THE NEED OF DEVELOPMENT OF NAR 3 «ACTUARIAL FINANCIAL REPORTS» IN THE CONTEXT OF BUSINESS MANAGEMENT

Urgency of the research. In the context of business globalization and crisis trends in the domestic economy, many enterprises face the need to attract investments. There is a need to develop a foreign actuarial model of financial reporting on legislation level in Ukraine. Its content will promote information formation, connected with changes in the economic value of the business that is useful to investors.

Target setting. Public financial statements need to be transformed into actuarial statements. Therefore, the development of a new NAR 3 «Actuarial Financial Reports» at the legislative level in Ukraine becomes a priority for improving the management of their activities.


Uninvestigated parts of general matters defining. At the same time, there are no scientific works that would cover the need for the development and application of the NAR 3 «Actuarial Financial Reports» in the accounting practice of domestic enterprises.

The research objective. Study the need of a new NAR 3 «Actuarial Financial Statements» development, comparing it with NAR 1 «General Requirements to Financial Reports» and highlighting key differences.

The statement of basic materials. The article considers the necessity of developing NAR 3 «Actuarial Financial Reports». A comparative characteristic was proposed for the new NAR 3 and NAR 1. It was established that the main differences concern the terms and definitions, composition and elements of reporting, disclosure of information.

Conclusions. The result of the introduction of actuarial accounting will be the formation of a new basis of accounting and analytical support for the management of the domestic enterprises activities. The development and implementation in Ukraine of the new NAR 3 at the legislative level will contribute to the formation of a favorable informational ground for attracting investments.

Keywords: actuarial accounting; actuarial reporting; 3D-model of accounting; management; investment.

DOI: 10.25140/2410-9576-2018-2-1(13)-77-84
form of ownership and the economic sector are among the most important and complicated tasks in the context of deepening globalization transformations.

In order to ensure the necessary level of economic development in Ukraine, innovative approaches to managing enterprises for all types of economic activity, from the agrarian sector to the aviation industry, should be actively and efficiently applied. However, any innovative implementations need an adequate level of financing, which, in the face of crisis trends in the domestic economy, becomes an extremely difficult dilemma. Due to such circumstances, attracting direct investments into the development of the national economy, both external and internal, is a strategic prerogative for domestic business entities.

Favorable ground for improving the investment attractiveness of domestic enterprises can be ensured by improving the accounting and information content of reporting with the system of actuarial accounting. It is actuarial financial reporting that can provide information to real and potential investors about the additional economic benefits of attracting investment in business development and the prospects for future cash flows changes. Therefore, there is an urgent need to regulate a legislative level and actively introduce a foreign actuarial 3D model of accounting and financial reporting in Ukraine.

**Target setting.** In today’s economic conditions, the main tasks of enterprises that are in an unstable or crisis financial situation and seek to attract investment in their development from external or internal investors, there is a formation of such accounting, which would reflect subsidiary (relevant) information about the prospects for future cash flows of investment object, a change in its net operating assets and net financial liabilities that cannot provide general purpose reports. Traditional public financial reporting by its nature is not capable of creating such an information foundation for investors, creditors and other capital providers, since it focuses on establishing facts of past events and reflects the actual financial situation of the enterprise. Due to such circumstances, the financial statements (including those prepared under IFRS) require the transformation into actuarial financial statements that can reflect the prospect of changing the business economic potential. Therefore, taking into account foreign experience and developing at the legislative level of the new National Accounting Regulations 3 “Actuarial Financial Statements” in Ukraine is one of the priority tasks at the national level of government, which requires urgent resolution.

