Presentation of Interdisciplinary Study Volume Competitiveness of Oltenia - Past, Present and Perspectives

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The group of senior professors of the University of Craiova offers, as usual on a voluntary basis, a new interdisciplinary study, "Competitiveness of Oltenia: past, present, perspectives", which, together with "Vision Oltenia 2050" and "Emerging technologies in Oltenia", is part of the academic research module of the University focused on the development of Oltenia, its becoming a prosperous and attractive region at national, European and international level.

It is an uplifting honour for the Group of senior professors to dedicate with deep affection this new study and the related academic symposium to honour and celebrate the 75th anniversary of the foundation of the University of Craiova, today a veritable Pantheon of knowledge of the Citadel, to which we wish unfailing flourishing and fruitful perpetuation.

The study aims to assess the state of research and practical application of the concept of competitiveness in the world, as well as the positioning of Romania as a whole, and in particular of Oltenia as a development region, in the context of developments in this important aspect of contemporary life. On this basis and benefiting from the undeniable advantage of interdisciplinary research offered by the Group's almost totally comprehensive heterogeneous expertise, the study puts forward several theoretical and practical initiatives, such as a rigorous operational definition of the concept of competitiveness, the qualification of the development region as a potential complex adaptive system, a simplified formula for calculating competitiveness at the enterprise/company level, as well as the re-establishment of the Romanian Marketing Association (AROMAR) and the Oltenia Businessmen's Club Atlantis/Minerva, as related practical actions.

It goes without saying that the responsibility for the opinions and proposals formulated by the authors in the study lies with them, and they cannot be considered as necessarily reflecting the position of the University of Craiova.

I. The study begins with two chapters of conceptual and methodological approaches, elaborated with the participation of the entire Group of senior professors, moderated by Prof. Fota C., with the aim of carrying out a rigorous research as thorough as possible and of useful scientific initiatives in the field, taking advantage of the competitive advantage offered by the multidisciplinarity of the Group.

Conceptually, although it enjoys a growing general interest, an abundant literature (2000 authors, 1200 publications, 70 countries, 78. 000 citations), as well as a broad consensus on its origin, essence and determinants, the term "competitiveness" does not yet have an established scientific definition, with many of the existing ones ranging from too general, e.g. "The ability to be competitive" (Dexonline), through the simplistically technical, e.g. "The ability to produce and sell at a price that ensures a reasonable profit", to the very specific, e.g. "The ability to generate relatively high levels of income and employment in the region under conditions of external competition".

If we go back a quarter of a millennium to Adam Smith, the year 1776, when the Wealth of Nations was published, the book considered to be the seminal work of Economics, we are not surprised to find that the author points out the key elements of such a definition in his work: free market economy based on private ownership; independent, rational, profit-motivated entrepreneurs; products quantitatively and at

prices appropriate to the market; price (productivity) = cost (labour, materials, machinery, land rent, capital interest) + profit; free and fair competition in the market as a natural institution, providential reconciler between the divergent interests of producer (private) and consumer (public); demand-supply and price interdependence as regulatory mechanism in free, decentralized economic system; "invisible hand", "laissez faire economy"; strong state, provider of access, protection and security externally, defender of freedoms, rights, free competition and investor with costs hardly bearable by the population internally; stellar role of free competition based on absolute productivity advantage, as doctrine for trade liberalization in international relations. On these classical fundamental bases of economics as a science, revealed by its father Adam Smith and on the pillars of modern marketing outlined by their founder Philip Kotler, in the study an operational formula of competitiveness is put forward and debated, as follows:

"Demonstrated and recognised ability to penetrate, resist and increase market share in a free, competitive, domestic or global market, as well as to enter and expand into new markets, by producing and offering goods and services that are appropriate to the demands of consumers or beneficiaries, at prices acceptable in those markets, distributed through an optimal value added network, and adequately promoted, so as to equitably meet both their own turnover and profit objectives and the income and livelihood needs of the workers involved and consumers respectively".

