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# Full Length Research Paper

# Supramacroeconomics: The newest management technology

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Among the existing economy and management types - microeconomic, territorial entities, branches (spheres) of economy and macroeconomic - this article singles out another one - the supramacroeconomic type. This type occupies a transitional place between the existing macroeconomics, whose subjects are state authorities of inter-branch level (Ministries of Economy, Finance etc.), and nationwide (administrative and political) level of management. The following proofs for the necessity of the new management level introduction are given: actual presence of supramacroeconomic functions in practice and impossibility to fulfill the majority of them by any state authority, except the government itself. The following functions of current concern are suggested to be attributed to the supramacroeconomic ones: contribution to population employment, domestic market development, realization of required structural adjustments in the economy, formation and regulation of the economic space of the country, balancing the intrasocial interests and other functions. The fulfillment of these functions represents the so-called functional management methods on the highest level of the executive power (to replace the preceding branch-related methods or those ones that depend on economic activity types). It is obvious that these very functions are directly aimed at satisfying the interests of people and long ago they became the basic functions in the government activities of all countries, including highly developed ones. It is this approach to the whole system of governments that will allow, firstly, to make the distribution of the responsibility of different management levels more target-focused and to provide for more effective cooperation between them. Examples of the efficient economy restructuring in Ukraine serve as the confirmation of the above mentioned idea. Some mechanisms of the restructuring fulfillment are presented in the article. Submitted proposals also entail system-related consequences in the transformation of GDP formation scheme, table "Expenses - Production" and other components of NAS (National Account System) towards the adequacy of ultimate purposes of governments, which is also substantiated by the author.

Key words: Government, macroeconomics, liberalism, functional methods, statistics, econometrics.

#### INTRODUCTION

Different classifications of economy types have been developed in science and applied management (Aubert-Kpier, 1969; Zadoia et al., 2011; McConnell, 1995; Mankiw, 2000). As far as our topic is concerned, we can characterize economy types, for instance, on the basis of the extent of their coverage: national, regional, global or world economies; on the basis of the levels of their application inside a country: a microeconomic type (corporations, enterprises), territorial entities and industries (spheres) of economy. Finally, a macroeconomic type is distinguished that embodies the integration of economy of each country in all kinds of economic activity.

Only some time ago macroeconomics was presented as inter-branch balances and relevant levels of economic management. Nowadays, changes have occurred, and they are mainly of a terminological character (Zadoia et al., 2011; Rogoff, 2003).

In this article we consider one more type, level of economic management, which is called supramacro-economics. In the structure it occupies a transitional place between macroeconomics and nationwide (or administrative and political) management. It is a peculiar chain which serves as transformational means for: 1) adequate generalization of current social and economic state and 2) formulation (statement) and transfer of target guidelines from state agencies with highest powers (the parliament and the head of the state) to the economy of the country.

Scientific researches and development works devoted to this topic are unknown to us. Such questions and other

conterminous issues were previously substantiated only by the author himself (Kozhurin, 2010).

The necessity for a new level of management appeared when, especially after the 1970s, the problems of population employment, domestic markets and inadequate economy structures became the topic of the day. Afterwards, regional and world financial and economic crises became more frequent (1998; 2008; 2011) because their offsets came from intranational economies and their origins, substantially, were found in capabilities of macroeconomics.

Macroeconomics is both coverage and depth of reflection of the economic processes that seethe in the country. However, nowadays it does not provide an adequate informational and analytical profile of circumstances for implementation of direct management by the government. Macroeconomics does not always show "pain spots" to the government and, what is more important, it does not lead to necessary control levers in order to stabilize the country and fulfill its natural wish to keep the power as long as possible. Globally, the suggestion of the Washington Consensus by John Williamson, which contained ten necessary recommendations, did not also exert the expected influence to improve the mentioned situation (Rogoff, 2003).

Supramacroeconomics is an individual and detached set of instruments that is orientated on task settlement directly by the government and contributes to fulfillment of its following functions: employment<sup>1\*</sup> and population; domestic market development; economic restructuring; economic space etc.

Our conception is based on the following: as market mechanisms or other macroeconomic methods are not efficient enough and need for formation of separate specialized state authorities is absent or unreasonable, it is the government (represented by subdivisions of its managerial staff) that has to take upon itself the abovementioned functions and duties.

Nevertheless, the changes associated with the abovementioned will not be superficial or "cosmetic" as they may seem at first sight. They get management methodology involved, lead to renewal of a range of notions, such as the GDP index, renovation of the most important conclusions of the analytical table "Expenses – Production" and NAS (National Account System) in general. That is the reason why these topics are covered in the article.

A new subject almost always gives new definitions and sets new tasks, and also those ones that offer new possibilities. In our case, these are the notions and economic categories of supramacroeconomics, which will provide for the fulfillment of real management functions and increase in management efficiency. Possible

mechanisms aimed at achievement of new results also belong to the topics that are covered in our article.

### Supramacroeconomics prerequisites

The progress of postwar Europe and North America is a merit of macroeconomic concepts and development system. These are the achievements that are now called modern civilization. They are cities, roads, and communications, advanced technology, high standard of living, models of freedom and democracy. The progress of European countries at that time was not impacted solely by huge allocations of the famous Marshall Plan. Not less important was a provision by the U.S. of its markets for Europeans to sell products, which is becoming ever more evident. This is something that is not valued less than funds now.

