

## ACCOUNTING RULES AT MACRO AND MICRO LEVEL

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**ABSTRACT:** At European level, economic governance is based on information derived from national accounts, harmonized by the European System of Accounts (ESA 2010). ESA 2010 accounting rules are consistent with the international statistical standard SNA2008 that is behind of many macroeconomic indicators such as gross domestic product (GDP), government deficit and debt and current account of balance of payment. What kind of information is necessary from the economy in order to compose the macroeconomic indicators? Comparability is essential for analysis and evaluation among countries and implementation of common rules has led to benefits. Accounting rules have significant importance for both public and private sectors of the economy because could lead to different results.

The budgetary system at national level has been designed taking into account the economic and social realities. However, the globalization requires countries to harmonize with the European statistical and accounting rules, because on long-term the costs of implementation of the new European standards will not surpass the cost of keeping the old national system of public finance and also the cost of transposing national figures into European standards (timeliness, errors and decisions of policymakers).

Regulations on business accounting (format and content) affect the financial reporting at the micro level. As financial statements of the corporations are inputs for the national accounts compilation, therefore these data are the basis for determining the GDP of a country and the corporate income tax, respectively the level of development of the country or the level of its government deficit evaluated in the Excessive Deficit Procedure at European level. Thus, the state's objective to stimulate economic growth, it can be targeted by harmonization of the accounting rules at national level with the International Financial Reporting Standards (IFRS), the IFRS rules for a comparable global business and also by full implementation of the ESA2010 rules for comparable country world statistics.

**Keywords:** National Accounts, European System of Accounts (ESA 2010), Government Finance Statistics, Government Deficit and Debt, Gross Domestic Product, Corporate Income tax, International Financial Reporting Standards, Profit and Loss Account, Accounting rules.

### I. Introduction: How is measured the economy?

A definition of economy is difficult to write because it is not enough space in this paper and because there are so many important economists that have allocated books for this. But, it is another related question that could find answer in this article: how the economy is measured? "Macro" economy statistics represent the aggregation of "micro" accounting activities! While these two part of economy seems to be different, macro and micro economy are interdependent and a decision taken at the level of one of these will impact also the result of the other one.

#### Chapter 1: About National Accounts

National Accounts reflect from statistical point of view the overall economy. In the context of globalization, the need for harmonization of standards is imminent. The European System of Accounts (ESA) is the model used "to calculate" the national economy, to determine the main macroeconomic aggregates by which a country is analyzed, evaluated and compared with another one and also is framework for determination of European Union macroeconomic indicators. The Figure no.1 illustrate the five sector of economy according to ESA 2010 edition, the statistical standard used to elaborate the national accounts of member states of the EU since September 2014.

The main data sources used to elaborate national accounts of each sector are the financial statements. All five sectors have transactions between them and also with non-resident actors, called the rest of the world. ESA 2010 is not only a system of flows and stocks classification of the economic actions taken by the institutional units as part of the sectors, but also a set of rules of registration all of these as evaluation principle,

time of recording, sector delineation and links between financial and non-financial accounts. The balance sheet of the economy is the final purpose of ESA 2010 system.

The Government Sector (ESA 2010 code S.13) produces the Government Finance Statistics indicators and is the part of national accounts more analyzed, evaluated and investigated, because of the Maastricht fiscal criterion. However, this sector accounts even it is complicated to elaborate, it is the diamond of the national accounts. The fiscal policy objectives are targeted by Government acting on all sectors. The challenge is to implement full ESA2010 as frame of the public accounting.

A new fiscal strategy can be based on sectorial structure of the economy as shown in the national accounts. Aiming at the contribution of each sector to GDP and thus to economic growth, through fiscal policy can be formulated smart developments on each specific sector according to Milesi-Ferretti (2004) as classified by ESA 2010 (the non-financial corporations, financial institutions, government sector, the households). Actions taken in the government sector have effects in all other sectors sooner or later.

The sector that provide the highest contribution to GDP formation is the Non-financial Corporation Sector (ESA 2010 code: S.11), because of the Gross Value Added resulted from the activities of production. The data related to the output and the intermediate consumption are extracted from the indicators available in the reporting of the Profit and Loss Account, centralized by Ministry of Public Finance of Romania, as institution responsible for collecting financial statements of the economic agents.