At the same time, the study points out that, from a methodological point of view, the nature of the research, its objectives and the circumstances in which it is carried out make it necessary to draw a clearer distinction between competitiveness in its original sense and the various other particular types of competitiveness, increasingly addressed not only in the literature but also in the practice of the respective fields: microeconomic competitiveness, macroeconomic competitiveness, national competitiveness, territorial competitiveness, regional competitiveness, etc. We do not include in this category the traditional competitions - competitiveness in non-economic fields, such as sports, schools, the arts, etc., which have a specific nature, history and rules.

The proliferation, including institutional, of the concept of competitiveness (for several years we have had no less than five solid international indicators for measuring and classifying the competitiveness of countries or regions, but none for entrepreneurs, firms or large companies) was accentuated after the appearance in 1990 of the much-publicised theory "The Competitive Advantage of Nations" by Professor of Management Michael E. Porter of Harvard University. Many economists, representatives of business circles, political figures and members of the press received the new theory with interest, even enthusiasm, considering it a step forward on the path of the great discoveries of economic science: Absolute advantage (A. Smith), Comparative advantage (D. Ricardo), Competitive advantage (E. Heckscher, B. Ohlin), Competitive advantage of nations (M. Porter).

Comparative advantage of nations is not as successful in the academic world. On the contrary, here the concept is unusually harshly criticised, undermining its credibility. Thus, Nobel Prize-winning economist Paul Krugman, in his paper "Competitiveness: a dangerous obsession", argues that the analogy between the corporation and the nation in terms of competitiveness is inappropriate and wrong.

However, the concept of competitiveness has continued to proliferate territorially, this time at the regional level within countries. Developments in this respect have been stimulated both by the intensification of general concerns for regional development, the narrowing and closing of existing internal gaps, and by the dissemination and institutionalisation of the concept of competitiveness of nations. In this way, today we have three categories of competitiveness: enterprise competitiveness (micro), regional competitiveness (mezzo), national competitiveness (macro).

But the biggest problem that regional competitiveness raises, would be the very concept of development region. It is considered that in order to qualify as such, the region must fulfil two conditions: it must be functional and have important political and administrative attributes. In most EU countries functional regions are not administrative and vice versa, they are administrative but not functional. From this point of view the Oltenia Region would be neither administrative nor functional, but a voluntary, statistically-informative gathering of counties, and it would not be an isolated case. This is not considered to undermine the credibility of the regional index, as it captures regional variations for firms and residents.

Whatever one may say, judging by the results so far of EU and member countries' regional policies, the need for a paradigm shift in this area, starting with redefining the very notion of a development region, freeing it from harmful political and administrative entanglements, becomes increasingly evident. As for various reasons internal administrative territorial adjustments seem practically difficult if not impossible to achieve, a feasible and sustainable productive solution could be the establishment of the current NUTS 2 in EU countries as Complex Adaptive Systems (CAS).

The Complex Adaptive System, a term first used by sociologist Walter Brucklay in 1982, is a Complexity Science term that is currently being accelerated on a multidisciplinary basis, particularly at the Santa Fe Institute in California, USA. Its very name says what it is all about: System - a whole made up of many heterogeneous, specialized components (agents); Complex - agents interact according to their purpose, without knowing what the end product of the whole is, and the system relates to other systems; Adaptive - permanent evolution, any movement of agents causes others internal and of the system as a whole, which may be greater than the sum of the promoting internal movements.

II. The study continues with the analysis of competitiveness in international practice. With the conceptual and methodological observations and delimitations, expressed by the exegetes and the Group of Senior Professors in the first two chapters, Professor Fota examines and presents in the third chapter the two international indices of national competitiveness, as well as the European index of regional competitiveness.

