

Virtues, Limits and Prospects of the National Accounts

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Abstract

The most important issues that national accounts have to solve today are the changes brought about by the globalization and the activity of multinational corporations on economic life. In June 2017, the 16th Conference of the Association de Comptabilité Nationale was held in Paris to talk over these topical issues. The paper presents the most important discussion topics raised at the conference and reflects their importance for the further development of national accounts.

Keywords

National accounts, gross domestic product, Association de Comptabilité Nationale

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VIRTUES, LIMITS AND PROSPECTS OF THE NATIONAL ACCOUNTS

Globalisation, presence of multinational corporations, effort to measure other than economic phenomena, the relationship between economics, and the environment are some of the topics the national statistical offices and their experts have to encounter in the fast developing world. The 16th Conference of the Association de Comptabilité Nationale, held on the premises of the French Ministry of Economy and Finance in Paris from June 7 to 9, 2017, addressed mainly such topics. This Conference (still free of participation fees and still Francophone) provides the grounds for professional discussions and meetings with the most important representatives of not only French accounting authorities but participants from other countries as well. Every two years, it presents new topics in the discussions on the quality, possibilities and contributions of the national accounts; this year the subtitle was *Virtues, Limits and Prospects of the National Accounts*.

More than 150 experts from ten countries participated, representing statistical offices, universities, research institutes and other national and international institutions (Eurostat, International Monetary Fund, and OECD). The topics were divided into six more or less separate thematic units. The Conference was traditionally opened by Jean-Luc Tavernier, Director-General of INSEE, and Georges Haddad, President of University Paris I – Panthéon-Sorbonne. Jean-Luc Tavernier focused on a discussion concerning the problems connected with the undervaluation of the economic growth rate, overvaluation of the price

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evolution, and the localisation of intellectual wealth in the globalised world. Georges Haddad spoke about the relationship between economics and mathematics and the importance of teaching the national accounts at universities oriented on economics.

Let us recall some of the most important contributions read at the Conference, which was immensely interesting and valuable this year.

André Vanoli presented an introduction to the Conference scope in *Virtues, Limits and Prospects of National Accounts: An Introduction*; this contribution sums up the basic stages in the evolution of the national accounts and pointed out that this topic has been undergoing a latent crisis lately: on the one hand, the national accounts are expected to provide the same data as before (which has been becoming more and more difficult in certain respects); at the same time, new challenges and requirements connected with continuing sustainable development should be respected. A. Vanoli does not deem it suitable (or even possible) to modify the central framework of the national accounts; he raises a question whether satellite accounts will be sufficient to meet the ever growing requirements or if other information systems related to the national accounts will have to be developed in parallel. Claire Plateau (INSEE) presents in her contribution (*Challenges and Criticisms of National Accounts*) an evaluation of the effort aimed at not only the conditions and evolution of the national economy, but also the social and environmental aspects. In principle, the same topics have been recurring:³ expression of the sustainable economic development, drawing on the exhaustible natural resources, and households' welfare; all of which are viewed within the framework of the national accounts. The adjusted Gross Domestic Product, or rather the Green Gross Domestic Product, is leading to a dead end, because it cannot be properly interpreted. Another option is a scoreboard with a number of indices from the given area (not only environmental, but also social). A problem of the scoreboard is its unclear character for the users if the scoreboard data is not compiled into a single index. The problem of creating the scoreboard itself is that of choosing the proper indices (they are changed rather often, and such changes may be caused by political decisions). Using one succinct index brings an additional problem of setting up the proper weights. However, the last mentioned problem goes beyond the scope of statistics. In expressing the welfare, which in itself is a subjective notion, the only way is to survey households.⁴

Didier Blanchet (INSEE) in his contribution titled *Building synthetic measures of inclusive growth and sustainability* also treats the possibilities and limits of the use and interpretation of a comprehensive index based on the scoreboard. In principle, he sums up the obstacles this approach brings and emphasises that the construction and utilisation of the scoreboard are not in the statisticians' job description. Regarding the welfare expression, he proposes a notion of an equivalent income, based on the indirect monetary expression of aspects that cannot be measured financially (health, life span, social certainties, etc.).

In the following contribution, titled *Are there any substantive changes to the existing national accounts conventions?* Didier Blanchet (INSEE) and Dominique Durant (Banque de France) address the economic basis of the national accounts as related to the notion of sustainable development. Similar to A. Vanoli, they observe that the Green Gross Domestic Product, or other modifications of GDP, is not a solution; a deeper study of sustainability in macroeconomic theory is desirable in the context of quantifying all of its aspects outside of the production area. From this viewpoint, the basic framework of the national accounts need not be modified.