**Actual scientific researches and issues analysis.** Concerning the issues of building an effective enterprise management system based on the actuarial concept of accounting and reporting, they are detailed and comprehensively disclosed in the works of such foreign and domestic scientists as V. B. Ivashkevych, V. H. Kohdenko, M. I. Kuter, A. O. Lahovska, J. Martin, S. H. Penman, G. Petti, J. Rishar, Ya. V. Sokolov, B. Stewart, A. I. Shyhaiev and others. In particular, V. B. Ivashkevich and A. I. Shigaev [1] refer to the methodology of actuarial accounting and the use of its data in the management system. Expose the concept of actuarial accounting and actuarial financial statements based on the transformation of financial accounting and reporting in accordance with IFRS. In numerous developments of J. Richard [2], special attention is paid to actuarial accounting (or accounting for the purpose of valuing the property sold as an integral property complex (IPC) too. According to the scientist's approach, a new type of accounting is intended not only to create a favorable informational ground for engagement investment, but also it acts as an effective lever of influence in the conditions of business sale as a holistic property complex. However, the issue of the need for introduction of foreign actuarial 3D-concept of accounting and reporting at domestic enterprises and its respective regulations at the legislative level require further research in order to create a favorable investment climate and attract the necessary amount capital investments into the economy.

**Uninvestigated parts of general matters defining.** At the same time, there are no scientific works at all that would cover the need for the development and introduction into national accounting practice of domestic enterprises of the National Accounting Regulation 3 “Actuarial Financial Statements”. An external approach to the composition and forms of actuarial reporting, as well as its differences from financial reporting, will be required.

**The research objective.** Studying the need to develop a new National Accounting Regulation 3 “Actuarial Financial Statements”, comparing it with the NAR 1 "General Requirements to Financial Statements" and highlighting key differences.
The statement of basic materials. The level of foreign direct investment from the countries of the world to Ukraine is important to maintain and ensure the necessary level of development of the domestic economy. Volume of direct foreign investments from the countries of the world in the economy of Ukraine as of 10.01.2017 amounted to 39719.8 million USD, that is 2215.8 million USD (or 5.9%) more than the same level at the beginning of the reporting 2017 (01.01.2017), when it amounted to 37504.0 million USD. The most significant level of investments during 2010-2016 is observed from the Netherlands, in particular for 2016 it amounted to 6184.7 million USD, that is 802.00 million USD (or 11.48%) less than the previous 2015. The level of investment from Germany has been reduced sufficiently. So in 2010 it reached 6009.6 million USD, while in 2016 their level was only 1598.2 million USD, so there was a reduction of 3731.6 million USD (or 70.02%) during the last ten years [3].

For a more detailed analytical assessment, we will follow the level of foreign direct investment in the economy of Ukraine by types of economic activity, Table 1. It is clear that the largest volume of foreign direct investment in 2010-2016 came to the industry, in particular in 2016 it amounted to 9893.6 million USD, while in the base 2010 its level reached 16473.7 million USD, that is, there was a reduction of 6580.1 million USD or 39.94%, that is a rather negative trend.

One of the system-forming sectors in the domestic economy is the agrarian one, with its basic component - agriculture. As defined in the Strategy for the Development of the Agrarian Sector of Ukraine for the period until 2020 (hereinafter Strategy 2020) [4], agriculture provides the basis for the sovereignty of the country, that is, the basis of its food security, and also partly determines economic, environmental and economic security. In addition, the agrarian sector has a significant impact on the development of related economic activities, contributing to the socio-economic development of rural areas.

The last one requires an adequate level of financing, which, in the face of crisis trends in the domestic economy, is extremely difficult to provide. Therefore, an increase in the level of direct foreign investment in the agrarian sector becomes a strategic prerogative of the state as a whole. In this case, a kind of panacea may be the transition to a new actuarial stage in the development of accounting and reporting. That is, in a new economy, the priority of business owners should be the formation of such an accounting ground that could provide real and potential investors with the necessary information about the potential change in the economic value of the enterprise and the prospect of a change in cash flows through the prism of financial statements. It is this information content that can be obtained in the system of actuarial accounting as a new stage in the development of modern accounting teaching in the 21st century, which provides the necessary level of management activity.