But, before doing so, an injustice is repaired by relocating competitiveness to the core of the free entrepreneur, be he small firm or large company. In this respect, it briefly evokes the overwhelming role of the stock exchange in economic life, as a continuous exponent of the essence of free competition and competitiveness. No index, no matter how sophisticated, can and will never be able to establish objectively, precisely and instantaneously the productivity of companies, as a determinant and measure of competitiveness, as the market, the more than 68 stock exchanges that exist in the world today do, by listing shares and evaluating the capitalisation of the companiesconcerned.

Returning to the two international indices for analysing competitiveness and ranking countries, the first, which appeared in 1989, is the World Competitiveness Index, drawn up by the Institute for Management Development, a Swiss foundation, in collaboration with national institutes in the 63 countries analysed. The Institute's mission is to develop managers in international business at every stage of their careers, and the index analyses and ranks countries according to how they manage their competencies to create long-term added value.

Methodologically, the index is based on 133 criteria, grouped into 4 categories (factors): economic performance, government efficiency, business efficiency, infrastructure. Depending on the degree to which each criterion is met, countries receive a score out of a possible maximum of 100. In this case, too, the criteria do not include resources and other favourable natural conditions, which significantly disadvantages countries such as Romania.

According to the World Competitive Index 2022, in terms of competitiveness, the top 10 out of 63 countries analysed are, in descending order, Denmark, Switzerland,

Singapore, Sweden, Hong Kong, the Netherlands, Taiwan-China, Finland, Norway and the USA, with individual scores ranging from 80 to 85, none of them managing to accumulate 100 points. In last place out of a total of 63 are in descending order Brazil, South Africa, Mongolia, Argentina, Venezuela.

Romania, with a score of 64.4 is in 51st place, slightly down from 49 in 2018 and 48 in 2021. Note that the country's position in international competitiveness is below the rankings for important criteria such as area, population or GDP of the country. The worst scores, below 51st place, were recorded, in the order of criteria performance, by foreign investment, public finance, international standing, labour market, management practices, basic infrastructure and educational infrastructure.

The second index, the Global Competitiveness Index 4.0, is developed by the World Economic Forum, which in its 2020 Report states as its motto: "National competitiveness is a set of institutions, policies and factors that determine the level of productivity", i.e. the definition of competitiveness given in 2007 by Professors Porter and Schwab, the latter being also the President of the Forum.

The index is calculated for 141 countries as a weighted average of indicators selected as determinants of competitiveness, grouped into 12 competitiveness pillars, namely: institutions, infrastructure, macroeconomic environment, health and basic education, education and higher education, market efficiency, labour market efficiency, financial market development, technological openness, market size, business sophistication and innovation.

In turn, each pillar is assigned a relative weight in the index, determined according to the stage of development of the countries: Stage I based on factors; Stage II based on efficiency; Stage III based on innovation. Two criteria are used to classify the stage: the share of minerals in total exports and GDP per capita. With more than 70% minerals in exports countries are classified in Stage I, and with certain levels of GDP per capita periodically predetermined, countries are classified in Stages II and III respectively. As its income increases, the country moves from Stage I to Stage II and then to Stage III.

According to the latest Global Competitiveness Report (2019), the Global Competitiveness Index ranks Singapore, the US, Hong Kong, the Netherlands, Switzerland, Japan, Germany, Sweden, England and Denmark in the top ten, with scores between 80 and 85 out of a possible 100.

In the Global Competitiveness Index Romania is ranked 51st, the same as in the World Index, with the observation that the years are different, 2020 and 2022 respectively, in the same slight deterioration from the previous year. It ranks in this position with countries such as Bulgaria, Indonesia, Mauritius and Oman, and in the World Index with other countries such as Slovakia, Poland and Turkey.

The third index, this time regional, the Regional Completiveness Index (RCI), operates in the context of the deepening and generalisation of the controversy that began in 1994 between P. Krugman and M. Poter on the theoretical validity of extending the application of the concept of competitiveness to regions and countries, becoming, according to Krugman, "a dangerous obsession". . It is developed and published every 3 years (2010, 2013, 2016, 2019), for the 268 NUTS 2 level regions of the 28 pre-Brexit EU member states, to demonstrate that the EU is an attractive and sustainable place to live and work.