In continuation of this contribution, Nicolas Canry (University of Paris-1) speaks about human resources valuation. He emphasises that discussions about sociality inequality stem from this topic, but such discussions leave aside the issue of valuating human resources. Such valuation may be based

³ Cf. the conclusions of the Stiglitz's Commission's report <<http://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report>>.

⁴ Cf., e.g., <<http://www.oecd.org/statistics/better-life-initiative.htm>>.

on inputs, i.e., costs (on education) or outputs, i.e., income (meaning an income level generated by a certain level of education). Both of these approaches bring about problems: on the one hand, households' expenses incurred on education do not grow as quickly as one might expect on the basis of the human-resources growth concepts; on the other hand, wages cannot be used as a proper valuation of human resources (people with the same education and at the same position may be paid quite different wages, women get less than men, etc.).

A very interesting contribution, *Improving the treatment of holding gains and default losses in national accounts* by Dominique Durant (Banque de France), studies the consequences of the fact that profit and loss from possession are recorded in the national accounts outside of the data on production and income. Consequently, the description of income on the national account is different from the expectations and assumptions prevailing in financial institutions. For example, losses from the bad debts in the years of the crisis reduced the banks' ability to provide loans but the national accounts did not record the corresponding decrease in production or income. D. Durant introduced a concept of expressing the profit from possession on the national accounts as income from the services provided (for example, an increase in the price when storing seasonal products, or mediators' exchange-rate profit from securities and foreign currency). He further suggests decreasing banks' FISIM by the amount of receivables if the bank rates include losses expected from those receivables. He explains that such suggestions represent an extension of existing principles of the national accounts and are compliant with the SNA, improve the ability of the national accounts to reflect economic movements and explain the behaviour of economic subjects, especially during financial crises.

An Appreciation of Living Standards, Well-Being and Quality of Life by Jérôme Accardo (INSEE) returns to the issue of measuring the standard of living, quality of life and welfare, with reference to the conclusions of the Stiglitz's Commission. In his opinion, expressing the standard of living, quality of life and welfare will not be achieved by modifying the Gross National Product, but by the effort to set up an account of a "sole" household (in the sense of one category of households characterised by age, income, social circumstances, etc.). The standard summary account of the household sector does not have the necessary ability to express the quality of life and, moreover, does not contain activities and aspects such as housework, health, habits, free time, satisfaction, happiness, etc. To set up such a "sole household" account we have to combine different data sources and solve the problem of monetary expression of activities and phenomena for which no monetary value has been established. For example, the quantity of free time can be estimated with the aid of time distribution during the whole day for selected people. But how should free time be valued? By the opportunity cost, i.e., net wages? What if the concerned person has not worked at all? Is the contribution of free time to welfare the same for an employed and (long-term) unemployed person? Can the "sole household" accounts be compared on an international level? These are just a few from among the questions J. Accardo is raising. In the end he observes that, even though his own and similar works have enriched the range of the tools for describing certain socio-economic phenomena by means of the national accounts, it must be admitted that scientists keep running up against many obstacles, in many instances insurmountable.

André Vanoli's contribution *Taking into account relationships with Nature* deals with the importance of the so-called environmental accounting. The key point of such considerations is undoubtedly a question whether environmental data can be incorporated into the basic framework of national accounts. A. Vanoli's reply is that such incorporation is impossible. In the original system of environmental accounting, SEEA⁵ 1993, the Net Domestic Product was adjusted to the environmental purposes by subtracting the exhaustion of natural resources and depletion of natural assets valued by the costs

⁵ System of Environmental-Economic Accounting.

on their replacement or renewal. A great deal of attention was then given to discussions about the services provided by nature (with monetary valuation estimated on the basis of gains from specific ecosystems, such as coral or mangrove). A newer system, SEEA 2012, contains two different parts: the first one, Central Framework, has been accepted as an international standard by the United Nations Statistical Commission. It introduces accounting of natural resources (mineral, energy, forest, soil, biological and water – both renewable and exhaustible) normally included in the assets on the national accounts; subsequently, everything is expressed in both natural and monetary units (with methods of valuation identical with those used by the national accounts). The second part of SEEA 2012, Experimental Ecosystem Accounting, has a very ambitious goal – setting up the accounts for ecosystem services in natural and monetary units, or rather, combining the ecosystem accounts with the national (economic) accounts using those monetary units. Unfortunately, this approach leads to exaggerated expectations with regard to possible integration between the natural and national accounts within a global approach to wealth. A. Vanoli accepts that nature and economies are, to a certain extent, intertwined and certain relationships between them should be reflected. On the other hand, they are two separate entities; that is why the national economy accounts and natural ones should not be amalgamated as a whole. This topic is very much alive and remains unresolved; it is clear that it is not to be resolved by statisticians only (valuations in the area of the environment must be carried out by the respective experts, not statisticians). The national accounts are primarily tools for describing economic phenomena and their monetary values are logical. For the environment (ecosystems), A. Vanoli recommends focusing on creating an information system (not accounts), in which everything is expressed in natural units.

