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**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ  
ФЕДЕРАЦИИ**

**ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ  
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ «САНКТ-ПЕТЕРБУРГСКИЙ  
ГОСУДАРСТВЕННЫЙ ЭКОНОМИЧЕСКИЙ УНИВЕРСИТЕТ»**

**УПРАВЛЕНИЕ ФЕДЕРАЛЬНОЙ СЛУЖБЫ ГОСУДАРСТВЕННОЙ  
СТАТИСТИКИ ПО Г. САНКТ-ПЕТЕРБУРГУ И ЛЕНИНГРАДСКОЙ ОБЛАСТИ  
(ПЕТРОСТАТ)**

**РОССИЙСКАЯ АССОЦИАЦИЯ СТАТИСТИКОВ**

**СОЦИОЛОГИЧЕСКИЙ ИНСТИТУТ РАН – ФИЛИАЛ ФЕДЕРАЛЬНОГО  
НАУЧНО-ИССЛЕДОВАТЕЛЬСКОГО СОЦИОЛОГИЧЕСКОГО ЦЕНТРА  
РОССИЙСКОЙ АКАДЕМИИ НАУК**

**Всероссийская научно-практическая конференция (с  
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*Summary :It is customary to consider a country's economic development on the basis of the size of its GDP. Gross Domestic Product highlights a country's productive capacity, mainly in terms of trade. However, this concept, which originated between the two world wars of the 20th century, can no longer form the basis of national economic policies, given the skewed interpretation of its growth, global warming and environmental issues as a whole. While the concept is still useful for measuring a country's overall economic added value, it does not highlight the varying degrees of social inequality within a country, the over-exploitation of land or raw materials, or the non-quantitative but significant criteria for people's well-being, such as national security, social cohesion, education, health, the maintenance of biodiversity and the capacity to innovate for the collective well-being of citizens.*

*Résumé : Il est habituel de considérer le développement économique d'un pays sur la base de l'importance de son PIB. Le Produit Intérieur Brut met en évidence la capacité productive, principalement marchande, d'un pays. Or, le concept, né entre les deux guerres mondiales du XX<sup>e</sup> siècle, ne peut plus constituer la base des politiques économiques des Etats, compte tenu d'une interprétation biaisée de son essor, du réchauffement climatique et de l'ensemble des questions environnementales. Si le concept conserve un intérêt pour mesurer l'ensemble de la valeur ajoutée économique d'un pays, il ne met pas en évidence les inégalités sociales plus ou moins importantes dans un pays, la surexploitation des terres ou des matières premières ou les critères non quantitatifs mais prégnants dans le bien-être des populations, concernant notamment la sécurité nationale, la cohésion sociale, l'éducation, la santé, le maintien de la biodiversité et la capacité d'innovation pour le bien-être collectif des citoyens.*

The IPCC's sixth report (IPCC, 2023) warns of the irreversible effects of climate change on today's populations and ecosystems, including increased disease and epidemics due to deteriorating air quality, increased heat stress, the lost battle against global poverty (3.3 to 3.6 billion people live in highly vulnerable conditions), diminishing water and food resources (mainly in Africa and Asia), and the halving of areas available for animal and plant species. Global warming must be tackled quickly, before its many negative effects become irreversible (Fontanel, 2024). To achieve this, substantial financial resources must be devoted to an energy transition aimed at reducing CO2 emissions, rigorous water management and protection of the natural environment.

Yet even today, Gross National Product is still considered the fundamental economic indicator of the health of a national economy. Initially, Kuznets tried to develop the concept of national well-being, but faced with the technical difficulties of its statistical definition, he was forced to choose the notion of Gross Domestic Product, or GDP, as a provisional indicator for roughly determining the level of development of national economies, at a time when the absence of reliable statistics meant that it was not always possible to help governments make economic decisions based on meaningful quantitative indicators. This was undeniable scientific progress, despite its limitations, in a period marked primarily by the quest to reduce the relative scarcity of less expensive consumer goods. The USSR also needed economic figures as part of its production planning, but in this context it had opted for a different approach to quantitative economic analysis, notably concerning the productivity of services.