The markets today are key benchmarks for development opportunities for all economies in the world. But new problems also occur now. Among them is reduction of the operability of macroeconomic management concepts. The time of easy achievements and stability of growth is over. Suffice it to recall the global financial crisis in 1998, recent (2008) mortgage crisis in the U.S. (which in many respects resembles a depression of the 1930's in terms of cause and form), which then spread to other developed countries, as well as the crisis that affected the European Union in 2010 to 2011 and the pre-default state of the U.S. economy (first six months of 2011).

The reasons of the fundamental level also include conservatism that embraced the principles of the present stage of democratic development, as such, and the inapplicability of the methodology of macroeconomic stability according to the interpretation model of the famous Washington consensus. However, such qualifications and generalizations are not the subject of this article. We need to find particular, but at the same time vital, components of social and economic movement of the world community forward. And among these components, we find the management system, modern methods of its construction and operation.

Since our goal in this respect is to determine the existing limitations of macroeconomics as a development stabilization method, we find the need to move to the next level of the economic management system itself. We will attempt to show that the limits created by macroeconomics currently significantly narrow the opportunities of the actual use of macroeconomics for the truly systematic development of countries, which leaves many areas and components of the economy beyond the influence of macroeconomics and relatively isolated. They include economy structure and monetization, economic space, rental policy, pricing, etc. And the analysis that would be possible in case of apparently necessary expansion of macroeconomics scope is not operational today; and the sectoral approach that is still quite widely used does not create conditions that allow

<sup>\*</sup> The ordinary macroeconomics also has possibilities to increase employment, for example, by means of increasing the aggregate demand. But they are not as radical as the current circumstances usually demand. Radical economic restructuring can be more reliable in this case (see further).

reaching the level of general system management. The point at issue is both the estimates of already incurred losses and, most importantly, the failure to use system capabilities of forecasts and calculations of economic space parameters for management purposes.

Next, Macroeconomic stabilization, in terms of its methods, if it is the only thing to rely on, is not truly liberal. Its original presentation as a scheme only, without proper consideration and reflection of the interests of all components of social development (population, regional divisions of the state) has at least two major drawbacks:

- Objectively established macroeconomic benchmarks are often subject to interception of interests by lobbies in the parliament and the current government (which, in its time, was acknowledged even in the citadel of the world democracy, by U.S. President Bill Clinton and others.)
- Today, liberality is not in fact general-public and, therefore, strictly speaking, is not democratic.

And millions of people are actually prevented from participation in the settlement of their own fate, from ensuring compliance with internal social rules to exercising their interests. And that is a "narrowed" democracy.

The above drawbacks explain that when coming to power, many political forces in almost all developed countries no longer promise to achieve certain macroeconomic targets incomprehensible to ordinary citizens but rather declare the reality: creation of a specific number of new jobs, reduction of unemployment, improvement of medicine, education, and public utility services.

And these are the benchmarks that are not macroeconomics-related but rather belong to another, or in this case, higher, level of control, which by its activities must immediately and directly reflect the interests of all people, the community as a whole, as stipulated in the constitutions of practically all countries. This level of control is called supramacroeconomic; and the relevant methods and system, a supramacroeconomics. So for the government of any country it is important to specifically plan their own actions and directions, through which the corresponding results will be achieved.

For example, in young Eastern European countries like Ukraine, this means "much-few," as restructuring of the economy from the one using mostly raw materials to the one using modern high-tech technologies or at least traditional engineering industries. This is because raw-material mining (iron ore, coal, etc.) companies can offer no more than additional 2 to 3% of GDP growth per year in the course of their development. On the other hand, high-tech companies, with multi-processing of raw materials, can bring in 3 to 4 times as much. It is true, however, that as regards developed economies, the given figures are significantly lower. And yet, even that is more than enough.

But to fully justify the strategy of the needed structural

reforms, also in current conditions in Ukraine, it is also necessary to conduct pre-system analysis of the situation that preceded the current economic state. That was a period of the country's transition to independent development; change of social structure from socialist to capitalist. And the way it happened was extremely ill-fated.

The rulers of the country literally "just barely" held it in their "hands." At the same time, almost all the basic fundamentals of the economy were affected: financial system, real economic balance. It happened so that, for the so-called support of national currency, hryvnya, the state primarily used the tactics of M3 monetary aggregate limitation in terms of minimum circulated amount - in the late 90s, its volume constituted only 12-14% of the annual GDP (for reference, it is 5-6 times as little as the values of other countries). And the amount of the latter also decreased by 50% compared with 1991 (when Ukraine was a part of USSR).

Such tactics failed to ensure stability, as it had been expected by the country's leadership, but rather led to even more devastating consequences. In the economic area, barter system of mutual settlements between business entities prevailed; monetary "exsanguinations" of the economy gave rise to non-payment crisis; turnover rate of "money-goods", "goods-money" dropped to a miserly level, which significantly hindered the economic activity in the country which, as it was, was too hampered.