However, in our opinion, actuarial accounting, in the present day, should acquire a 3D format, that is, to provide accounting information in a three-dimensional space that would fully satisfy the growing needs of investors and other capital suppliers. After all, actuarial accounting, in addition to traditional accounting methodical tools, operates with specific methodological techniques of descriptive, triple recording and actuarial calculations. That is why, we propose to introduce actively at the domestic enterprises 3D-model of actuarial accounting, which content consists in the fact that both in the system of accounts and in the light of information display in actuarial financial statements, a special account information about the level of economic potential of the business being created, and also about the prospect of its change.

In Ukraine, the general principles for the preparation and presentation of financial statements are determined by NAR 1 “General requirements for financial reporting” [5]. Regarding the procedure for drawing up consolidated financial statements, it is regulated by NAR 2 “Consolidated financial statements” [6].

However, in accordance with M.2, Section I, the Conceptual Framework for Financial Reporting [7], the purpose of the financial statements is to provide useful, relevant financial information about the entity to current and potential investors, borrowers and lenders in their execution decisions on investment in the development of this economic entity. M.3, the same Section of the Conceptual Framework [7], states that investors’ and borrowers’ expectations about the total return on invested capital are determined by estimating the amount, timing and prospects of net future cash flows.

Such information content can be obtained in actuarial financial statements, but in foreign accounting practice, there is no standard, or at least a normative document that would regulate the methodology for compiling and presenting actuarial financial statements. It should be noted that the significant
increase in the usefulness of reporting information was achieved in 2011 within the framework of the adoption of "Presentation of Financial Statements" by the IASB and the Accounting Standards Board of IFRS [8], since the standard has defined the conceptual structure of financial statements for entities management. However, according to foreign scholar A. I. Shyhaiev [1] the statements prepared according to IFRS are required to be transformed into actuarial financial statements based on the dichotomy of operational and financial activity.

Table 1
Direct investments in the economy of Ukraine by types of economic activity in 2010–2016

<table>
<thead>
<tr>
<th>№</th>
<th>Type of economic activity</th>
<th>Volume on January 1 (USD millions)</th>
<th>On December 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>A 669.2  719.5  725.3  717.8  776.9  617.0  502.2  500.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Industry</td>
<td>B+D+D+E 16 473.7  18 693.8  17 303.8  18 031.1  17 681.4  12 419.4  9 893.6  9 550.2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Construction</td>
<td>F 1 082.2  1 111.2  1 176.8  1 408.5  1 580.0  1 301.9  1 104.1  1 074.4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Wholesale and retail trade</td>
<td>G 4 341.1  4 681.1  5 346.1  6 070.6  6 807.8  6 037.6  5 247.4  5 485.5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Transport, warehousing, postal and courier activities</td>
<td>H 923.6  1 027.1  1 073.1  1 427.6  1 535.3  1 355.5  1 088.0  1 054.0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Temporary placement and organization of food</td>
<td>I 354.1  353.0  374.6  411.5  446.5  382.3  332.6  326.7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Information and telecommunicatio ns</td>
<td>J 1 572.3  1 734.9  1 982.7  1 840.4  1 894.7  1 646.2  2 089.4  2 089.3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Financial and insurance activities</td>
<td>K 8 973.2  11 498.3  12 908.1  13 094.9  12 261.4  8 790.3  8 382.0  10 324.4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Real estate operations</td>
<td>L 2 371.3  3 045.6  3 508.9  3 878.3  4 768.3  3 979.4  3 882.1  3 670.6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Professional, scientific and technical activities</td>
<td>M 1 133.1  1 182.0  2 072.5  2 831.0  4 006.8  2 634.5  2 222.6  2 196.2</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Public administration and defense; compulsory social insurance</td>
<td>O 0.1  0.1  0.1  0.1  0.1  0.1  -  -</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Education</td>
<td>P 25.9  7.6  6.7  9.1  12.0  10.7  16.0  24.1</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Health care and social assistance</td>
<td>Q 49.8  50.7  50.4  59.3  59.9  50.7  44.0  45.7</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Arts, sports, entertainment and recreation</td>
<td>R 122.4  130.9  155.2  138.7  157.0  141.0  112.5  110.4</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Provision of other types of services</td>
<td>S 26.5  23.5  33.0  26.1  28.9  18.4  -  -</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>T O T A L</td>
<td>38 992.9  45 370.0  48 197.6  51 705.3  53 704.0  40 725.4  36 154.5  37 655.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: created according to official data of the State Statistics Service of Ukraine, 2017 [3]