Methodologically, the index is based on 70 indicators grouped into 11 productivity pillars, and these into three categories: basic (institutions, macro-stability, infrastructure, health, basic education), efficiency (higher education, labour market efficiency, market size), innovation (technological readiness, business sophistication, innovation). In turn, countries are grouped according to their level of development, expressed in GDP per capita: 1 - medium level, 2 - intermediate level, 3 - high level.

The top three regions in the EU are Stockholm, London and Utrecht (the Netherlands), the last place Vereio Aigio (Greece) and the penultimate place Sud-Est

(Romania). In fact, except for Bucharest-Ilfov, all the other 7 Romanian regions are in the last part of the ranking (238-267 out of 268) and in stages 1 or 2 of development, Bucharest-Ilfov being in 151st place and in stage 5 of development.

Surprising or not, depressing or on the contrary mobilizing, the report relentlessly reveals the embarrassing competitive position of the South-West Oltenia Region in the European regional landscape, with a score of only 10.57 out of a possible 100, placing it in 6th place among the 8 national development regions (well below the country's average score of 17, 84), and in the EU it ranks 254th out of 268 European regions (with 253 ahead and only 13 behind), which contrasts with the area's exceptional endowment with natural and other factors, as well as with some triumphalist assertions of local achievements.

Overall, as a mirror of regional administration, the 2019 Regional Competitiveness Index confirms a polycentric pattern, with most capitals and regions with large cities performing well, while other regions in the same countries score much worse.

III. After the foray into the theory and practice of competitiveness, the research focuses on the competitiveness of Oltenia, which is in fact one of the main objectives of the academic approach. It was also found on this occasion a well-known fact: the country and, from a certain surprising point of view, Oltenia are even more worryingly placed in the international competitiveness rankings, far from their places in the world in terms of surface area and population and their potential in terms of natural and human material resources.

Apart from GDP per capita as a synthetic indicator, the trouble spots in both scenarios are chronic budget deficits, chronic and growing trade and current account deficits, emerging shortages of medium and highly skilled labour, poor basic and educational infrastructure, poor management, weak foreign investment flows.

The causes are multiple, most of them also known, so we do not propose to repeat them. In any case, it is unfounded to claim a lack of capital as long as we do not fully use EU funds or the efficiency of the amounts used is questionable. This is the right place to remind ourselves of the old saying "A true man is not one who makes money, but one who knows how to spend it well". Knowing how to spend it means knowing what you want, where you want to end up, in other words, thinking strategically, having vision, not shooting randomly with a shotgun and putting the mark where the bullet hit!

In order not to remain at the level of wishful thinking, the vision must be based on knowledge, experience, intuition as a synthetic expression of these, taking into account the laws and principles applicable to the field. In our case, of competitiveness, one of the important laws, together with price = the relationship between supply and demand, or specialisation and trade on the basis of absolute or comparative productivity advantage, is the inclination towards specialisation in the production of relatively abundant resource-intensive goods (Heckscher - Ohlin, Competitive Advantage). For example, a country or region with more land and less population will specialise in land-intensive agricultural products (Australia), if it has more population and less land it will specialise in labour-intensive textile products (Bangladesh), and if it has more capital than land and population it will specialise in capital-intensive machinery (Germany). This was the philosophy of the Vision Study "Oltenia 2050", developed and published by the Group of Senior Professors of the University of Craiova in 2018 and not the lust, ambition of some people or the understanding of some interested circles.

Taking into account the fact that in the meantime many other important changes have occurred at national and international level, we considered it appropriate and useful to update the sectoral studies of the Vision "Oltenia 2050" (2018), which we thus "upgraded" and present in summary below, this being also an informed plea for a more competitive Oltenia in the future.

