

FORMALIZATION OF SELFSELECTION OF GLOBAL ECONOMIC GOVERNANCE MODE

Abstract. Nowadays, global economic governance is on the edge of economic scientific research. The fastening economic globalization with its drawbacks and unprecedented possible gains alongside with toughening competition on markets of sources and finished products, deepening global problems represent a real challenge for decision-makers across the World. Activities of supranational organizations are complemented and sometimes substituted by actions of other global actors which role is constantly increasing and strengthened. Thus, previous forms of global economic governance do not fit the modern system of governance itself well.

Various foreign and Ukrainian scientists attempted to assess, analyze and explain global economic governance phenomena and its modes, among them are: D. Lukjanenko, D. W. Drezner, M. Filipovich, S. Bancic, M. Kahler and D. A. Lake et al. Despite existing literature, there are no researches which are aimed to the development of model which allows formalizing self-selection of GEG mode.

The goal of the paper was to develop the formalized model of self-selection of global economic governance mode and to trace out which factors drive the switches between modes. The paper proceeds with the respective analysis of four mostly widespread modes of GEG: supranational, hierarchic, network and hybrid, and the derivation of specific probit function which explains dependence on GEG mode on a specific set of dummy variables.

Thus, the paper is the first attempt to formalize the self-selection of modes of global economic governance. Using methods of economic analysis, it suggests the specific functional form of dependence of four specific GEG modes (supranational, hybrid, network, hierarchic) on the set of dependent variables, among them are: leadership in specific sphere, divergence from the generally agreed policy, absence of effective national institutions and etc. The paper could be developed further by elaborating on the set of indicators which could be used to proxy the suggested dependent variables. This will represent the finished methodology of GEG modes self-selection and could be used further for scientific and practical needs, e.g. in forecasting changes of GEG modes.

Keywords: global economic governance, mode, supranational organizations, integration unions, networking governance, globalization.

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ФОРМАЛІЗАЦІЯ САМОВИБОРУ РЕЖИМУ ГЛОБАЛЬНОГО ЕКОНОМІЧНОГО ВРЯДУВАННЯ

Анотація. Наразі глобальне економічне управління перебуває на першому плані економічних наукових досліджень. Швидка економічна глобалізація та її недоліки і непередбачені можливі вигоди, поряд із посиленням конкуренції на ринках сировини та готової продукції, поглиблення глобальних проблем, є справжнім викликом для осіб, які ухвалюють рішення, у всьому світі. Діяльність наднаціональних організацій доповнюється та

іноді замінюється діями інших глобальних суб'єктів, роль яких постійно зростає і посилюється. Таким чином, попередні форми глобального економічного врядування не достатньо добре відповідають сучасній системі управління.

Різні зарубіжні та українські вчені намагалися оцінити, проаналізувати та пояснити явища глобального економічного врядування і його режими, серед яких: Д. Лук'яненко, Д. В. Дрезнер, М. Філіпович, С. Банчич, М. Калер і Д. А. Лейк та ін. Попри наявну літературу, не існує досліджень, спрямованих на розроблення моделі, яка б дозволила формалізувати самовибір режиму глобального економічного врядування (ГЕВ).

Мета статті — розробити формалізовану модель самовибору режиму глобального економічного врядування і простежити, які фактори впливають на «перемикання» між режимами. Проведено відповідний аналіз чотирьох найпоширеніших режимів ГЕВ (наднаціональний, ієрархічний, мережевий і гібридний) та виведено специфічну пробіт-функцію, яка пояснює залежність режиму ГЕВ від конкретного набору фіктивних змінних.

Таким чином, стаття є першою спробою формалізувати самовибір режиму глобального економічного врядування. Використовуючи методи економічного аналізу, запропоновано специфічну функціональну форму залежності чотирьох конкретних режимів ГЕВ (наднаціональний, гібридний, мережевий, ієрархічний) від набору залежних змінних, серед яких: лідерство у певній сфері, відхід від загальноприйнятої політики, відсутність ефективних національних інституцій тощо. Дослідження можливо продовжити й далі, розробивши набір показників, які могли б бути використані як наближення до запропонованих залежних змінних. У результаті це становитиме готову методологію самовибору режимів ГЕВ, яка може бути використана як для наукових, так і для практичних потреб, наприклад, у прогнозуванні змін режимів ГЕВ.