Following the structure of NAR 1 "General requirements for financial reporting" [5], and on the basis of the approach application of the actuarial structure and form of A. I. Shyhaiev's financial state-
Proposed Draft of National Accounting Regulation 3 "Actuarial Financial Statements" (NAR 3)

<table>
<thead>
<tr>
<th>№</th>
<th>Project of NAR 3 &quot;Actuarial Financial Statements&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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</tr>
</tbody>
</table>

I. Terms

1.1. This National Regulation (Standard) defines the purpose, composition and principles of preparing actuarial financial statements and the requirements for recognition and disclosure of its elements.

1.2. The provisions of this National Regulation (Standard) apply to actuarial financial statements of legal entities (hereinafter - enterprises) of all forms of ownership (except banks and budgetary institutions) that, if necessary, can transform financial statements and financial statements prepared in accordance with IFRS into actuarial financial statements.

1.3. The terms used in the national accounting regulations (standards) have the following meanings:
- operating assets - assets used in the course of an enterprise operating.
- operating liabilities - liabilities that arise in the course of operating activities.
- financial assets - assets used in the direct execution of financial transactions by the enterprise.
- financial liabilities - liabilities that arise in the course of operating activities.
- net operating assets - reflect the cost of resources that the enterprise attracts from investors, borrowers and other capital providers within the framework of financial activity and investment in operating activities. Net operating assets are calculated as the difference between operating assets and operating liabilities.
- net financial assets (liabilities) - reflect the net debt of the enterprise and are calculated as the difference between financial assets and financial liabilities.
- actuarial financial statements - transformed accounting, which contains information on changes in the economic value and future cash flows of the enterprise for the period.

1.4. The purpose of actuarial financial reporting is to provide real and potential investors, when deciding on investing in an investment object with complete, truthful and unbiased information about changes in the economic value of a business and future cash flows of the investment object.

1.5. The procedure for submitting actuarial financial statements to investors is determined by the management of the enterprise.

II. Composition and elements of actuarial financial statements


2.2 The actuarial balance sheet of an enterprise is compiled according to the data of the balance sheet (Statement of financial position) or the consolidated balance sheet (Statement of financial position) of the enterprise for the reporting period.

2.3 The form and composition of the articles of actuarial financial statements are determined by these National regulations (standard) and are given in appendix 1.

2.4 Actuarial financial statements include indicators of the activities of branches, offices, departments and other separate divisions of the enterprise.

2.5 The actuarial balance sheet includes operating and financial assets, operating and financial liabilities and equity of the enterprise. For the distinction between operational and financial activities, net operating assets are calculated as the difference between operating assets and operating liabilities and net financial assets or liabilities as the difference between financial assets and financial liabilities.

2.6 The actuarial statement of comprehensive income discloses information about the aggregate financial result, which consists of the aggregate financial result of operating activities (operating profit) and the aggregate financial results of the financial activities (net financial income or net financial expenses).