## Chapter 2: National approach versus European rules on Government Finance Statistics

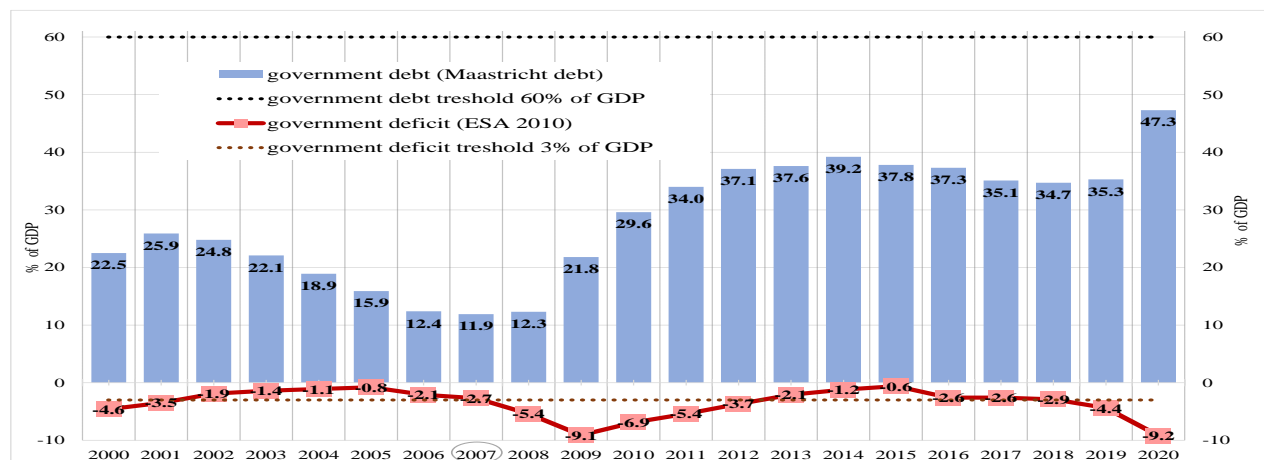
In Romania, the reports of government finance statistics on national approach are elaborated under the conditions of Law no. 500/2002 on public finances, Law no. 273/2006 on local public finances and Government Emergency Ordinance (GEO) no. 64/2007 on public debt. Ministry of Public Finance is responsible for the periodic publication of reports on general and central government operations in Romania.

Responsibilities for the elaboration of fiscal indicators according to ESA 2010 related to the Excessive Deficit Procedure (EDP) notification tables and government financial and non-financial accounts are stipulated in the Cooperation Protocol between the Ministry of Public Finance (MoF), the National Institute of Statistics (NIS), the National Commission for Prognosis and the National Bank of Romania on government finance statistics (updated periodically). The National Institute of Statistics is the national statistical authority that coordinates the elaboration of the fiscal notifications of Romania and transmits the tables of the fiscal notification on government deficit and debt to Eurostat, the Statistical Office of the European Union.

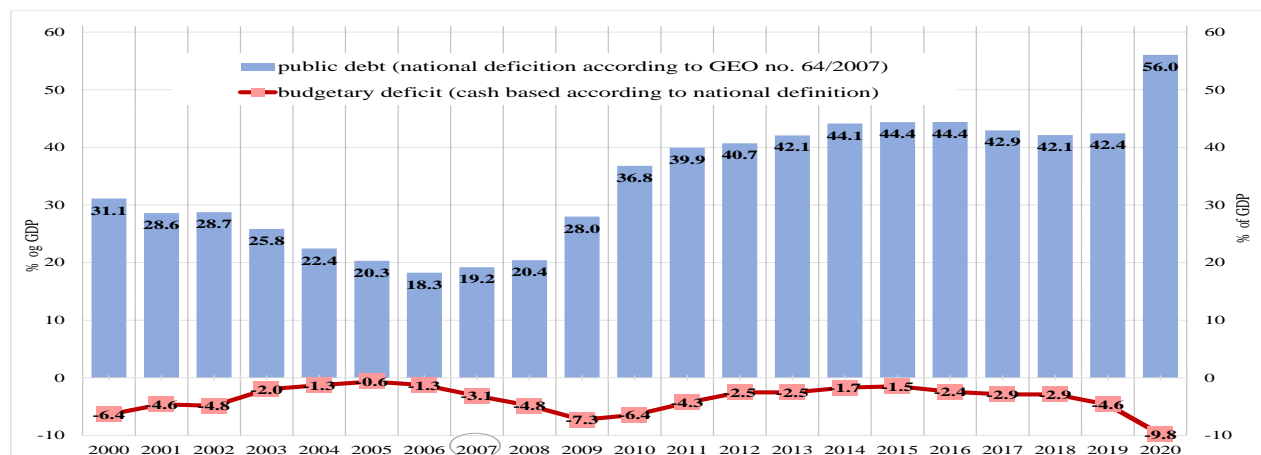
The main differences between the two methodologies come from the coverage area and the accounting regulations.