Ключові слова: глобальне економічне врядування, режим, наднаціональні організації, інтеграційні об'єднання, мережеве врядування, глобалізація.

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ФОРМАЛИЗАЦИЯ САМОВЫБРА РЕЖИМА ГЛОБАЛЬНОГО ЭКОНОМИЧЕСКОГО УПРАВЛЕНИЯ

Аннотация. Посвящено нахождению функциональной зависимости меню опций режимов глобального экономического управления от ряда экономических и институциональных факторов. На основе достижений ведущих исследователей глобальной экономики и глобального управления были найдены триггеры смены господствующего режима, начиная с наднационального регулирования в формате международных организаций и интеграционных объединений и заканчивая сетевыми режимами глобального экономического управления, предложены основные виды режимов глобального экономического управления как комбинаций значений независимых переменных: экономического лидерства, постколониальной политики, выгод и потерь от участия в интеграционных объединениях и тому подобное. Результаты статьи могут быть использованы для прогнозирования изменений глобального экономического управления, а ее идеи развиты в последующих исследованиях.

Ключевые слова: глобальное экономическое управление, режим, наднациональные организации, интеграционные объединения, сетевое управление, глобалізація.

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Introduction. Nowadays, global economic governance is on the edge of economic scientific research. The fastening economic globalization with its drawbacks and unprecedented possible gains

alongside with toughening competition on markets of sources and finished products, deepening global problems represent a real challenge for decision-makers across the World. The existing forms of management and administration develop as well. Previous instruments and institutions are to change in order to better meet the requirements of nowadays. In these conditions, the concept of global economic governance emerges and transforms according to the new faces of economic globalization. Activities of supranational organizations are complemented and sometimes substituted by actions of other global actors which role is constantly increasing and strengthened. Among them there are: NGOs, club of countries with related «summitria» mechanism, global corporations and global value chains etc. Therefore, the respective modes of global economic governance are the product of their interaction of global economic actors.

The current stage of economic thought development is characterized by relative theoretic novelty of the GEG concept and, thus, lack of the formalization of GEG modes self-selection. As it was previously shown, there are three most possible options of GEG modes: supranational, hierarchical, network, hybrid [1]. The choice of the dominant form depends on the complexity of factors, which can be used in modeling global economic governance.

Literature review and the problem statement. Various foreign and Ukrainian scientists attempted to assess, analyze and explain global economic governance phenomena and its modes. Lukianenko D.G., considering centers of powers of global transformations, stressed the repetitive changes in their structure and character — unipolarity, multipolarity towards bipolarity, tripolarity [2] There, bipolarity / tripolarity assumes forming coalitions or regional integration unions.

UN experts still consider global economic governance modes in relation to supranational organization which shape its overall mechanism, pointing out two major GEG regimes: in trade (World Trade Organization (WTO) regime) and in finance (International Monetary Fund (IMF) regime) [3]. While the first one is suggested to be treated in more cooperative manner, with talks and negotiations being put in the center, the second one is seen to become more formalized and stricter, e.g.: «the internal governance structures need adaptation in order to reflect better divergent national interests and avoid domination by individual countries». Therefore, one should differentiate between modes as institutionalized ways of governing global economy and regimes as specific spheres of this governance. Williamson still uses term «regime» to denote the mechanism of transactions regulation between international players [4].

Daniel W. Drezner follows this logic considering two *regimes* of global economic governance- finance and trade- and respective multilateral organizations, thus, using economic sphere criteria. Although he stressed an importance of a renewed surge in policy coordination still doubting the closing of existing multilateral mechanism of GEG as a dominant GEG mode in future [5].

Miroslava Filipovic and Sonja Buncic, in their turn, suggest considering soft law as a very essence of new GEG mode with G20 being its major form [6]. Marina Larionova and John Kirton support this idea considering two extrema of possible GEG modes: multilateral organizations as producers of hard law and G8 with its soft law respectively [7].

One of the first attempts to approach modes of global governance and to develop the set of assumptions which explain the choice of specific mode of global governance were made by Miles Kahler and David A. Lake. Their findings could be easily used for more specific needs of global economic governance. The authors suggested such parameters of the choice of GEG regime, as: distributional consequences within or between countries, the authority of the dominant state or the legitimacy of its leadership, divergence between the dominant state's preferred policy and the median of a supranational collectivity, the number of «losers» from a policy, the policy bias of a national institution, the existence of veto players, etc. [8]

Despite the existing research results concentrated on global economic governance, its forms and modes, broad discussions on the changes in approaches to optimal GEG and its regimes, there are no researches which are aimed to the development of model which allows formalizing self-selection of GEG regime.