2.7 The actuarial cash flow statement (actuarial balance of cash flows) shows the cash flows from operating, financial and investment activities, while cash flow from investing activities allocated to the cash flow for investments in operating assets and cash flow for investments in financial assets. While drawing up the actuarial balance of cash flow, a dynamic accounting concept which requires the need to reflect the data on the operational and financial activity of the enterprise not only on the basis of moment indicators but also on the basis of interval indicators is used.
Continuation of table 2

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8</td>
<td>The actuarial report on changes in equity discloses information on changes in the equity of the enterprise, including: transactions with shareholders (holders of ordinary shares), net result due to operations with shareholders and the aggregate financial result of these transactions.</td>
</tr>
<tr>
<td>2.9</td>
<td>Enterprises that according to the law apply international financial reporting standards, may (if necessary) transform the financial statements prepared under IFRS into actuarial financial statements.</td>
</tr>
</tbody>
</table>

III. Qualitative characteristics of actuarial financial reporting and principles of its preparation

3.1 The information provided in actuarial financial statements should be useful to current and potential investors, lenders and other lenders in making decisions about providing resources to this entity. Such decisions include the acquisition, sale or retention of equity instruments and debt instruments, as well as the provision or repayment of loans and other forms of loans [M4. The Conceptual Framework for Financial Reporting] [7].

3.2 Actuarial financial statements should include useful, that is, relevant and truthful information about the entity's resources, requirements to the entity, and how effective and efficient management personnel are and the management board fulfills its obligations to use the resources of the subject of the business so that current and potential investors and lenders could assess the prospects of future cash flows of the entity [M4. The Conceptual Framework for Financial Reporting] [7].

3.3 General purpose of actuarial financial statements intended to show the value of a reporting entity; but it provides information to help current and potential investors, and lenders estimate the value of an entity. [M7. The Conceptual Framework for Financial Reporting] [7].

3.4 Actuarial financial statements of the company are formed in compliance with the fundamental and strengthening principles-requirements:
- **fundamental principles** - allow to separate useful information from non-useful;
- **enhancing principles** - allows to analyze the usefulness of accounting information and distinguish between more useful and less useful information.

Fundamental principles include: relevance and truthful representation: relevance implies that in order to be useful for making decisions on investing, lending and other similar decisions on investing resources in an enterprise, information should be relevant. true presentation suggests that in order to be useful in making decisions on investing, lending and other similar decisions on investing resources in an enterprise, information should create a true representation of economic phenomena, which content must present, that is, be complete, neutral and error-free.

Enhancing principles include: principle-requirement of comparison, timeliness and comprehensiveness: comparison suggests that in order to increase the usefulness of investors' decision to invest resources, relevant information that truly reflects economic phenomena should allow users to identify the similarities and differences between the two sets of phenomena; timeliness characterizes the need to ensure the availability of information that is disclosed to interested parties up to the point at which the information will lose the ability to influence their decisions on investing resources in the enterprise; clarity implies that information may not be useful for making investment and lending decisions unless it is presented in a way that is understandable to those concerned.

IV. Disclosure of information in actuarial financial statements

4.1 In the actuarial statement of comprehensive income information on the calculation of the amount of equity at the beginning and at the end of the reporting period is given separately.

4.2 Actuarial report on aggregate profit is made in two stages:

1) the actuarial statement of comprehensive income includes the financial results attributed directly to the accounts of equity;

2) all items of income and expenses are reclassified in operating and financial activities and the net financial performance is determined by type of activity, as well as the aggregate profit.

Source: created on the basis of the application of the A. I. Shyhaiev approach, 2011 [1] and taking into account the Conceptual Framework for Financial Reporting [7].

The proposed draft of NAR 3 "Actuarial Financial Statements" has the same structure as NAR 1 "General Requirements for Financial Statements" [5], but the main differences between these standards are the main terms and definitions, composition and the structure of the elements of reporting...
The need of development of NAR 3 «Actuarial financial reports» in the context of business management and disclosure in the reporting. In the system of actuarial accounting, there are such specific objects as: operating assets and liabilities; financial assets and liabilities; net operating assets and net financial assets (liabilities).