At the time, these aggregates were extremely useful for regulating national economies, providing an overall picture of national production, final consumption, intermediate consumption (with the Leontieff Table) and gross fixed capital formation. At the time, the world's population was 2 billion, 4 times less than a century later, in 2023. The mass consumer society gradually took hold, with a strong focus on individual happiness based mainly on purchasing, possession, but also profit and individual interest. In this context, in capitalist countries with market economies, programmed obsolescence made it possible to accelerate

the importance and demand of production systems (Fontanel, 2022). Destruction replaces renovation, and waste is not outlawed - indeed, it is often encouraged in the constant quest for profit.

In all the media and economists' analyses, the notion of States' performance is measured by GDP, a statistical concept that does not take into account the plundering of the earth's resources and oceans, the cost of which is supposedly free, but also the non-repair of products made socially obsolete (Guilhaudis, Fontanel, 2019). So, while GDP is still the essential indicator of a country's economic situation and an instrument that is supposed to measure the quality of government economic policies, it has many limitations in achieving a Nation's objectives, to the point of all too often leading to results that run counter to the objectives officially pursued.

- First of all, GDP is the sum of added values produced in a country, without any additional information available on the content of these values (known as added values) and on the rise of economic and social inequalities within a Nation. First, let's note that, technically, analysis in terms of constant dollars or Purchasing Power Parity is based on relevant calculation methods, but founded on assumptions that are not indisputable, all the more so as they produce, "in fine", very different results (Donsimoni, Fontanel, 2019). Without additional information, a country's GDP growth may threaten future economic growth or reduce the well-being of the population. Excessive exploitation of natural resources, which seems to have been measured only too recently and minimally, can ultimately reduce the potential of future GDPs and even the fundamental basis for survival of humanity as a whole if the race for production involves all the countries of the world, without measures to protect people and the Earth. The figures themselves are debatable, as some polluting activities create morbid health situations which themselves increase GDP if an additional national healthcare system has to be developed for the purpose.

- What's more, not all production is desirable (such as drugs, prostitution, corruption or mafia activities), and some does not, a priori, improve the human condition, unless we consider, as a "heroic" but blind assumption, that as soon as there is a market activity, national

productivity increases. A population in a state of slavery could thus significantly improve GDP, without economic activities improving the living conditions of its citizens. The productive and consumptive content of GDP is certainly more important to analyze than its numerical level, particularly when compared with that of other countries. Announcing the value of GDP becomes an indicator of a country's economic power, without any serious thought being given to improving people's lives at work, in their consumption activities and in their social and societal relations.

- A large increase in GDP can be achieved by extending the retirement age, increasing the working week, increasing pollution or taking public health risks. How can we assess all the future benefits and harms of production, and over what period of time? Should we assume that people's efforts to adapt to global warming will be satisfactory, at least in part, or should we focus on preventive action? Who should pay for safety measures, and who should be supported in corrective action? Today, economists are unable to provide sufficiently precise assessments, given the uncertainties surrounding compliance with the rules set today and those that will inevitably be adopted tomorrow and the day after tomorrow.

- Most economic models continue to ignore these environmental issues, focusing instead on GDP growth, employment and short-term economic policies. Today, using GDP independently of any reflection on its content and effects on people's natural living conditions is problematic. Yet environmentalists have been sounding the alarm since the 1970s. Since the Club of Rome report, the debate has centered on the choice between growth and long-term recession, considering that there is a limit to economic development, given the depletion of the planet's resources. This supposedly Malthusian analysis has, however, awakened the world to the excesses of a civilization "of the moment", which depletes available resources to satisfy desires that are constantly fueled by information from a production system in constant search of consumers, whereas the establishment of an economy based on satisfying the essential needs of the entire population, with a view to combating situations of misery and precariousness, should, on the contrary, strive to combat the excesses of the market economy.

- The Rio de Janeiro principles (1992) already stressed the need to strike a balance between the "sovereign right" of states to exploit their own resources and their "international duty" not to cause damage to the environment of other countries. Today, the world's three biggest carbon polluters are the major powers: the USA, China and Europe. Developing countries are supposed to ask the most industrialized countries to make the main effort to reduce carbon emissions, but today the climate responsibility of each state is no longer debatable.

