PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS

of Wrocław University of Economics

263

Quantitative Methods in Accounting and Finance



edited by **Edward Nowak Ruslan Motoryn**



Publishing House of Wrocław University of Economics Wrocław 2012

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Typesetting: Comp-rajt

Cover design: Beata Dębska

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ISSN 1899-3192 ISBN 978-83-7695-274-1

The original version: printed

Printing: Printing House TOTEM

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PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS nr 263 • 2012

Quantitative Methods in Accounting and Finance

ISSN 1899-3192

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SCOPE FOR USING FINANCIAL ACCOUNTING DATA FOR THE PURPOSES OF THE SYSTEM OF NATIONAL ACCOUNTS

Summary: The article presents a methodological approach to defining the scope for the use of financial accounting data for the purposes of the system of national accounts (SNA).

Key words: scope of accounting, system of national accounts.

1. Introduction

Financial accounting is an accounting system that can satisfy information-related queries of a wide range of users and that allows aggregating financial ratios by means of preparing consolidated and summarized financial reporting. As a microlevel accounting system, financial accounting is required as a source of information for macroeconomic summaries, particularly, for creating a statistics system of national accounts (SNA). At the same time, there is an issue of data consolidation and coordination.

The main objective of the SNA is to provide a comprehensive conceptual and accounting framework, which can be used to create a macroeconomic database suitable for analyzing and evaluating the performance of an economy. The existence of such a database is a prerequisite for informed, rational policy-making and decision-taking. Some of the more specific uses of the SNA are described in the present paper.

The uses include monitoring the behavior of an economy, a macroeconomic analysis, economic policy-making and decision-taking and international comparisons. The system also has a very important statistical function by functioning as a coordinating framework for economic statistics in two different senses. Firstly, as a conceptual framework for ensuring the consistency of the definitions and classifications used in different, but related fields of statistics. Secondly, as an accounting framework for ensuring the numerical consistency of data drawn from different

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sources, such as industrial inquiries, household surveys, merchandise trade statistics, VAT returns and other administrative sources.

The aim of national accounts is to provide a comprehensive conceptual and accounting framework which could be used to create a macroeconomic database appropriate for analyzing and evaluating the performance of an economy. The existence of such a database is a prerequisite for informed, rational policy and decision-making.

The SNA data provides information which is covering both different types of economic activities and the different sectors of an economy. One can monitor the movements of major economic flows such as production, household consumption, government consumption, capital formation, exports, imports, wages, profits, taxes, lending, borrowing, etc. The flows of goods and services are recorded at both current and constant prices. Besides, information is provided about a budget surplus or deficit, the share of income which is saved, or invested, by individual sectors of an economy or a whole economy, trade balance, etc. The SNA provides the background against which movements of short-term indicators, such as monthly indices of industrial production or consumer or producer prices, can be interpreted and evaluated. Many of the accounts, tables or balance sheets of national accounts are not usually compiled more frequently than once a year. Now most elements of the national accounts of Ukraine are usually made no more often than once a year.

The basic data filled in a system are derived from the surveys and data gathered by certain agencies for administrative purposes, such as taxation forms, data from social insurance organizations, etc.

The SNA is an institutional system, comprising the following institutional units: the natural persons (households), legal units (foundations, enterprises, cooperation, corporations, etc.) and governmental units.

The transactions of the institutional units are well known in our societies. Some examples are buying and selling products, paying out wages, interest, taxes, taking up loans, issuing shares, etc. With these two building blocks and a sound understanding of what is going on in the economic world, a description of an economic process is possible. However, we have to limit ourselves in several respects: restrictions in time by defining a period of accounting being often one year; restrictions in activities to be accounted for by limiting the number of activities belonging to an economic process; restrictions in detail by means of aggregates and classifications; restrictions regarding the actors we are accounting for by the introduction of the residents of a certain territory.