Claire Plateau (INSEE) returns to implementation of Stiglitz's Commission's conclusions in her contribution titled *The question of sustainable development*, mainly focusing on the issues of scoreboard indices for the sustainable development. She again pointed out that the indices to be included are influenced politically, and economic theory and statistics are not included in the process of their selection (Stiglitz's Commission's conclusions do not mention any particular ideas in this respect). Understandably, certain theoretical and even practical problems are implied. The only way to eliminate such problems is harmonisation of the indices on an international level. C. Plateau introduces a concept of monitoring the sustainable development accepted at a conference of European statisticians in 2013; this concept outlines a relationship between the basic notions and characteristics of the sustainable development and certain different policies. C. Plateau describes the rather political approach: the United Nations General Assembly accepted the goals of the sustainable development in 2015 and a scoreboard was set up based on those goals. The United Nations Statistical Commission subsequently published a call for the member states to monitor and report on a set of 232(!) indices beginning in September 2017. However, analysis of those indices has revealed that only 37% of them can be currently monitored without additional surveys and costs, 36% indices are lacking any internationally recognised definitions, and 27% of them are simply unavailable in more than a half of the member states. Again it turns out that certain policy goals must be defined with regard to the possibilities of statistics.

Keen interest was reflected in a discussion on Michael Connolly's contribution (Central Statistics Office, Ireland) *Economic Globalization and Global Production*, followed by a highly critical response by François Lequiller (OECD). M. Connolly first introduced certain conceptual problems of the national accounts in the global economy (such as the impact of globalisation on the national accounting standards, consequences of capitalisation of the research and scientific results, role of multinational companies, and intellectual property as related to a residential unit). On example of Ireland he then showed examples of problems such new aspects are capable of bringing, and how Ireland may approach their solutions. In fact, Ireland's GDP year-to-year growth rate jumped up to 26.3%(!) in 2015, while GDP had been more or less stagnating from 2009 to 2013 and the prediction for the growth rate had been at 7.8%. The reason for the high GDP growth was given by income from multinational corporations' licences,

which had been administratively transferred to Ireland. The Central Statistics Office of Ireland defended its approach by pointing out compliance with the SNA 2008 principles: income from licences is added to the production index. On the basis of the “Irish peculiarity” a panel of experts was held. It observed that the Central Statistics Office’s approach was correct but suggested certain solutions to be accepted within the Irish economy; in particular, the “borderlines” for the intellectual property, and the role of multinational corporations should be resolved. One of the suggestions is to measure the national economy results not by GDP but an adjusted Gross National Income (GNI*); the latter’s year-to-year growth was merely 6% in Ireland in 2015. The suggested modification subtracts from the GDP depreciation of fixed assets owned by non-residents and re-invested profit of foreign corporations. This suggestion was officially confirmed by European structures because it better reflects the character of the Irish economy.

F. Lequiller’s response gave a critical view of what really happened in the Irish economy, how the Irish economic results were affected, and how similar instances should be resolved within the framework of the national accounts. He admitted that the Central Statistics Office of Ireland proceeded in good faith and within the rules, but claimed that such extreme results based on administrative movements due to tax optimisation by multinational corporations may be dangerous. He showed that the industrial production in Ireland grew by 98% in 2015, and net exports by 102%, but the consumption by households grew by less than 5%, and there was no actual movement of the multinational corporations’ localities or their research institutes; neither were any new jobs created in those companies. In other words, mere administrative “movement” of licences doubled the volume of Irish industrial production. Despite the presented explanations and the approval by Eurostat, such results must have stirred uneasiness even in Ireland itself. Economic growth is always connected with growing employment – and how will the Irish government respond to such an extreme growth of GDP and industrial production? What if the same multinational corporations optimise their taxes elsewhere, say, Singapore, next year? A significant decrease in the GDP and industrial production would follow without any real impacts on what was actually produced. How would the Irish government respond to such year-to-year changes?