Data on government finance statistics of Romania' are also reported to the IMF, monthly (cash-based data) and annually (accrual-based data) according to the GFSM 2014 Manual on Government Finance Statistics, the government finance statistical standard published by the IMF in according to the SNA 2008. The Manual on Government Deficit and Debt (MGDD) 2019 on the implementation of the ESA 2010 is the 2014 GFSM correspondent at European level published by Eurostat. This manual helps the Member State of the EU to transpose their public accounts (on IPSAS/EPAS standards) into national accounts (on ESA 2010 standards).

**Graph 1 Government deficit and debt (ESA 2010) in Romania in the period 2000-2020**



Data source: Eurostat, online database

**Graph 2 Government deficit and debt (national approach) in Romania in the period 2000-2020**

Data source: MoF, online database

The annual increases of the budget deficit were exponential before the 2008 financial crisis, reaching in 2009 the maximum level of -9.1% of GDP according to the ESA 2010 methodology, respectively -7.3% of GDP according to the national methodology. The two graphs above illustrate the same dynamics for deficit and debt in both approaches. The differences between the two methodologies show that the ESA 2010 deficit is generally higher than the deficit calculated according to the national methodology, in an annual average of 0.5pp over the last 20 years. In 2013 it could be noticed a change in the trend, the 2010 ESA deficit was 2.1% of GDP 0.4pp lower than the deficit in the national approach (2.5% of GDP).

The national definition uses the revenues actually collected and the payments actually made to calculate the budgetary balances of the state budget, local budgets, social insurance funds (pension budgets, health and unemployment), treasury budget, public institutions partially or totally financed from own revenues, the budget of external loans and the budget of the National Road Company.

Accrual accounting recommended by the ESA 2010 methodology has started to be implemented in the Romanian public accounting reports starting with 2006 for the elaboration of the balance sheets of public institutions. According to ESA 2010 rules, in a multi-annual budget (5-10 years), cash accounting data should be equal to accrual accounting data, the differences due to time of recording being eliminated in the long run. According to the EDP Inventory of Sources and Methods of Romania on the Excessive Deficit Procedure (published on 2020) published by the National Institute of Statistics of Romania (NIS), the government sector in terms of ESA 2010 has a larger coverage than in the national methodology, as it also includes public companies reclassified into the government sector. The NIS annually updates the list of institutional units of the general government sector and decides on the reclassification of public companies in the non-financial corporations sector (S.11) into the general government sector (S.13) based on the application of the qualitative and quantitative test (market/non-market test) according to ESA 2010 and MGDD 2019, in terms of autonomy, control and financing of activities.

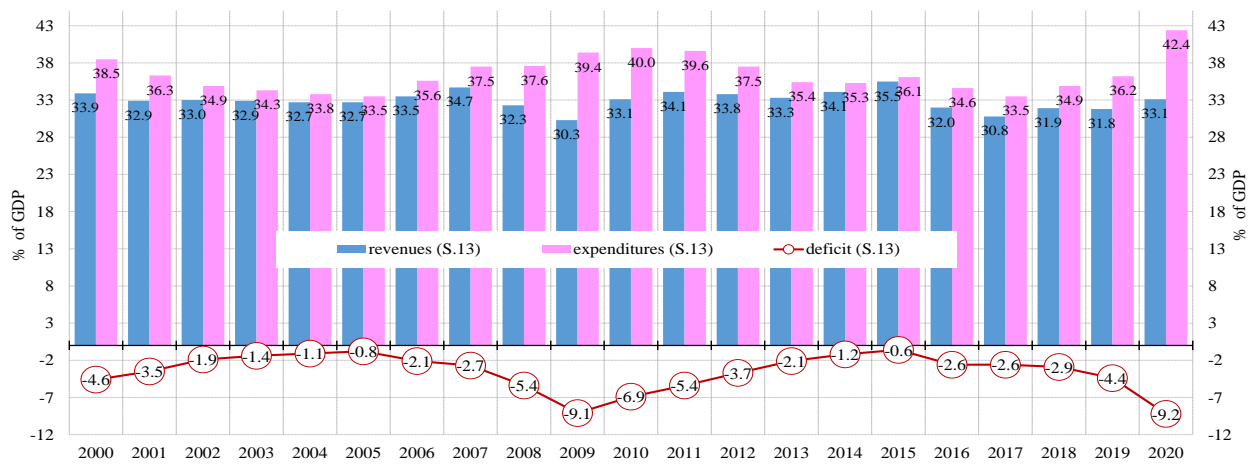
The revenue and expenditure categories in the national approach have the same structure as in the ESA 2010.