The appearance of problems that cannot be now solved by any state authority and are not covered by any active structures served as the signal of necessity to examine the subject-matter of supramacroeconomics. It includes the following functions: 1) ensuring a sufficient level of population employment and 2) development of the domestic commodity market. Moreover, these problems themselves have become very urgent nowadays. These questions cannot be solved by means of macroeconomics, in other words, on the inter-branch level of management (ministry of economy, ministry of finance etc.).

But the most important and difficult thing is that if appropriate structures were created, their duties would be "contrived" or "paper", in other words they would be powerless. No institution was responsible and could be responsible for the necessity of creating new (or regeneration of old) working places as well as could project the domestic market. The origins of these problems are found in the economic structure itself, whose main objects belong to the private property, and a large market, for example in Ukraine, is not capable enough to "push" the labor market.

Only the government is able and also obliged according to the Constitutions of the majority of countries to implement its fellow citizens' right to work. The development of the domestic market of raw materials or energy resources could solve this problem and at the same time form new

additional GDP volumes and contribute to the improvement of the population welfare as well as solve the whole set of urgent social tasks.

The government cannot avoid fulfillment of these duties.\* That is why we get at least three supramacroeconomic functions at the same time, which can be denoted in the following way: development of the domestic commodity market, economic restructuring, employment and population. Supramacroeconomical balancing is an obvious mechanism of fulfillment of these functions by the government.

It is also necessary to create a relevant economic environment. This function has the name of "economic space formation". The government structure (or, to be exact, its own machinery) has to be also reconstructed in an appropriate way. We call this activity government "reloading".

And yet, there is something that takes place in many developed countries, namely the model of so-called conservative liberalism based on the provisions of the Washington consensus proclaiming the "omnipotence" of macroeconomic stabilization continues to be "promoted." This is the same liberalism that actually hides not always legitimate activities of large banks and financial circles behind its "mask." It reduces accountability and transparency in the activities of the latter for the community. That was the reason why the banks were truly and severely criticized by President Roosevelt in 1932 (He called this phenomenon Wall St. Arbitrariness).

Now it is only technology that has changed. Namely, forged diversification of package of securities, some of which are in no way secured nor guaranteed by relevant agencies, now pertains to the activities of those same financial companies and banks. This is just the case of "History repeats but does not teach," as the famous adage says. And in 2010, new financial crisis (following the one in 2009) covered a significant part of most developed countries. That last crisis hadn't come from purely economic reasons; instead, it was the crisis of modern politics of democratic countries. Its origins must be sought in a pragmatic and more thorough regulation of financial and related commercial corporations.

Government of each country does not need to be left wondering about the country's potential, actual sources of material and financial basis; instead, it must be based on the definite range of activities, current size and structure of the country's population, when developing strategies and tactics of such activities. All these instruments must be close to the realities of the country's needs, which is usually required from the political forces in whom the society vests the responsibility for the country's state.

As regards the above, Ukrainian experience can prove to be very useful. Because, in order to ensure overcoming the system crisis in our country, its current government shall not merely perform the analysis, but also create, in fact, a new system of national economy; and now we can begin "from scratch", as they use to say. State management is forcedly doomed to think comprehensively and to create everything all over again.

That was the primary point. Secondly, such restructuring of the economy shall meet no obstacles on the part of advocates of pseudo-democracy; it may not be solely based on paper macroeconomics diagrams; instead, it must include more broadly the interests of all strata of society. Specifically, we are talking here about corresponding expansion of the concepts of GDP and overall operating margins and expansion of national accounts and supramacroeconomics. The concepts of supramacroeconomics are being developed in Svyaz Investment Company (Dnipropetrovsk, Ukraine; author: Mr. F.D. Kozhurin).

From all the above, it becomes more convincing that the methodology of supramacroeconomics seeks to provide additional balance that cannot be provided within the framework of macroeconomic patterns and indicators, but not only due its methods and instruments but also due the competence of the highest executive body, namely the government. In other words, these new functional capabilities represent organic improvement of the economy management beyond the macroeconomic stabilization possibilities. Supramacroeconomics determines the transition from current inter-industry methods that underlie the macroeconomic approach, to the functional ones. Formation of its subject is a discovery in the management field, which is expected and highly relevant on the current stage of socio-economic development of mankind.

Thus, the functional principles of the government of any country at the present time are derived from the components that reflect the public interest. And therefore, the supramacroeconomic management system will be established.

Last but not least is also a social and systematic "bridle" for uncontainable market and deviations from liberality to the full and relevant significance of the word\*. The supramacroeconomic level so far is a yet-to-be-defined margin between social and political life and the top of the final phase of the economic processes that are raging in the real economic, financial, and other sectors and, in some way, are aimed at satisfying the changing needs of society. It is at this margin, and not on a subordinated macroeconomic level, as some scientists believe, that the features of social and political structure of the state are revealed, which exist objectively and are

<sup>\*</sup> When asserting purely market means of economy functioning, some economists often appeal for diverging from natural duties of the state related to creation of employment facilities for its citizens; it means that they also call for departing from provision of the necessary number of working places. So, the constitutional duty of the executive power to increase the minimum level of welfare is being drawn aside.

<sup>\*</sup> The necessity of establishing institutions that would monitor the process of financial deregulation is now unequivocally pointed out by the Washington Consensus creator, John Williamson himself. And this comes after nearly 20 years of its use.