The studystarst with the labour market which, as we have seen, is currently functionally deficient, with serious existential connotations in the medium and especially

long term, raising the question: "Is it possible to stop the population decline and eliminate the danger of depopulation of the regions and the country as a whole?". Before giving the answer to this good question, Professors Dumitru Otovescu, Elena Parpala-Afana, and Dinică Ciobotea, co-authors of this report, evoke a quote from what our distinguished and much regreted University and Group colleague Ovidiu Ghidirmic wrote four years ago as co-author of the original report on this topic: "Petre Pandrea, an scientillating essayist, theorizing creative regionalism that should not be confused with provincialism, was also the first of the Oltenian intellectuals who tried to define the Oltenian spirit, naming Oltenia as the enclave of my nation, which remains the great reality and the reservoir of energy from which it is constantly supplied".

The answer to the question is positive, there are two ways. Theoretically, the first good solution is to let things go and work themselves out. Referring strictly to the birth rate, without significantly changing the current circumstances, it is hard to foresee that all fertile families will want to have at least 2 children in the coming period. In such a situation, the only way to avoid deadlock would be to stimulate immigration. As many economically more advanced countries of the world have a large and growing need for immigrants, see the case of Germany, it is expected that those with fewer opportunities to work in other such countries, i.e. the less qualified, will go to Romania. In addition to the professional implications, there would also be a big problem from a technological and financial perspective.

Admitting that the current labour market imbalance is a market and governmental failure, it is theoretically acceptable to call for the second best solution, i.e. central and local government intervention, preferably through economic rather than administrative measures.

For historical reasons, in our case, a return to the ban on abortion seems practically excluded. The classic, robust and consistently applied economic avenues remain open: substantial allowances, significant lump sums for mothers in need, preferential credits, tax exemptions, subsidies, nurseries, free fertility treatments. Every child must be considered a child of the community, the region and the country. Education issues are presented separately.

Another important problem of the country, for Oltenia in particular, is that of energy. In one way or another, to a greater or lesser extent, this is an important problem for every country or region, which has been amplified and exacerbated by the threatening degradation of the environment through the consumption of polluting and non-renewable fossil fuels, which has imposed severe restrictions on their continued use, as well as the ongoing aggression against Ukraine, which has led to the application of sanctions against Russia, a significant international supplier of oil and natural gas, and has seriously disrupted the flow of supplies. In these radically changed circumstances, Professors G Manolea and P Rotaru gave a new twist to their study on energy in Oltenia, directing it towards "Oltenia - from the energy pole of the country based mainly on fossil fuels, to a self-sufficient energy region based mainly on renewable and non-polluting resources and national strategic energy reserve", expressive in this respect being the considerations of Professor of Physics P. Rotaru on modular atomic-electric power plants and the hydrogen issue.

Assessing the current situation in agriculture and the food sector with the exigency of researchers, Professors Romulus Mocanu and Aurel Popa consider in their report that this can be treated by our country, first of all by Oltenia, a region par excellence agroindustrial, as a structural, not conjectural, opportunity, for increasing and diversifying production, with emphasis on the organic segment, developing and satisfying the internal market to the highest quantitative, qualitative and competitive degree, expanding and above all diversifying exports, primarily of processed agricultural products and food products in demand on foreign markets. The key words must be: organic, processing, quality, added value, distribution network, competitiveness and efficiency.

The most important move, which everyone is calling for, is undoubtedly the leap from being a producer and exporter of raw materials (wheat and sunflower seeds, for example) and an importer and consumer of processed or finished products made from them (flour, frozen dough, sunflower oil or margarine, for example), to being a producer of raw materials and finished products and an exporter of finished products (sunflower oil or margarine, for example). In practice, we are talking about a great many products and values of hundreds of millions of euros, perhaps even billions. The effects would be multiple and substantial: new and many jobs in the country, larger and more efficient exports, less unbalanced trade and current account balances, lower foreign loans, etc. In time, a genuine food industry will develop in Oltenia and throughout the country, an example of the practical application of the Heckscher-Ohlin theory of the competitive advantage offered by the relative abundance of resources, in our case of undisturbed agricultural land.