Besides the restrictions there are also extensions introduced to cope with a need to depict important variables, such as production, intermediate consumption value added, etc. These variables are not transactions but analytical concepts. With this framework as a starting point, extensions are introduced, such as quarterly accounts and regional accounts. These are real extensions in the sense that an economic

process is at the very heart of the matter, but the description is more detailed in time, respectively in space.

Besides these extensions the SNA shows how to proceed in describing social, economic issues consistent with the SNA by the introduction of satellite accounts. One may say that in those accounts a combination of economic and social indicators is depicted in such a way that the economic and the related social variables are consistent with the SNA.

Scientific research on the issues of the interrelation between financial accounting and economic statistics, whether theoretical or practical, is relatively scarce in Ukraine. Ukrainian analytical publications on the subject of the SNA and its interrelation with financial accounting date back to the introduction of the SNA in Ukraine, starting from the second half of the 1980s. Such publications include works by S. Gerasymenko, V. Golovko, I. Nikitina [Gerasymenko et al. 2005], A. Golovach [2004], M. Melamed [2004], T. Motoryna [Motoryn, Motoryna 2001], P. Nagirnyak [1997] and other authors.

According to the statement made by I. Nikitina at the conference "National Statistics Development in the Light of Recommendations of the Global Evaluation of the Statistics System of Ukraine Held Within the STATISTICS-8 Project of the TACIS Program", held by the State Statistics Committee of Ukraine, Ukraine has problems related, in particular, to various methodological principles for primary accounting and to the differences in the financial reporting between different institutional sectors of the economy, and even with the same sector. First of all, this concerns the national governance sector and financial corporations" [Gerasymenko et al. 2005].

Nikitina believes that the current economic budget classification of expenses and the principles for accounting of transactions in budget reporting do not fully conform to the international standards; there is no unified approach to preparing financial reporting of the State Treasury, the Pension Fund and social security funds.

2. The methodical defining of the scope for the use of financial accounting data for the purposes of the system of national accounts

In the system of national accounts, the transactions are accounted for according to the accrual method, while the reports of the state and local budgets show the revenues and expenses at the time of appropriate payments, therefore using the cash method. When we take this into consideration, the financial accounting system in the state sector must be improved with regard to the requirements of the international standards; a single methodological approach to financial accounting and reporting must be adopted. This issue, among others, will be resolved as part of

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the Strategy for Modernizing the Financial Accounting System in the State Sector in the Years 2007–2015 [Cabinet Council of Ukraine 2007].

Furthermore, different classifications of financial assets and liabilities used to prepare financial reports in different institutional sectors and subsectors of the economy make it more complicated to develop a financial account for financial assets classified according to the appropriate, unified international classification. This raises the issue of the limits for the use of financial accounting data for the purposes of the SNA.

The conceptual foundations of financial accounting and the SNA were compared based on the following criteria:

- definition,
- objectives (tasks),
- accounting entities,
- toolkit,
- information users,
- qualitative characteristics,
- indexes.

For the purposes of a definition, the SNA uses a version of aggregate balance keeping that is appropriate for the market economy and concludes on the macroeconomic level, as a system of interrelated synthetic parameters. This approach is based on a certain set of accounts and balance tables that reflect the continuous production process. Accounting reporting uses an organized system for collecting, registering and summarizing data on the assets, equity, liabilities, revenues and expenses of a company, in a monetary form.

The objective of the SNA is to provide information support to the state regulation of an economy. Its tasks include:

- monitoring the state of an economy;
- macroeconomic analysis;
- approving decisions and developing economic policy;
- international comparisons.

The purpose of financial accounting is to provide users with information on the activities of a company, which is necessary for decision-making. Its tasks include:

- reflecting on complete and reliable information about the activity and financial state of a company;
- providing internal and external users of financial recording with information necessary to control the adherence to the legislation of Ukraine during business activity, evaluating the feasibility of business activities, monitoring the availability and movement of assets and liabilities, and the use of resources;
- preventing a company from having a negative financial result, discovering internal economic resources and analyzing the financial stability of a company.