Table 1. Organizational and functional activities of the state in economic area.

No.	Functions/ level of management	Determinant management principles	Main (substantial) functions	Procedural and management (technologic) functions
I.	Socio-political level (President, Parliament)	Statehood, national identity, civic consciousness, freedom, equality	Internal policy, external relations, social liberalism	Intrasociety relationships (legal regulation)
II.	Supraeconomic management (government)	Budget planning, state budget execution, maintenance of balanced development of the country, intrasociety interest parity	Internal market, structural reforms, economic area, population and employment, intrasociety balance, small and medium business, disposing resources and budget execution control	Extended GDP, operational environment of supramacroeconomics
III.	Macroeconomic level (cross-industry level agencies, including statistics agencies)	Macroeconomic equilibrium of country development, preparation of regulatory measures on the part of public sector	Inter-industry balance of "Input-output," GDP, national accounts	Preparation and support of state programs and national projects
IV.	Industry-territorial ( <i>ministries</i> , <i>local</i> <i>authorities</i> )	Development of economic industries and territories (local self-government)	Support of technology levels, growth in gross regional product and regional infrastructures	Preferences to priority sectors and areas (state budget)
V.	Microeconomic (companies, corporations)	Selection of opportunities to develop technologies and markets; improvement of product quality; increase in labor productivity.	Same as in column 3	Technological parks, nanotechnology, use of financial instruments

available in each period of the state development.

In general terms, the objects of our discussion are summarized in Table 1.

### **METHODOLOGY**

Such considerations that are theoretical in many respects require serious methodological grounds. The more especially as we are talking about a new subject. But before that, let us try to answer a very simple question: Are not we talking about some sort of "leveling" of work results distribution in our social liberalism, which is usually pointed to by the leftist preachers? No, this is not the subject of our discussion; what we are talking about is correct assessments and conclusions. According to the foundations of democracy, liberalism does not refer to complete permission to do whatever you think is right. As if liberalism were only freedom of choice and action. But it also includes responsibility. Freedom is immediately limited to the point, in which the interests of one person border on or intercross the interests of another person (that is, society). This really cannot be done without a biased regulator. And this bias is called no more than real equality and justice. Because neither the strength nor the deception of others, whatever be the source, can be a decisive factor here. This is required by society, and its laws are effective to this end.

Based on the concepts described above, this methodology will not fall well with the conservatives of liberalism because it confirms the real karma of liberalism. It will bury conservative liberalism. This methodology shall proceed from the objectivity of the laws of

nature, society, state as one of the forms of human existence. Also, it must be sourced out from action of economic laws in the state, as an integral part of the universe, which affects the nature and the organization of mankind, its conscious community. Further, these laws are technologically transformed into structure and self-organization of management systems, democracy, etc. In particular, into the basis of life, the economy.

According to our subject, depth analysis and evaluation, and radical improvement of the both are required today. There is a methodological unity of mediacies of all listed components. We also mean "sandwiches", multi-layer productive-economic diagrams of deep processing of industrial raw materials and creation of GDP in the expansion version of the latter in the form of interested circles, a transition of belt rings (strips). The comparison of these figures displays analogy of natural resources processing technology, on the one hand, and creative human activity (creation of conditions for its multifaceted activities), on the other hand. Here the authors of the new approach seem to find interesting firstly the methodological consistency between 5th and 6th processing depth levels that exist in modern countries (or modern technological forms or generations of machines) and secondly, an increased level of expansion of GDP that corresponds to supramacroeconomic concepts and categories (Figure 1).

But the evidence of natural place of supramacroeconomics in self-government processes in societies can be complete if it is grounded in the same manner as, for example, each element's position in the Periodic Law of Chemical Elements, which is known in Eastern Europe as the Mendeleev periodic system. Or, as prediction and calculation of new stars in world space. A similar (yet unwritten) law must be applied to the socio-economic system that is

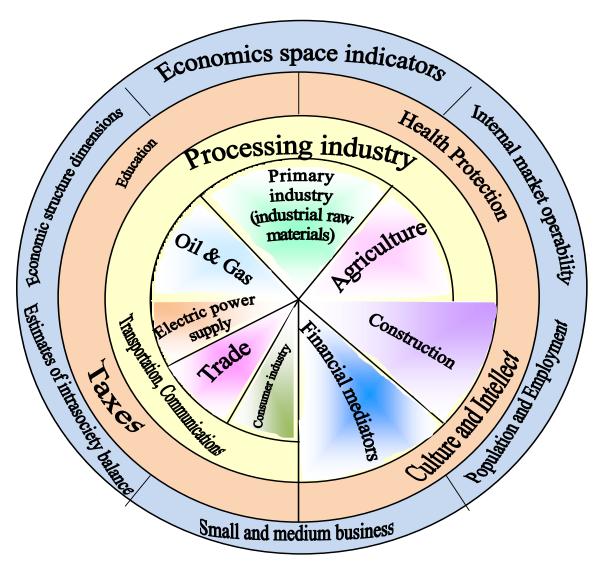


Figure 1. Variant of GDP concept extension.

the basis for any state construction.