Regarding the government debt related to the period 2000-2020, the level of debt is higher in the national approach with an annual average of 6.0pp. The explanation is that, for budgetary policy reasons, the national approach includes in the debt calculation all guarantees granted by central and local authorities, but for the determination of Maastricht debt, only guarantees used three times in a row are included in the debt calculation. In addition, Maastricht debt is consolidated for loans between institutional units of the general government sector, so it does not include state loans to public companies reclassified under ESA 2010 into the Government sector. However, in recent years there has been a decrease in the gap between the public debt (national definition) and Maastricht debt. The annual increase of debt has also slowed down in both approaches. However, it should be noted that the government debt has been well below the nominal convergence criteria (60% of GDP), but from the beginning of the 2008 financial crisis, government debt has begun to accumulate results of pro-cyclical fiscal policy. Thus, at the end of 2014 it reached the level of 44% of GDP in the national approach and 39% of GDP according to ESA 2010, twice (national methodology), respectively three times (ESA 2010) higher than the level recorded at the end of the year 2008, at the beginning of the financial crisis (20% of GDP according to the national definition and 12% of GDP according to ESA 2010 respectively).

In Romania, the central government subsector is the subsector of the general government sector that contributed the most to the government deficit and debt, the level recorded by S.1311 in a few years exceeding the level of the total deficit of S.13 (2000-2003, 2005-2007, 2013 -2018) and in other years in a percentage of over 79% (2004, 2008-2012, 2019-2020). Due to the principle of consolidation, when compiling data for subsectors, only the relationships between institutional units within the same subsector should be excluded, the equivalence "S13 = S1311 + S1312 + S1313 + S1314" not being exact for the aggregate revenues and expenditures due to transfers between subsectors that are eliminated at the aggregate level of sector S.13. The same applies to the general government debt, the amounts representing the loans granted by subsector S.1311 to subsector S.1314 must be eliminated (consolidated).

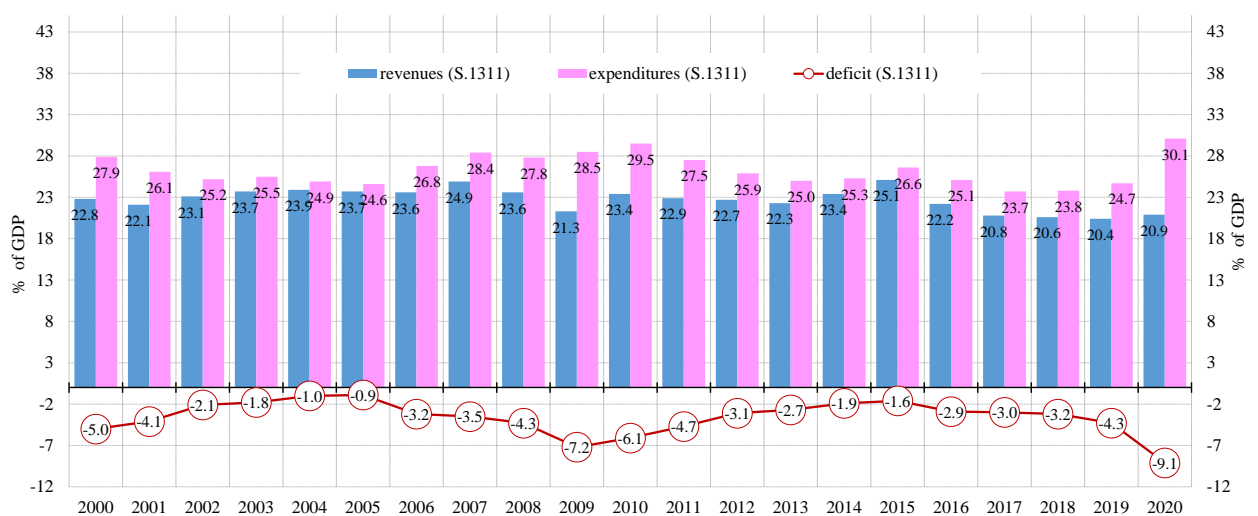
However, according to the ESA 2010 consolidation principle, the equivalence must be verified when calculating the general government deficit ( $B.9 (S.13) = B.9 (S.1311) + B.9 (S.1313) + B.9 (S.1314)$ ). The graphs below illustrate the evolution of revenues, expenditures and deficit of general government (S.13) and its subsectors (central government - S.1311, local governments - S.1313 and social security funds - S.1314) in Romania, during the period 2000-2020, according to SEC 2010 methodology.