- Competition between states on the basis of GDP leaves little room for consideration of long-term well-being, avoiding questions relating to the preservation of the earth's heritage or the unacceptable pockets of misery and poverty that don't pollute but bear the harmful consequences. The current over-exploitation of resources inevitably leads to an increase in relative and absolute scarcity, both of which are powerful factors in war and migration. Under certain conditions, the pursuit of short-term profit has become lethal. Poverty in one country leads to migration, air pollution in one region affects all neighboring territories, global warming and its deleterious effects affect the security of all, but above all that of future generations. Countries like Bangladesh or island nations such as the Maldives, Tuvalu, Marshall Islands, Nauru and Kiribati, and major cities like New York, are just a few examples.

- The constant quest to increase GDP reflects a way of thinking that favors maximum national production to demonstrate the capacity of each state to produce and consume, without regard for the heritage of humanity or the consequences of production systems on the environment of today and tomorrow. Like international finance, the casino economy has spread throughout the system of economic globalization, in its relentless pursuit of maximum short-term profitability for its financial operations.

While GDP was once a useful yardstick for measuring the productive evolution of societies, it now appears undoubtedly "counter-productive", as it fails to take into account societal, social and environmental issues (Fontanel, 2019). Similarly, the notion of the

population's overall well-being, which statisticians have sought to define, is difficult to measure. Government policies in favor of GDP growth neglect the value of natural assets, stocks of freely available goods and services, and citizens' actual living conditions.

The major economic powers are the world's main polluters, but it is in developing countries that the negative effects are felt most acutely. Questions of national competitiveness and attractiveness are put forward to delay the necessary control measures. There are many choices to be made. The same applies to renewable and non-renewable energies, both polluting and non-polluting. The question of nuclear power as a source of green energy remains controversial, given the apparent contradiction between short- and long-term energy interests, particularly between Germany and France. The policies to be implemented in the short term also depend on the economic and political conditions in each country. France has every interest in developing nuclear energy, which creates waste in the very long term, but partially resolves the issue of decarbonization in the short term, while Germany is abandoning fission nuclear power in favor of research into fusion nuclear power, the hoped-for final solution to decarbonization, which will undoubtedly arrive too late to prevent the catastrophic effects of global warming. Decisions taken have a greater impact on GDP than GDP itself.

Global warming was already an issue in major cities such as London (the famous "fog"), but despite some preliminary studies, economists and statisticians thought that the negative effects would fade over time. Since scientists first highlighted the influence of human activity on the climate, the issue has always been addressed from a long-term perspective (Fontanel, 2023). Today, the issue of "global warming" is on everyone's diplomatic agenda, but effective agreements and action are still hard to come by, and the COP 28 conference that has just ended in Dubai is not yet providing all the impetus needed to reverse a process of state decisions that will ultimately prove fatal. However, after all these years of maintaining a system that is potentially fatal to humanity, it is no longer a question of acting tomorrow, because tomorrow will be too late or too costly for today's generations of young people. It's no



longer a long- and medium-term policy that we need to pursue together, but one that we need to engage in immediately, today, right now.

## Notes

Donsimoni, M., Fontanel, J. (2019) Les ambiguïtés de la mesure de la puissance économique des États par les parités de pouvoir d'achat. *Annuaire français de relations internationales*, 20.

Fontanel, J. (2019), Différends, conflits et guerres économiques, *Paix et Sécurité Européenne et Internationale*, hal-02017498

Fontanel, J. (2022), Le capitalisme, le Produit Intérieur Brut et le Bien-Être, ECCAR, hal-03621699

Fontanel, J. (2023), L'humanité face au réchauffement climatique, *Pax Economica*, hal-03664892

Fontanel, J. (2024), Global Warming, Economic globalization and Civilization crises, in *Vision. the Journal of Business Perspective*, March.

Guilhaudis, J-F., Fontanel, J. (2019), Les effets pervers de l'usage du PIB pour la décision politique et les relations internationales. Comment en sortir ? *Annuaire Français des Relations Internationales*, AFRI.