"The production of tractors, agricultural machinery and equipment for the food industry - the missing link in the value chain of Oltenia's industry" is the title given by Professor N Dumitru to the sui generis report on the industry of our study.

Currently (2016), industry contributes 30% to Oltenia's GDP (GVA), agriculture 7% and services 63%. In the industry as a whole, the manufacturing industry accounts for about 80%, with the rest coming from the extractive industry (3%) and the energy industry (17%). The representatives in the current manufacturing industry of the Region are, in order of turnover in 2020: Ford Craiova (cars and car engines), ALRO Slatina (aluminium), TCM Artrom Slatina (pipes and tubes), Cumins Craiova (electric generators), Vel Pitar Râmnicu Vâlcea (bakery), Diana SRL Râmnicu Vâlcea (slaughterhouse, sausages), Bekarat Slatina (metal wires), Vimetco SRL Slatina (aluminium extruded products), Vital SRL Coșoveni (chicken farm), Casa noastră Pielești (aluminium shredders), Popeci Craiova (heavy machinery), Selftronic Craiova (locomotives). A large part of the products of these companies go for export, so they are very competitive both domestically and on foreign markets.

However, there is a lack or insufficient representation of industries that would benefit from a relatively abundant local supply of raw materials, cereals and sunflower seeds for example, or from a large and constant local demand, such as agriculture for tractors and agricultural machinery. Here is a strong reason, both theoretically and practically based, why Professor N. Dumitru has literally been campaigning for a long time for the re-establishment in Oltenia of industries producing tractors, agricultural machinery and food machinery, as well as the textile, footwear and furniture industries. Professor Dumitru also advocates the simultaneous re-establishment of the vocational, secondary and higher education system, in line with the activities supported.

Professor M. Opritescu, our specialist in finance - banks, author of the report in this field, points out that the problem of financing the economy is all the more important today, as we are in a new model of economic development, called endogenous development. The key element of this new theory is the inclusion of knowledge in the category of factors of production, alongside land, labour and capital. In this way, technological progress is internalised, endogenised, and growth itself can be explained as an endogenous phenomenon. The incorporation and development of knowledge is accompanied by positive externalities, generates increasing returns and counteracts the tendency for growth to slow down in the classical development model. In such new circumstances, there is a need for increased, continuous and available financial flows on the most advantageous terms.

The list of updated papers ends with essays on two topics that are as important as they are topical, even pressing. The first is health, a field in which Oltenia, without making other comparisons and judging only by the number of doctors and beds, does not rank among the country's regions in a satisfactory position, namely 6th place for doctors and 8th place for beds, the last in the country.

Together with the morally and materially motivated moderation of the emigration of doctors and the determined, in fact radical and urgent, reconstruction of the medical infrastructure, while taking into account the great and profound technological transformations taking place worldwide, Professors M Ioana and M Schenker stress the importance of the paradigm shift in medicine, from the treatment of the sick or diseases to health care and from a retrospective, reactive and generic system to a prospective, proactive and personalized one. On the technological front, every step in medical treatment is being reinvented. On the front end, the convergence of sensors, networks and AI (Artificial Intelligence) is overturning medical diagnosis. In the middle, robots and 3D printing are changing the nature of medical procedures. At the back, AI, genomics and quantum computing are transforming medicine itself.

Given the breadth, depth and speed of implementation of emerging technologies, the fact that we are already operating within the new endogenous model of development that has internalized technological progress as a driver of growth, Professors C. Niculescu, M. Ivănescu, C. Fota and M. Ioana, the authors of the second essay, stress the need, in parallel with the general modernization of the infrastructure, to move to a new paradigm in education as well, i.e. the educational target should no longer be jobs but competences. As in the current conditions of generalised and galloping technological progress we cannot predict what will be the jobs of the next 15-25 years, the only good solution is to give current and future pupils and students the basic skills that will enable them to work in various jobs. These include: logical, coherent and critical thinking; cognitive flexibility, the ability to work simultaneously with several concepts and to solve complex problems; research, creativity, innovation; the ability to analyse quickly and make correct decisions; emotional intelligence, the ability to identify, understand and manage one's own and other people's states and feelings; teamwork, communication and negotiation skills.