According to NAR 1 [5], financial statements include the following reporting forms: Balance Sheet (Statement of Financial Position), Statement of Comprehensive Income, Statement of Equity, Statement of Cash Flows and Notes to the financial statements. In accordance with the proposed NAR 3 "Actuarial Financial Statements", it includes the following reporting forms: Actuarial Balance, Actuarial Income Statement, Actuarial Statement of Cash Flows (Actuarial Balance of Cash Flows), Actuarial statement of changes in equity. There is a difference in principles of preparation of financial and actuarial reporting. In particular, the principles of the preparation of financial statements, according to NAR 1 [5] include the following principles: autonomy of the enterprise, continuity of activity, periodicity, historical (actual) cost, accrual and compliance of income and expenditure, full coverage, consistency, prudence, prevalence of the essence of the form and the single monetary meter. As outlined in Tab. 3, the main principles-requirements for the preparation of actuarial financial reporting are: fundamental (relevancy, truthful coverage) and enhancements (comparison, timeliness and comprehensiveness) [1].

Under the conditions of the active capital market, the actuarial report on changes in equity is an extremely important place in the system of actuarial reporting, so we will build the above form on the example of the agricultural enterprise «Interahrokom» (Chernivtsi region), whose main activity is the cultivation of grain and pome fruit. It should be noted that foreign direct investment from Germany (Redcast Holding Limited) is involved in the activity of this agricultural entity. The structure of the Actuarial Statement of Changes in Equity for Agro Enterprise «Interahrokom» is presented in Tab. 3.

<table>
<thead>
<tr>
<th>Item</th>
<th>Line code</th>
<th>For the reporting period</th>
<th>For the previous period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity at the beginning of the year</td>
<td>7010</td>
<td>20000</td>
<td>18786</td>
</tr>
<tr>
<td>Transactions with shareholders - holders of ordinary shares</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producing of own shares</td>
<td>7020</td>
<td>9</td>
<td>347</td>
</tr>
<tr>
<td>Sale of repurchased own shares</td>
<td>7030</td>
<td>(741)</td>
<td>(458)</td>
</tr>
<tr>
<td>Dividends</td>
<td>7040</td>
<td>(732)</td>
<td>(111)</td>
</tr>
<tr>
<td>Total aggregate financial result</td>
<td>7050</td>
<td>(897)</td>
<td>679</td>
</tr>
<tr>
<td>Net profit (loss)</td>
<td>7060</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disposal of subsidiaries</td>
<td>7070</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Dividends on preferred shares</td>
<td>7080</td>
<td>(907)</td>
<td>(887)</td>
</tr>
<tr>
<td>Total aggregate financial result</td>
<td>7090</td>
<td>18361</td>
<td>19562</td>
</tr>
</tbody>
</table>

Table 3: Actuarial Statement of Changes in Equity of Public company «Interahrokom» on January 01, 2017, thousand UAH

As noted in Tab. 3, Paragraph 4.1, Section IV, Project of NAR 3 "Actuarial Financial Statements", in the actuarial statement of comprehensive income information on the calculation of the amount of equity at the beginning and at the end of the reporting period is given separately. We propose to codify the strings in actuarial financial statements as part of the extension of the coding system in the public financial statements, which is regulated by NAR 1 "General requirements for financial reporting" [5].

Conclusions. Introduction of actuarial accounting and financial reporting in Ukraine will contribute to the formation of a new basis of accounting and analytical support for the management of the activities of domestic enterprises. The development and implementation at the legislative level of the new NAR 3 "Actuarial Financial Reporting" will facilitate the formation of a favorable information ground for attracting foreign direct investment into the development of the economy, as the potential investor will immediately see the prospects for future cash flows and the additional economic benefits from the in-
vested capital. In this way, the revival of potential opportunities for all types of economic activity, in particular for the agrarian sector of Ukraine will be ensured.

References

Lитература

Received for publication 25.12.2017

Бібліографічний опис для цитування :