhagen (Egalitarian Democracy Index and Media Bias). The last data source is the Democracy Barometer (DB), where we took the Index of Government Stability. Not for all the indices, the data for the entire time estimated period (1991–2018) are available. The variables are defined as in Table 1.

Table 1. Definition of indices

<table>
<thead>
<tr>
<th>Index</th>
<th>Definition</th>
<th>Source</th>
</tr>
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<tbody>
<tr>
<td>Gross Domestic Product per capita (current US$)</td>
<td>the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products</td>
<td>World Bank</td>
</tr>
<tr>
<td>Gross Domestic Product per capita growth (annual %)</td>
<td>gross domestic product divided by mid-year population</td>
<td>World Bank</td>
</tr>
<tr>
<td>Government Effectiveness</td>
<td>“perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.”</td>
<td>WGI</td>
</tr>
</tbody>
</table>
Due to the ordinary character of our variables, we use Spearman’s rank correlation coefficient as well as the Kendall rank correlation coefficient. The chosen significance levels are: \(* = p < 0.05\) and \(** = p < 0.01\). It needs to consider that there are not enough data points to reach high significance levels without strong coefficients. In this respect, it is important to complement the correlation analysis with further explanations. To continue the analysis of system transformation in Ukraine we analyze interrelations between political as well as socio-economic indices to GDP and GDP growth rate. Application correlation analysis aims to discuss their possible effects on economic growth. We apply correlation analysis, which we use to define the degree of relationship among assessed variables.

### 4. Results and Discussion

The results of the correlation analysis are presented in Table 2. The coefficients only show a correlation, which does not reflect a causal dependency. In the first step, we describe the results of correlation analysis. This is our basis to estimation in the second step – discuss which indicators might not only have a spurious correlation but also a causal effect on the change of GDP per capita and GDP per capita growth.

The results of the correlation between our indicators and GDP per capita show a slightly positive, but not significant correlation coefficient for both – Spearman’s rho and Kendall’s Tau. Exceptional to that are the indicators rule of law (0.572) and Voice and Accountability, which shows a moderate and statistically significant correlation for Spearman’s rho. For Kendall’s Tau’s three variables show weak positive and significant correlation coefficients.
<table>
<thead>
<tr>
<th>Index</th>
<th>GDP per capita</th>
<th>GDP per capita growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spearman</td>
<td>Kendall’s Tau</td>
</tr>
<tr>
<td>Government Effectiveness</td>
<td>0.164</td>
<td>0.158</td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>0.159</td>
<td>0.111</td>
</tr>
<tr>
<td>Political Stability and Absence of Violence/Terrorism</td>
<td>0.098</td>
<td>0.042</td>
</tr>
<tr>
<td>Regulatory Quality</td>
<td>−0.004</td>
<td>0.011</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>0.572**</td>
<td>0.342**</td>
</tr>
<tr>
<td>Voice and Accountability</td>
<td>0.506*</td>
<td>0.316</td>
</tr>
<tr>
<td>Further Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Stability (1991–2016)</td>
<td>0.267</td>
<td>0.188</td>
</tr>
<tr>
<td>Absence of Corruption CPI (1998–2018)</td>
<td>0.251</td>
<td>0.181</td>
</tr>
<tr>
<td>Index of economic freedom (1995–2019)</td>
<td>0.25</td>
<td>0.145</td>
</tr>
</tbody>
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Significance level: * = \( p < 0.05; \) ** = \( p < 0.01. \)

Source: own elaboration.

Considering our correlation analysis between GDP per capita growth and our indices, we have other significant variables compared to the previous. Table 1 shows a positive, weak Spearman’s rho between GDP per capita growth and government stability, which is significant on our estimated significance level. For both coefficients (Spearman and Kendall’s) we can observe a weak negative, statistically significant coefficient between GDP per capita growth and the Democracy Egalitarian Index. The index of economic freedom is also statistically significant: It has a moderate positive correlation (0.585) due to Spearman’s rho and a weak positive correlation (0.435) due to Kendall’s tau. The correlation analysis provides a statistical assessment but does not explain the causality of the transformation process and connections to GDP changes.

The correlation analysis of GDP per capita/GDP per capita growth and government stability showed that all coefficients have positive values, but only the Spearman’s rho between GDP per capita growth and Government Stability is higher than 0.3 (0.41) and statistically significant. Combining correlation and graph analysis we find some support for the thesis that Government stability affects GDP per capita and its growth.

The further graph analysis for absence corruption index and index of economic freedom does not provide descriptive information for transformation changes within society and effects on GDP per capita growth. The assessment results illustrate the moderate correlation coefficient GDP and index of economic freedom for Spearman’s correlation coefficient (0.58) and Kendall’s Tau correlation coefficient (0.43). The correlation coefficient GDP per capita and rule of law for Spearman’s correlation coefficient (0.57) and Kendall’s Tau correlation coefficient (0.34) demonstrate moderate correlation. The GDP per capita and voice and accountability are significant for Spearman’s correlation coefficient (0.51). This data confirms the necessity of political stability in society as the prerequisite of successful transformation.
Figure 1 demonstrates GDP and factors’ effects in the transformation process, where the curves of the government stability, confidence in the justice system, and GDP reveal relatively inter-related changes over the period from 2004 to 2018. The curve of the index of economic freedom has a flat character that indicates that economic reforms do not have an important effect on the transformation process. Further graph analysis of Devbehav curve, Largpavo curve, Votediff curve could be provided after the assessment of their essence. Devbehav curve shows behavioral dialogue as a share of citizens, which do not endorse behavior, and attitudes that are directed against the democratic society in period \( t \) (percentage). Largpavo curve reflects the margin of electoral concentration of votes; \( \text{Comp} = 100\% - p_{\text{strongest}} \), where \( p_{\text{strongest}} \) = percentage of votes obtained by the strongest party (percentage). Votediff curve demonstrates 100-difference between largest and second-largest lower house party in the percentage of all votes (percentage). The curve of confidence in government and Devbehav, Largpavo, Votediff curves have inverse direction from the curves of the government stability, confidence in the justice system, and GDP. It points to the crucial role of political and legal reforms in the establishment of democratic institutions, civil society, and democratic state based on the rule of law, property rights. The significant change in the Largpavo curve reflects the transformation in the political system, the party system, the electoral system, the degree of the decentralization of the political decision–making process in the last decade.

Nonetheless, Ukraine, as well as other post-Soviet countries in Eastern Europe and Eurasia, has weaker institutions than countries with similar levels of economic development. The difference is particularly stark when comparing Ukraine with its neighbors that joined the European Union in the early 2000s (Global Risks, 2014).

Transformation strategy of reforms suggests the following developments: institutional direction of institutional change, market institutions, property rights, and legal systems, commercial law application, formal and informal rules formation, trade and capital liberalization,
convertibility of exchange rate, foreign investment regulation, restructuring of state-owned enterprises, privatization, and deregulations.

5. Conclusions

The development and normal functioning of democratic institutions, creation of effective new institutions, renovation, independence of the institute of power, property institute, achievement of transparency of the activity of institutes of state, business, civil society based on intensification of work of alternative social institutions of state establishment ensure transformational change. The main tasks in the field of transformation include ensuring political stability by observing the legal basis of the behavior of the state, business, compliance with contracts, fulfillment of the basic principles of the courts and other bodies of justice, functioning of independent professional regulators, development of technological institutes, and creation of social partnership institutes.

References

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