IV. The volume continues with four specific studies focusing on particular but very important aspects of the competitiveness of the field.

The first such study is entitled "A synthesis of the history of Oltenia", authors Prof. Dinica Ciobotea and Gabriel Croitoru, a truly original and thoroughly documented handbook for young, mature and old of the history and culture of this blessed and indestructible rock of the country, expressively illustrated with inspiring images. The study is also an argument sine qva non primordial for the qualification of the Oltenia Development Region as a Complex Adaptive System.

The second, "Energy efficiency of photovoltaic systems with private owners", authors prof. univ. dr. eng. Gheorghe Manolea, Laurențiu Ionel Alboteanu, Marinescu Sabin, Bratu Cristian, which demonstrates through technological solutions and practical experiments that photovoltaic systems are not only clean and renewable, but also competitive with conventional systems, a conclusion of broad and pressing interest, especially in the current context of generalized energy crisis.

The third one, "Viticulture of the country and in particular of Oltenia", written with high professionalism, total dedication and deep love for the city and the nation by the guru of the field, pref. Aurel Popa, makes a documented, convincing and vibrant appeal to the restoration of Romanian viticulture and in particular of Oltenia, which benefits from the divine gift of exceptional conditions for vineyards and wines of unparalleled quality, urging us, instead of importing poor wines, to produce good wines for us, not forgetting the saying respected by others "good wine is not sold, it is kept for your own".

Finally, in the fourth paper, entitled "Regional development financing systems: from classic mechanisms to modern channels for mobilising resources", the author, our financial "engineer" Prof. Emeritus Dr. Marin Opritescu, draws our attention to the fact that the endogenous development model that mankind is entering, by internalising technological progress as a factor of economic growth, requires an increased volume of financing, and the problem that arises is not so much the offer of money, but the quality

of ideas and business plans. which are increasingly becoming instruments for attracting capital and guaranteeing repayment of the loan plus interest or recovery of the investment plus profit.

V. From the scientific approach undertaken, numerous conclusions can be drawn, which are presented grouped together at the end of each material. In this last part of the presentation we highlight only two of them, namely those which offer opportunities for scientific initiatives and which we now set out in terms of ideas.

First: The current NUTS 2 development regions in the EU, even if they were to be both politically-administrative and functional, cannot have the attribute of being competitive, but rather complementary to that. Initiative: "Development Region as a Complex Adaptive System". We note that there is already a growing trend in favour of decentralisation of regional development and de-bureaucratised relations between regions and the EU.

Second: The seat and author of competitiveness is the enterprise and the entrepreneur, not the town hall and the mayor or the government and the prime minister. Initiative: "Simplified formula for calculating competitiveness at company level", that can be done by anyone at any time, based on systematic, consistent and freely accessible public data.

The two ideas are currently under interdisciplinary research by Professors C. Fota (Economics, International Economics), M. Ivănescu (Robotics), D. Bușneag (Mathematics), V. Răsvan (Automatics) and V. Găină (Law). Other interested teachers are also welcome. The objective is to develop the respective algorithms and their empirical verification so that scientifically sound and practically tested solutions can be publicly advanced in the second part of 2023.

Conected with this analysis are the essay "AROMAR ´50", which is directly related to our definition of competitiveness and a possible proposal for the re-establishment of AROMAR, and a passage from the book "Reteta de Ministru - The Minister's Recipe", which is related to the re-establishment of the Oltenia Businessmen's Club - ATLANTIS/MINERVA, both as forums for professional debate and generating innovative ideas for progress.