In methodological respect, one should proceed from omnipresent unity of the Universe, which involves (1) the universality of the principles of creation (and operation) of the world space (gravity and so on) and internal structure of the matter (atoms and molecules) - chain nuclear fission and multi-processing of mineral resources to obtain useful products by the mankind - inanimate nature, (2) internal arrangement of plants and biological objects, wildlife, and even (3) economy, by comparison of the principles of the living cell, consumption and accumulation, that are inherent to any economic system.

But the mankind has gone even further: it uses the mentioned laws consciously and deliberately, analyzing and completing the creation of its own way and reproduction system and providing conditions for its life, and economy management patterns.

Thus, supramacroeconomics, in that sense, is the analytical and operational instrument designed to provide practical compliance of the current economic processes with the public interest and needs of developing countries to the maximum extent possible. And this is regardless of the form or the socio-economic structure of the country. To this end, it includes goal setting system, functional

methods of higher authorities activities and forms the levers of actions of the latter.

But where is the critical limit in the development of social economy, which serves as a reasonable condition for the transition from an adequacy of purely macroeconomic assessments to the need of supramacroeconomic concept? One of the criteria for answering this question, shall be, for example, related to manifestations of supramacroeconomic crises (like in 1930s, 1998, and 2008-2009). But along with that, broad implementation of supramacroeconomic tools is made possible for impeding or smoothing traditional "rise-and-falls" that are inherent to market economies in general.

Supramacroeconomics refers to a new set of time-weighted market mechanisms that regulate aggregate demand. They are based on social rather than on purely economic issues. Based on the fact that the availability of supply and product markets, and competition for them is the most important factor for economic development, macroeconomics also has more extended meaning. It does not only act as an intrastate mechanism; instead, it will become a mechanism of global economy that regulates global society, global demand, and helps satisfy the needs of global

growth. Over the years, appropriate correction of free trade zone, the WTO rules in general, will be made. Then, money will not be in want: printing of USD or EUR will no longer be a problem. The problem will only be in the maintenance of their exchange rate. The demand, the market, and the sales will be the largest deficits in international economic relations.

Economic analysis that somehow includes supramacroeconomic issues is has become common. Such issues have become attributes and defining characteristics of modern economic systems of most world countries. They identify both degree of their development and standards of living and population trend. Now, it is time to review the completeness, to "collect" all links and a whole structure of state management, to integrate broadly scattered management functions, to provide the existing methods and tools of implementation for an enhanced formulation of the problem, including (as an example, see below) an anti-crisis concept.

But for some reason, the latter are either completely lacking or are brought outside the main mechanism for assessing the economic development of countries through a well-known input-output table in the current system of national accounts. This shortcoming must be corrected gradually.

If we look specifically, we will need to convert, for example, the methodology of GDP creation in the direction of extension of this macro index functions to the category of really supramacroeconomic level. We consider correct to present it as a diagram, in which the supramacroeconomic level as such is actually added to current GDP components. In our opinion, gross domestic product must logically include, along with education and public health, other significant human activities that can have impact on the economic growth, prosperity, and intellectual potential of the nation.

A variant of such GDP expansion is shown in Figure 2\*. As such, it essentially will serve as a general model of society activities assessment. Compared with a valid calculation scheme of GDP distribution by economic activity types, it includes both positive (the "plus") and negative (flaws, the "minus") indices. It also includes the definitions from missed opportunities analysis.

Generally speaking, part of the GDP generated by supramacroeconomic operability can be interpreted as a service to society (and everyone) from the highest level of state administration and free assistance (whether through tax or other benefits) rendered to business entities. This is the kind of gross product share that the highest level is obliged to "produce" (generate) itself.

## Algorithmic structures of supramacroeconomics

In our previous statement, we have tried to prove that the content of the functional methods of economic management at the highest level are supramacroeconomic concepts and categories. They also reflect nature and primary structure for society movement to economic prosperity. They are actually indifferent to the types and branches of economy; they have general public nature of certainty. Since domestic market, economic structure, economic area, population and employment, and intrasocial balance are, in essence, the ways of current adequate assessing of the efficiency of use of productive-economic and natural resources. They are both indicators and leverage of the state impact to satisfy the growing needs of society and further development of the country.

Both appropriate development and expansion of state statistics, national accounts, schemes of GDP calculation and other macroeconomic indicators become urgent. Among the latter, the following is expected: introduction of accounting systems and, therefore, extended national accounts of effective and more

complete use of domestic mineral and other natural resources in every country. How it could be done is illustrated by the "sandwiches" of multiprocessing of the latter with an appropriate regulation of economy structures. This will be reflected in the ways of reasonable use of existing industrial and economic potential of the country. There is also a need to overcome the tradition of priority of financial support of business over the economic development itself and achieve the priority of public over the productive and economic.

In turn, the need for interpretation of the expansion "sandwich" of GDP generation with additions and directly formalized assessment of degree of satisfaction of new social needs in humanitarian (and intellectual) field. In this regard, methodic workout of types for consideration of indicators of such areas in the economic development will be important.

One of the unavoidable consequences must be the change in the composition and the analytical functions of both "input-output" tables and the system of national accounts (SNA). However hard we may try to simplify or narrow the "input-output" table, including the Leontief type, we will be naturally tempted to expand it to see mediation of various economic hardships or disbalances. Therefore, we must find and establish quite a flexible scheme that matches all 14 quadrants of our large macromatrix (Figure 2), combined in whichever way (totality and composition). One of the opportunities can be a GDP "sandwich" that was shown in Figure 1.