**Graph 3 Revenues, expenditures and deficit of Government sector (S.13) of Romania in the period 2000-2020**

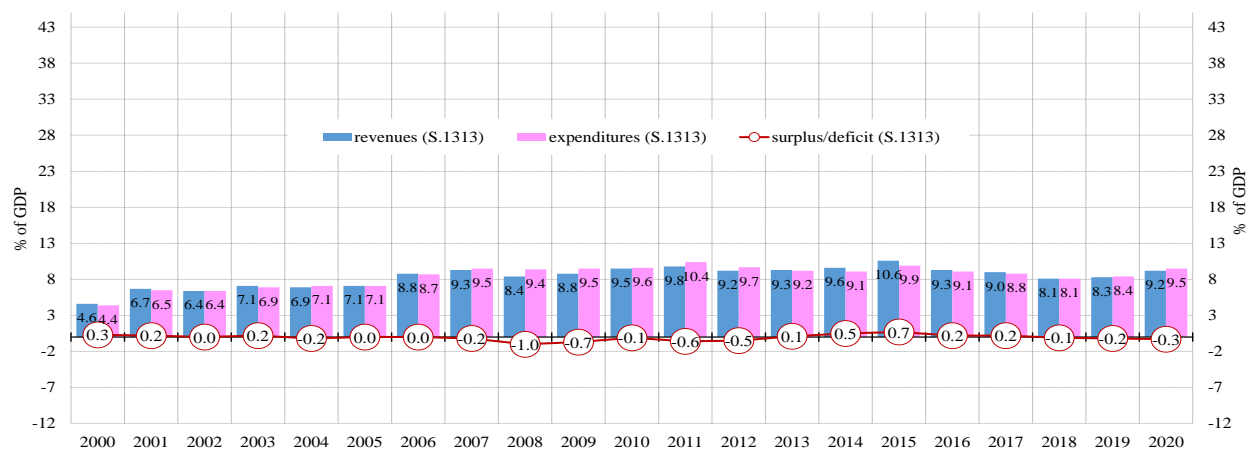


Data source: Eurostat, online database

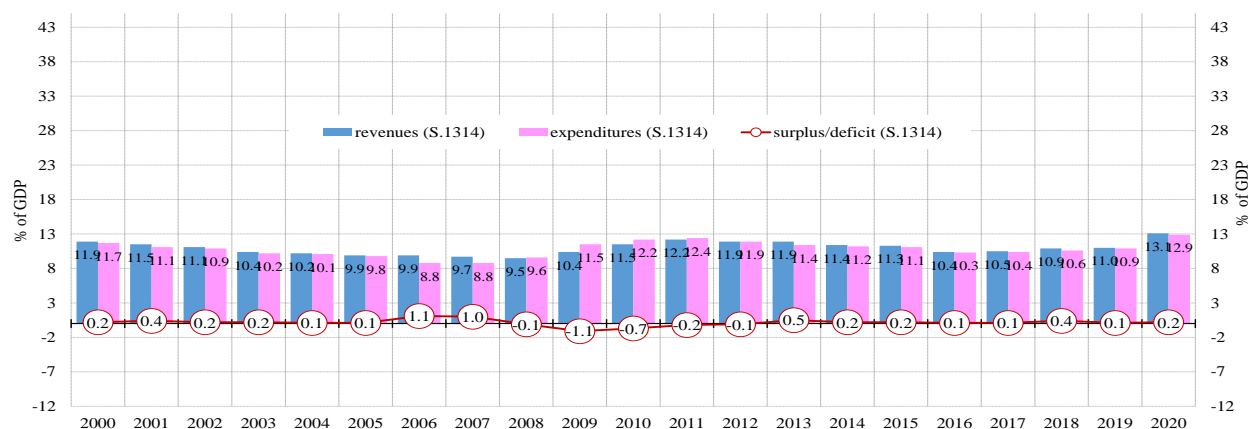
**Graph 3a Revenues, expenditures and deficit of Central Government subsector (S.1311) of Romania in the period 2000-2020**