The goal of the paper is to develop the formalized model of self-selection of GEG mode and to trace out which factors drive the switches between modes. The paper will proceed with the

respective analysis of four mostly widespread modes of GEG: supranational, hierarchic, network and hybrid, and the derivation of specific probit function which explains dependence on GEG mode on a specific set of dummy variables.

Research results. Basing on previous researches in the area, specifically on that of Miles Kahler and David A. Lake, let's develop the formalized model of GEG mode choice.

First of all, we should trace out the factors which influence the choice of specific mode of global economic governance.

If we concentrate on four modes of GEG: supranational, hierarchic, network and hybrid, we can derive common features of the situations when the specific mode is playing the leading role.

Looking at supranational and hierarchic modes of GEG, one can state, that during the history of global economy development they were most widespread and, thus, can be treated as the classic ones. While network mode of GEG and hybrid mode of GEG are the results of the recent developments in global economy, the complication of forms of economic interactions and formation of new ways of economic cooperation in the form of global value chains. All this requires more flexible and, thus, more complicated mechanisms of finding global economic consensus, where network and hybrid modes are more optimal solutions. The simple upside-down mechanism of transmitting of directives, instructions, commands etc., even on negotiable basis, do not correspond to the current state of global economy, when first: the sources of economic power become more and more diversified and, thus, the number of world leaders increases, which complicates finding the compromise between different interests; second: the process of regulation requires time and, thus, lags behind changes in global economy. At the same time, there is a shift from supranational institutions, countries and their leadership to the representatives of different sectors of global economy. In addition, there is an absence of effective mechanism of taking into account the views of the latter into the process of global decision making and, thus, of regulation of their activities. These facts represent a significant challenge to the effective function of global economy. Thus, the alternative modes of GEG should develop and are developing.

Supranational mode of global economic governance is characterized by the existence and functioning of multilateral organizations or different integration unions. In this case multilateral organizations perform government-like functions, including those of dealing with externalities that are not internalized by national government, and resolving global imbalances [9]. Concentrating on reasons of entering integration agreements, there are the major ones: strengthening domestic policy reform, increasing multilateral bargaining power, getting access to external markets, set up of strategic linkage between integrated countries, use of regional agreements to achieve multilateral negotiating objectives of countries [10].

Proceeding with hierarchic mode of GEG, one assumes the existence of the Global economy leader/leaders and formation of «circles of power», which other countries are entering. The theory of unipolar, multipolar and bipolar, tripolar World explains this mode the best.

Nowadays, economists tend to consider the global economy as the economy of three-regions leaders: East Asia, Western Europe and North America together with a combined GDP of around 80 percent of global economic output. The within-region trade in each of them is higher than external trade with the rest of the world. And these regions are in fact single economic units, regional economies, not the collections of national economies [11].

The question is not why some countries enter these hierarchic schemes (they are concentrated basing mostly on economic reasons and those similar to previous mode), but what are the factors which could explain why this mode is more preferred than other ones in some cases. In other words, why hierarchy- not the supranational mode.

The existence of hierarchic mode is also the result of restructuring of post-colonial international social relations [12] and forming of *neocolonialism*. Thus, in this case the major reasons of switching of GEG system to hierarchic mode are of pure economic nature. However, both discussed modes are not mutually exclusive. Even more, sometimes its even stated that Global leaders are to conserve existing system of supranational organizations via having large quotas or veto right, so to take advantage of *compensatory globalization and global rent*.

Network global governance is a rather new concept, which was given a lot of definitions, associating it with multi-layered networks of supra-state, sub-state and non-state entities such as non-governmental organizations. Its occurrence is generally explained by the shift from industrial to a post-industrial knowledge economy and learning society. As Sol Piccoto stated «the emergence of a multiplicity of forms of regulation, and the constant variation, adaptation and experimentation with them, may be seen to reflect the basic modernist dilemma of attempting to govern an increasingly complex lifeworld» [13]. Moreover, the functions of the state are evolving, some of them are given to non-public bodies erasing the border between public and private, new forms of international dialogue are in place. Thus, previous forms of global economic governance do not fit the modern system of governance itself well.