The analysis the possibilities of which are limited by the technically accepted "Input-output" table dogma will be very risky. Over a very short time, the "center of gravity" of the world standards of socio-economic analysis will be shifted from Wassily Leontief's "input-output" and Richard Stone's national accounts to the set of above features, supramacroeconomic indicators, since they are the most adequate interpretation tools for assessing the economy, as well as the further multifactor impact on overall system efficiency.

Flexible ("floating") set of the foundations of economic and social analysis and testing of solutions taken on its basis, as well as new supramacroeconomic management system of single economic space of a country (or their associated conglomerate) are on time today.

The following conventional symbols are used in Figure 1:

a i, i+1 – matrix elements of intermediate consumption in terms of economic sectors, i=1÷8; b9, i+2 – final consumption of products in each of the industries; cj, i+2 – matrix elements of manufacturer's income and expenditure and GDP, j = 10÷14; d15, i, – manufacturing of products of the industries, i=1÷i+2; f – cost of final consumption, L=11÷13; g – accumulation of capital, h=14÷16; ui+1, q – exports and imports volumes and production output, q=17÷19.

Data regarding new matrices and vectors of the internal market, economic structure, population and employment, economic space, intrasocial balance, small and medium enterprises must be brought to the formal appearance in order to create a common operational field (environment) necessary for the functioning of system complexes, for each supramacroeconomic concept and category.

#### Methodology application practice

To illustrate the effectiveness of supramacroeconomic management in the context of the conditions of accelerated industrial recovery, such as in Ukraine, the concept and mechanism of economic growth are presented as follows.

The corresponding concept will bring, in its meaning, an irreversible growth of the defining indicators of the Ukrainian economy. It is deemed to be formed on a permanent basis, simultaneously with the creation of required number of jobs in the economy. It is schematically shown in Figure 3.

<sup>\*</sup> This presents the structure of the existing GDP generators in a slightly amended form (due to the conceptual nature of the review).

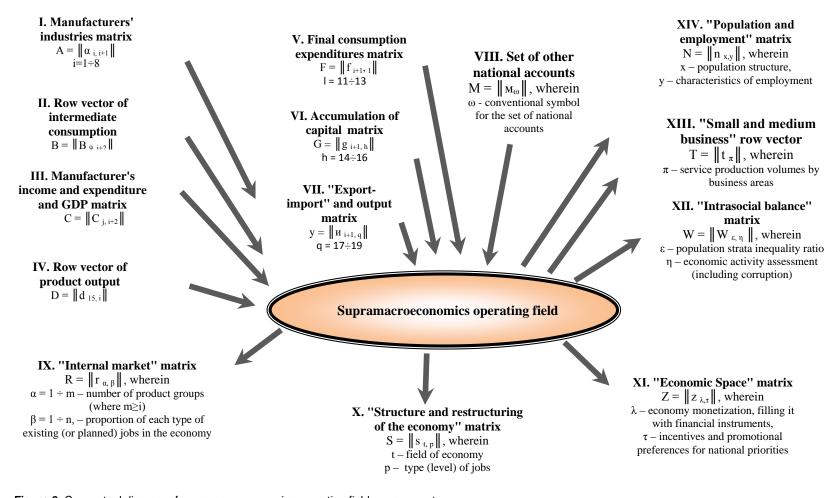


Figure 2. Conceptual diagram of supramacroeconomics operating field engagement.

The very realization of the concept provides for both industrial recovery and, in many respects, modernization of the economy and creation of new and significantly (manifold) increased added value that is necessary for the country development, performing of reforms, and implementation of country-important national projects. Our

scheme includes two key levels. They are: 1) creation of state investment fund (funds) for raw-material and energy industries – for a strong support of machine– and instrument-building industries development; 2) effective functioning of high-added-value industries – for financial support of reforms and national projects.

Here we show two main sources of Nadra Ukrainy (Ukrainian Resources) investment fund:

- Fees for use of soil and other natural resources (already envisaged by new Tax Code revision);
- Income (in kind or in monetary form) under product

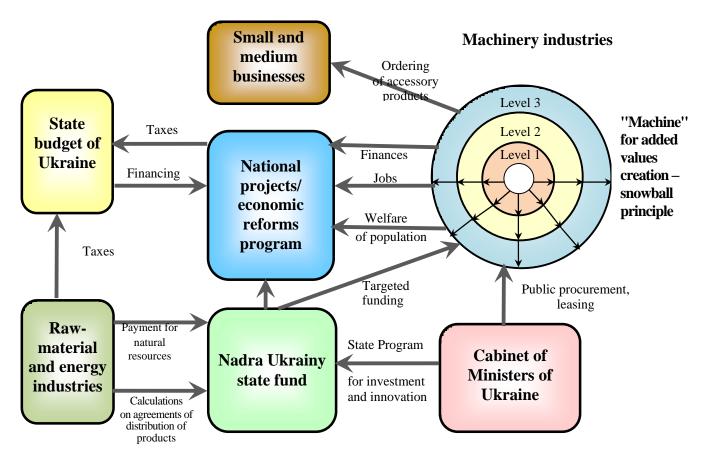


Figure 3. Mechanism of rapid industrial recovery and economic growth.

distribution agreements. According to the interpretation by the Ministry of Justice of Ukraine that we specially received, such agreements are obligatory to be concluded with the Cabinet of Ministers by all existing users of Ukrainian resources, transport companies, and primary processing companies (metallurgical and similar plants)\*.