Data source: Eurostat, online database

**Graph3b Revenues, expenditures and deficit of Local Government subsector (S.1313) of Romania in the period 2000-2020**

Data source: Eurostat, online database

**Graph 3c Revenues, expenditures and deficit of Social Security Government subsector (S.1311) of Romania in the period 2000-2020**

Data source: Eurostat, online database

The infrastructure of the current budgetary system of Romania, mainly built on a cash basis, could therefore respond to requests for reporting fiscal indicators according to the ESA 2010 regulation. Good cooperation between the institutions involved in the reportings of the government deficit and debt in the Excessive Deficit Procedure (the Ministry of Public Finance, the National Institute of Statistics, the National Bank of Romania and the National Commission for Prognosis), could confirm the country's ability to provide quality data for the fiscal monitoring at European Union level. However, implementing automated mechanisms for elaborating public finance statistics in accordance with ESA 2010 rules, would improve both the quality and reduce the time required to compile the government finance statistics. Romania will continue to target in its fiscal policy two types of indicators, according to the national definition (cash) and, respectively, according to the rules of the European system of national accounts (accrual).

### Chapter 3: Legal frame of the business accounting in Romania

In Romania, the Accounting Law no. 82/1991, republished, with its subsequent amendments regulate the accounting framework of activities in Romania. The financial statements and annual reports elaboration and data submission to the Ministry of Public Finance are stipulated into the Minister of Public Finance Ordinances no. 3055/2009 and 1286/2012. The first document is known as the Romanian Accounting Standards, simply called RAS, which is consistent with the related European Directives and the second document regulates the transition to accounting rules in accordance with International Financial Reporting Standards (IFRS) as adopted by EU, rules that have to be followed by companies whose shares are listed on a regulated market and for which IFRS are compulsory since 2012 according to the Minister of Public Finance Ordinance no. 881/2012.

IFRS bring changes only in the form of presenting the financial statement and the economic activity or IFRS come also with a new evaluation system and new procedures? Ionașcu et al. (2010) argue that when changes of rules and accounting standards are imposed, any company analyzes the situation first in terms of implementation costs and then from the perspective of future benefits. The companies in Romania are wondering if they will have to pay more taxes as a result of new rules... Does accounting regulations can influence the results? How will affect the efficiency and performance indicators of the company? Even since 2006, the law leaves the possibility of listed companies to use IFRS, they are not rushed to implement this set of principles for the mandatory annual reporting. Whether it was the lack of new accounting software or the lack of staff experts in IFRS accounting, we speak then about extra costs for the company and because IFRS were recommended, but not mandatory, therefore the companies do not proceed to the analysis of the benefits.

Further, in this paper, I intend to present the analysis made related to the impact of IFRS rules on accounting companies, in terms of financial position and performance, in order to determine if the new business accounting rules could influence also the national accounts indicators, namely the Gross Domestic Product (GDP) or the Government Finance Statistics (GFS). Therefore, there were selected seven Romanian companies whose shares are listed and representative indicators were extracted from the annual financial statements of both kind of reports, RAS and IFRS. These companies have been chosen for two reasons, firstly because availability of data of listed companies on the website of BVB and on the internet page of the companies, that have compiled both RAS and IFRS reports in the year they switched to accounting and reporting under IFRS and secondly, because these companies are from industry branch, which provide the greatest Gross Value Added to GDP and because their importance as volume of activity and nationwide results. The data sources are the financial statements, annual reports and notes published on the websites of MoF, of BVB and of the companies included in the analysis, namely ROMGAZ, TRANSGAZ, OMV PETROM, ALRO, CONPET, TRANSELECTRICA, NUCLEARELECTRICA.