The accounting entities in the SNA are flows, reserves and economic transactions, which characterize the macroeconomic processes at all the stages of the continuous production process (production, primary distribution of income, secondary distribution of income, use of income for final consumption and accumulation); while in financial accounting, these are assets, equity and liabilities, revenues and expenses, and business transactions.

The toolkit used by the SNA consists of the Concept for Development of the System of National Accounts, the Program for Developing the System of National Accounts for the Period Ending 2010, the International SNA Standard – 2008 [U.N. 2009], the Methodological Statistics Provisions of the State Statistics Committee of Ukraine. The toolkit used by financial accounting consists of the International Financial Reporting Standards (IFRS), the Law "On Accounting and Financial Reporting in Ukraine", normative and legal acts (financial accounting provisions (standards)), methodical recommendations, instructions on accounting for specific transactions and accounting ledgers, etc.

The users of information in the SNA include an unlimited circle of people, up to and including the general public (the Law on Information, the Law on Statistics), while in financial accounting, users include internal users (management, founders, shareholders and owners of companies), external users (investors, creditors, etc.) (Law "On Accounting and Financial Reporting in Ukraine"), and an unlimited circle of users (Principles of IFRS).

Oualitative characteristics of SNA include:

- double-entry recording and accrual;
- evaluation of the results of economic transactions: market prices of end consumers, manufacturer prices, basic prices.
- Qualitative characteristics of financial accounting include:
- double-entry recording,
- assumptions: independence, continuous application of an accounting policy, and the time definition of business activities (the accrual method).
- requirements: complete reflection, timeliness, conservatism, priority of content over form, rationality.

SNA indexes reflecting the results of economic activity on the macroeconomic level include:

- production of goods and services,
- intermediary consumption,
- gross added value, gross domestic product,
- fixed assets consumption,
- gross revenue, mixed revenue,
- property incomes, etc.

Financial accounting indexes reflecting the financial state and financial results on the macroeconomic level include:

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- fixed assets,
- floating assets,
- liabilities,
- equity,
- revenue,
- income,
- expenses.

Based on the comparison of the conceptual foundations of financial accounting and the SNA, we can state that financial accounting and the SNA are accounting systems that can be interconnected, because:

- the objectives and tasks of financial accounting and the SNA are not in conflict;
- the toolkits of both accounting systems are defined and formalized, and available for studying;
- the indexes of financial accounting and the SNA are interrelated and allow for transformation.

At the same time, consideration must be given to the fact that financial accounting and the SNA have different objectives and tasks, and, respectively, different accounting entities, qualitative characteristics and indexes. Insufficiently detailed research of the conceptual foundations of the two systems will create risks of distortion, incorrect interpretation and under-evaluation of data created in a specific information system.

3. Conclusions

Provided there are no conceptual conflicts, independent accounting systems can be interrelated. Based on the approaches for correlating financial accounting and the SNA, the theoretical form and content of coordinating these systems can be as follows:

- integrating on the SNA level, which assumes special organization of financial accounting;
- interaction (supplementing) of the accounting systems of the SNA and financial accounting;
- convergence (interpenetration and mutual enrichment) of the SNA and financial accounting;
- coordination (harmonization) of the SNA and financial accounting as independent accounting systems.

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MOŻLIWOŚCI WYKORZYSTANIA DANYCH Z RACHUNKOWOŚCI FINANSOWEJ DO CELÓW SYSTEMU RACHUNKÓW NARODOWYCH

Streszczenie: W artykule naukowo uzasadniono metodyczne podejście do określenia możliwości wykorzystania danych z rachunkowości finansowej do celów związanych z systemem rachunków narodowych.

Slowa kluczowe: zakres rachunkowości, system rachunków narodowych.