State orders and leasing of import substitution machinery and equipment for agriculture, industry, complicated domestic appliances can be seen as ways to support high-tech industries. Such steps are designed to provide real creation of added values that are sufficient for country development, with their tax transformation in the state budget and social funds. Besides, according to this scheme, small and medium businesses are also benefited (see top of Figure 3).

We propose the following distribution of functions in the implementation of appropriate trigger mechanism of the industrial recovery. The state creates (and therefore funds) its orders for import substitution machinery and equipment or leasing thereof. This is implemented during the first iterations of production organization (approximately, 3 to 4 years). And the necessary technological upgrading, restoration of jobs are implemented by the current owners of machine-building enterprises via attraction of other investors or, if they want, obtaining sufficient credit resources.

According to the preliminary forecasts, owing to these measures and some other sources, annual GDP in 2017 can reach UAH 2.5 trillion compared to current UAH 1 trillion; and the size of the state budget, UAH 0.8 trillion by providing GDP generation of about USD 8,000 per capita (current UAH/USD exchange rate is USD 1  $\approx$  UAH 8).

As to the general formulation of the problem, we are able to combine our still utilitarian knowledge and skills of analytical work with understanding of truly systemic and multidimensional macroeconomic-level models. For this, we will use the illustration provided in Figure 4.

In our version of this figure, the "Economic space" is shown as a semi-oval, specifically its horizontal section. It is indicated as "z" and is composed of z  $\lambda$ ,  $\tau$  elements. Two longitudinal, perpendicular planes are: R – "Internal market" represented by r  $\alpha$ ,  $\beta$  elements; N – "Population and employment" composed of n x, y. Two planes that are cross-perpendicular to the horizontal plane are: S – economy structure represented by S t, p elements; W – intrasocial balance represented by W  $\delta$ ,  $\eta$  elements.

The asterisk in Figure 4 is used to indicate key pulsating inclusions: intersection of supramacroeconomic indicators, intersection of supramacroeconomic indicators. They are the manifestations and dimensions of the actual values of supramacroeconomic concepts and categories in multidimensional space\*.

As regards this illustration and creation of an operationalgorithmic supramacroeconomic environment as a whole, we

<sup>\*</sup> This is regarding the consummation of the Law of Ukraine dated 9/14/1999 # 1039-XIV "On Production Distribution Agreements". For these purposes, it is sufficient to hold a relicensing of the related fields (a separate decree of the Cabinet of Ministers of Ukraine is required).

<sup>\*</sup> To use this representation as an operational and algorithmic environment, it is necessary to encounter a suitable software package.

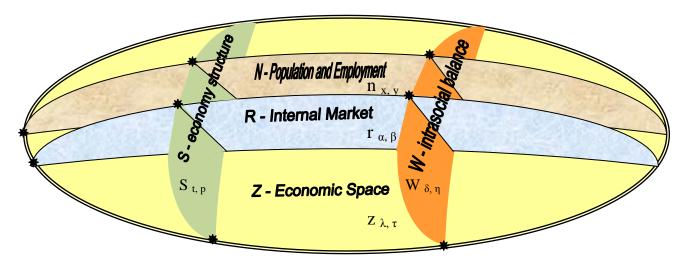


Figure 4. Graphical computer-made model of certain supramacroeconomic components (demo version - fragment).

realize that, first of all, arguments presented are merely a plan, an attracting idea for setting the corresponding problem. Within this article, we deem it unrealistic to present another series of motives and substantiating facts. Secondly, the solution to the said problem is not easy, and it can be implemented only by a considerably sized team. Or a set of such teams and within the indefinite time period.

And thirdly, perhaps the most important: it is impossible to solve the problem using a single method and conclusively. For a task will continue to remain open for a long time with the deepening of knowledge and changes in the requirements from the customer, that is the society. Therefore, one day you can only state that the problem of formation of the operating field and algorithmic supramacroeconomics structure is only "principally" solved.

This is only the first experimental stage in our essentially pilot project. It can proof really useful to a new system of supramacroeconomic management. In its not-the-best option, to tell the truth, because it is probably hard to attract all the other sections of information for system complexes. And the findings and the results to be made and obtained will be quite low compared with the situation when it is possible to just easily and purposefully build a new and enhanced information system.

However, the expected system needs to be the most up-to-date and based on new opportunities; it shall directly respond to higher goals, current requirements to further development of human community. The most important guarantee of relevancy in the development of our system is that its root cause is not a statistic interest but the movement from the needs of management and general social development.

## **RESULTS AND DISCUSSION**

It is convenient for us to represent them within three groups as follows: definition and substantiation of supramacroeconomics, its fundamental notions and categories; methodological foundations of this discipline; set of instruments of evaluation and methods of supramacroeconomics.