To analyze the implementation of IFRS, both at the country and company level, the minuses and pluses results have to be revealed. Increased comparability and transparency of financial information, harmonization of internal and external reporting under IFRS, creating a common accounting language or reducing information asymmetry are the benefits of uniform application of IFRS at national level.

Experts from KPMG (2010) have argued that expansion of international economic relations and the cross-border capital movements require accounting systems that could ensure through the summary financial statements (Balance Sheet, Profit and Loss Account, Cash Flow and Own Funds Reports and Notes) comparability between different countries. Another important step towards improving the financial reporting framework in Romania could be done allowing also to other companies the adoption of IFRS as single base of annual reporting. Subsidiaries of foreign companies already report financial statements in two formats, one for government institutions according to RAS and one for foreign shareholders, according to IFRS. Companies prepare financial statements according to IFRS, mainly because they are required by banks or shareholders.

Additional financial indicators reflect the historical performance of companies having limited relevance in predicting their future evolution. Accounting profit provides information on the company's ability to control costs and to obtain higher revenue than expenses. The rates of return that gives comparability across time and space, there are useful in assessing the company's capital or assets efficiency, but their content information is limited to the historical results. According IAS 1, fair presentation of financial position, performance and cash flows requires the use of relevant, reliable, comparable and clear information, in order that the reports can be easily understood by any reader, whether it be an economist or not. Petre & Lazăr (2012) consider that foreign investors may consult the financial statement of listed companies in a way they are used to see it and they can compare the relevant indicators of listed companies on different international stock exchange and the fact that they are accompanied by the opinion of an independent auditor increases trust on business partners.

#### **Chapter 4: Are the Results affected by the Financial Reports Form?**

Comparing indicators on financial position, cash flows and financial performance in both presentation of the financial statements, namely RAS and IFRS, the following sentences could be written:

- the base for determination of the corporate income tax is higher in the case of IFRS, the standard referring to accounting profit as shown in the financial reports, while in the case of RAS, the base for calculating the CIT is the fiscal profits; therefore income tax could be different in case of IFRS application, because it includes the deferred tax, element in addition to those of the RAS; therefore budgetary revenues could be influenced;
- accounting estimations may lead to different results, depreciation and valuation of assets being an area where professional judgment and experience of the expert who elaborates the IFRS reports are essential keys;
- the comprehensive income as central element of the company's performance may be lower than net profit when applying RAS, because the comprehensive income includes gains and losses which are not typically included in the Profit and Loss Statement. Current accounting model for calculating the performance of a company allows that a number of gains and losses to be not included in the calculation of profit or loss for

the period, but to be recognized directly in equity. Although, in principle, all items of income and expense of a period shall be included in profit or loss account, certain standards IAS/IFRS require that some gains and losses (such as revaluation surplus and some foreign exchange differences, gains and losses from available for sale financial assets and related amounts of current tax and deferred tax) to be recognized directly as changes in equity. But, financial reporting provides this information to shareholders, in the statement of comprehensive income, which gathers data on profit of the year and other information about changes in their wealth;

- rates of return (economic, financial) and leverage show better results in the case of accounting under IFRS, which favours listed companies on the capital market scene.

However, according to current methodology of national accounts elaboration, especially of GDP, only income and expenditure of respective exercise are taken into account to determine Gross Value Added (GVA), which appeared to be lower in the analysis of IFRS approach. Therefore ... the companies reports that apply IFRS may conduct to a decreased GVA and by extension, lower GDP. There are also some exceptions, when the company overestimate performance for capital market purposes, then GVA result will be higher, but a good investor will check also the Own Funds Statement.

Literature showed that the results recorded by companies at the micro level influence macroeconomic aggregates, but equally according to Georgescu (2018) the accounting regulations that impose certain rules for registration, evaluation and estimations can lead to different final results.

### **Conclusion: Accounting rules affect statistics at national and European level**

Government could stimulate economic growth through harmonization of Romanian accounting rules with the International Financial Reporting Standards, the IFRS rules for a comparable global business, acting then at micro level of economy and also by full implementation of European System of National Accounts, rules for comparable country world statistics, acting then at macro level of economy.

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