F. Lequiller further analysed the way taken by the Central Statistics Office of Ireland (which is in compliance with SNA 2008) and possible solutions. The Office’s basic argument was the fact that the “economic ownership” of capital was transferred onto the Irish branch office of a multinational corporation. Unfortunately, the definition of the economic ownership by SNA 2008 is vague; hence UNECE⁶ recommends using a notion of “legal ownership”. This approach is not, however, correct with respect to the national accounts, for which the economic ownership takes priority. With emphasis on the notion of the economic ownership, Irish suggestion of the GNI* must be rejected as well. According to F. Lequiller, this modification is a strange construct interfering with the importance of the economic ownership. Such and similar proposals often initiate discussions whether or not the GDP is obsolete and remains a good indicator of the economic results in the respective territory. The notion of GDP is not obsolete indeed; it is an important indicator of the economic policy, measuring the results of economic activities in a given territory. It is also related to employment rate. Globalisation and the ever-growing importance of the multinational corporations undoubtedly bring new tasks for the national statistical offices, whose effort should be focused on GDP best expressing what it should express.

It is clear that multinational corporations do not care about country borders and put their production where the wages are smallest, taxes where the tax rates are lowest, and research where the concentration of brainpower is highest. If a multinational (American) corporation moves its registration to Ireland without moving its production at the same time, the value of GDP should remain unchanged. The income from licences coming to Ireland is income from ownership, not from production (no value added was

⁶ United Nations Economic Commission for Europe.

created!). If GDP is a sum of values added in a given economic territory, we always have to ask where the value added was created. Labour force and physical form of capital must participate in such creation, and such participation can be clearly localised. A problem remains with intangible capital, which can be placed anywhere.

The problem that arose in Ireland has a general character; F. Lequiller suggests three possible ways for resolving it:

1. Take the income from licences as property income (not income from production); this was valid in the old SNA 1968 and, essentially, complies with the principles of business accounting.

2. Localise the intangible capital where it was created, i.e., place the licences where the scientific centres are active. The production corresponding to the income from licences will be deemed production by those scientific centres, and the profit will be deemed income from ownership in the country to which it is coming and in which the tax on it is actually paid. This operation will affect the Gross National Income (GNI), but not the Gross Domestic Product.

3. Formulary apportionment of multinational corporations' profit according to the country in which the labour force participating in creating it is located – in reality, multinational corporations move the profit to a locality with the lowest taxation rate. This solution has already been applied to regional accounts when estimating the regional gross domestic products.

In F. Lequiller's opinion, any of these solutions can be implemented. He recalls that, within the BEPS programme,⁷ multinational companies will have to consolidate their accounts according to the country. National statistical offices should have such data at their disposal; it would be a real shame if they did not try to make use of such data. The approach taken by the Central Statistics Office of Ireland unfortunately goes against the BEPS programme's goals – to make multinational companies pay their taxes where the profit is really created (not in a locality to which it was transferred administratively). This is an expression of a common idea of tax experts and experts in the area of national accounts, which idea stems from an economic basis.

In conclusion of his very interesting contribution, F. Lequiller reiterated the question whether or not the concept of the Gross or Net Domestic Product should be changed. He immediately replied to the question himself: certainly not. The Gross – and also Net – Domestic Product follows a methodology which remains valid regardless of the changes in the corporations' organisation. At the same time, he emphasised that the concept of the national accounts must be focused on economic, not legal aspects (in particular with regard to economic ownership), avoiding influence by formal organisation of multinational corporations. Effort should be made to obtain multinational corporations' data consolidated by territory within the BEPS project. A working group should be set up for this purpose by OECD.

F. Lequiller's contribution was very interesting; its content goes beyond the scope of criticism of the Irish approach. It has outlined new challenges for the national accounts' concepts brought about by development in society. He nevertheless underlined that the fundamental idea on which the national accounts are based remains valid and the framework of the national accounts need not be changed.

The closing part of the conference was (non-traditionally) focused on problems in teaching national accounting at French economically-oriented universities. This subject is a usual component of the economic curriculum at various degrees of studies. Unfortunately, often it is presented in a descriptive way without deeper statistical insight and without seminars (only lectures). French colleagues do not deem this teaching method optimal, because it does not enable students to understand the national accounts

⁷ Base Erosion and Profit Shifting Action Plan is an OECD programme focused on suppressing strategies whose purpose is to minimise the tax duty via transferring profit to low- or no-tax locations. It was signed by 50 countries.

as data resources and tools of analysis. One of the problems of teaching national accounting at the Bachelor Degree stage is, in our French colleagues' opinion, the insufficient knowledge of mathematics obtained at secondary schools.

The 16th Conference of the Association de Comptabilité Nationale held in Paris this year was focused on the key topics in the evolution of the national accounts, providing the participants with new ideas and topics for discussions. Thanks should be expressed to French members of the Association (outstanding personalities of European national accounting) for the excellent preparation and organisation of the event. Support by French Statistical Office INSEE should also be acknowledged.

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