1. The definition of the supramacroeconomical level of management was ensured by the determination of the essence of functional methods in the activities of the government of the country that result from the constitutional provisions and governmental responsibility before the society. Alongside with the functions related to the support of the state functioning and security, the government bears responsibility for providing its citizens with rights to work and satisfaction of the minimum social needs. These functions are expressed through the population employment promotion, availability of the sufficient quantity of working places throughout the whole territory of the country, the economic structure that should be adequate for these purposes, domestic market development, creation of economic area (monetary and currency environment, taxation system, preferences), provision of the balance of intra-society interests of all layers of population, regions and separate individuals. These particular conceptual functions as compared with traditional ones, mainly of technological character, constitute the basis of supramacroeconomics.

- 2. The object of supramacroeconomics occupies the niche of state management functions between the national level and the level of economic management that is identified with the current macroeconomics (interbranch management). The distinguishing of the supramacroeconomical level of management, which is suggested in the article, is linked with the actualization of the abovementioned functions practically in all countries, including the developed ones, which has become also the outcome of more frequent manifestations of financial and economic crises (recessions, depressions). The necessity for scientific explanation of supramacroeconomics as a separate discipline appeared.
- 3. The first step on this way is the parameterization of evaluation of constituent concepts and categories of a new discipline, the determination of ways of estimation and simulation that would provide the possibilities for adequate assessment of adequate human activities, usage of industrial and economic as well as natural

resource potential. The above-mentioned notions and categories express the influence exerted by the government and also serve as levers of governmental influence for the purpose of satisfaction of the growing needs of the society and further development of each country.

4. In our interpretation, methodology of supramacroeconomics provides, in substance, new and much more extended and adequate to modern demands evaluation of the human activity effectiveness within the framework of the state jurisdiction. It manifests itself through a sufficiently pragmatic integral index - GDP volume - by adding to its traditional components the influence of concepts supramacroeconomical and categories. Because, after all, employment and domestic market are not only socially and economically important components of human activities; they also serve as a productive force and come as factors of the steady development of the country.

Virtually, at the same time the objects of supramacroeconomics serve as weighing mechanisms of selfregulation of the aggregate demand. By using them the society can accompany the operation of law of growing demands. Finally, supramacroeconomics gives the opportunity to reach the highest stage of actual implementation of social liberalism and provision of all necessary facilities to it as the expected way of the formation of social relationships.

- 5. The basis of supramacroeconomics and its driving element is the synthesis of the method of inter-branch balance with absolutely new possibilities that will be included into the actual table «Expenses and Production», essentially expanding thereby the structure and also making it stronger both in terms of information and technologies by means of creating a common operating field. After all, it will considerably raise the role and importance of updated NAS (National Account System) within the overall management system. The enumerated components will create a new «supporting structure» of the information and analytical system of the country.
- 6. The methodological set of instruments for assessment and activation of supramacroeconomical levers was determined in the article.

The first part of the set of instruments is aimed at ensuring the adequacy of fulfillment of goals and tasks that are set on the national level of state management. The second part ensures functional interaction of supramacroeconomical methods with macroeconomic methodological arsenal that is currently used. Owing to the above-mentioned, the integrity and necessary appropriateness of separate elements and country management system will be preserved as a whole. In addition, it will be implemented in two planes: basic – functional plane and the other one – analytical and procedural plane. This factor will be reflected in corres-pondingly updated gross-table «Expenses-Production» and NAS.

7. As an example and illustration of supramacroeconomics design our article demonstrates the mechanism of financial provision of accelerated industrial reconstruction and economy modernization (for postsoviet states – former USSR). The accepted method is a radical structural reconstruction of the economy supported by the state. This is the case when no efficient thing can be achieved without the usage of supramacroeconomical means (confirmed by 20-years experience).

One of the problems arising during the supramacroeconomical method implementation is the problem of formalization – the use of quantitative indicators – when carrying out evaluations in intellectual or social and political spheres. This will require the attraction of appropriate circles of experts, sociologists, political scientists and other representatives of human sciences.

The agenda of our project also includes a wide-ranging problem of the development of the set of indicators (including within supramacroeconomical concepts and categories), their positional matrix and vector placement in every quadrant of the common operating field of supramacroeconomics. The author is gradually approaching the solution of the problem indicated.

#### **REFERENCES**

Aubert-Frier J (1969). Gestion de L'enterprise. – Presses universitaire de France, Paris p.304.

Kozhurin FD (2010). Methodological Principles urgent project of economic and social reforms in Ukraine. "Current Economic Issues", Kyiv, ISSN 1993 - 6788 International Centre, Paris, and Thompson Reuters, 3501 street, Philadelphia, PA, 19104 (USA) 11:3-18.

Mankiw NG (2000). Macroeconomics- Worth Publishers, Inc., New York p.588.

McConnell CR (1995). Economics: principles, problems, and policies/ Campbell R. McConnell, Stanley L. Brue. 13<sup>th</sup> edition, New York.

Rogoff K (2003). Wither the Washington Consensus?//Foreign Policy.
Zadoia AO, Petrunina YE, Kuz'minov SV, Tushenko OM, Kosyakina OA (2011). Macroeconomics— Alfred Nobel University, Dnipropetrovs'k, design p.296.