If we follow the sympathy of Walter Powell, we found that networks have a significant advantage over other forms of interaction, as they are based on mutual interests with the aim to get a possible gain from the cooperation [14]. From this perspective, this mode of GEG almost exclude any possibility of economic or political subordination and is based on the principles of equality of its participants. The latest example of global network initiative is China's «One road-one belt initiative», which do not have a goal to integrate economies, but to unite effort around trade facilitation.

As Kahler and Lake stated that the fact of uneven distribution of gains will motivate global economies to shift to network mode of its governance as well as regulatory capture [8]. Still the network phenomenon in global economic governance is not studied well enough.

Let us summarize the factors derive in our analysis in the following *table 1*.

Table 1

System of factors influencing the self-selection of GEG mode

| Supranational GEG1 | Hierarchic GEG2 | Network GEG3 | Hybrid GEG4 |
|---|--|--|--|
| <i>Possible economic gains or losses (G-L) from non-entering integration unions or multilateral organizations</i> | <i>Existence of the leader (L):</i> Leadership in technology (share in world GDP) The size of economy (share of GDP in world GDP) Control over the market of raw materials or other factors of production Control over the global value chains Compensatory globalization and global rent | <i>Uneven distribution of gains (dG) from hierarchy or supranational GEG mode</i> | Combination of GEG1-3 and their factors |
| <i>Absence of national institutions (I) able to resolve internal problems and to conduct internal reforms, increasing multilateral bargaining power, set up of strategic linkage between integrated countries, use of regional agreements to achieve multilateral negotiating objectives of countries</i> | <i>Differences in GDP (dGDP)</i> | | |
| <i>Necessity to deal with externalities (Ext)</i> | <i>Discrepancies in economic policy (dP) of the country and multilateral organization</i> | <i>Impossibility to address national and international regulatory challenges (Ch) at the level of GEG1 or GEG2</i> | |
| <i>Existence of global or regional imbalances (IB)</i> | <i>Post-colonialism/Neocolonialism (Col)</i> | | |

Source: developed by author based on [8; 9; 12—14].

Each indicator from the table above can take two values: 0 or 1, where 0 denotes absence of specific characteristic, 1 — other way round. Therefore, the choice of the specific mode can be represented in the following functional form:

$$\text{GEG_mode}_i = f(\text{G-Ls}; \text{I}; \text{Ext}; \text{IB}; \text{L}; \text{dGDP}; \text{dPolicy}; \text{Col}; \text{dG}; \text{Ch})$$

where $i = [1; 4]$.

Thus, the function can take different values as represented in the table below (*tabl. 2*):

Table 2

Possible sets of GEG_ mode_i function values

| Mode | Name | Factors GEG1 | | | | Factors GEG2 | | | | Factors GEG3 | |
|------|--------------------------|--------------|-----|-----|-----|--------------|------|---------|-----|--------------|-----|
| | | G-Ls | I | Ext | IB | L | dGDP | dPolicy | Col | dG | Ch |
| GEG1 | Pure supranational | 1-0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| GEG2 | Authoritative hierarchy* | 0-0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| | | 0-0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| | Cooperative hierarchy* | 1-0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| | | 1-0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| | Supportive hierarchy* | 0-1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| | | 0-1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| GEG3 | Economy based network | 0-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | Post-colonist network | 0-1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| GEG4 | Hybrid GEG | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 |

*(two extremes)

Source: developed by author.

The table above represents possible sets of function which explains the self-selection of global economic governance mode. It also contains some extreme values inside each group of modes, while the last mode GEG4 can be characterized by the combination of chosen indicators values, with a specific accent on factors of the predominant mode of GEG 1—3.

Conclusions. The paper is the first attempt to formalize the self-selection of modes of global economic governance. It suggests the specific functional form of dependents on four specific GEG modes (supranational, hybrid, network, hierarchic) on the set of dependent variables, among them are: leadership in specific sphere, divergence from the generally agreed policy, absence of effective national institutions and so on. The paper could be developed further by elaborating on the set of indicators which could be used to proxy the suggested dependent variables. This will represent the finished methodology of GEG modes self-selection and could be used further for scientific and practical needs, e.g. in forecasting changes of GEG modes. Further research in the area should concentrate on the evaluation of possible gains and losses from each mode of global economic governance and developing the model for the estimation of these consequences.

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