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Ciumag, Marin and Ciumag, Anca

Universitatea Titu Maiorescu Bucuresti

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## **Types of balance sheet changes corresponding to economic and financial transactions**

**CIUMAG MARIN, Assoc.PhD.,**  
*University "Titu Maiorescu" Bucharest*  
e-mail: mari\_ciumag@yahoo.com

**Abstract:** *The activity carried out by any entity is materialized in a multitude of economic and financial operations (transactions) which, naturally, modify the patrimonial elements of assets and liabilities that it entails and, implicitly, the patrimony considered in its entirety and reflected through the balance sheet. In other words, the patrimonial elements of assets and liabilities belonging to the economic entity are in a continuous process of movement and transformation, and the economic and financial operations that take place are reflected in the accounting and, at the same time, influence the content of the balance sheet. economic assets and their sources of financing. Balance sheet changes are a consequence of the economic and financial operations that are carried out within the entity to achieve the planned objectives and which, naturally, produce changes in the assets. Viewed in this context, the operations performed directly influence the value of the balance sheet items because they reflect exactly the value of the patrimonial elements, including those that have undergone changes.*

### **1. Significant theoretical elements on balance sheet changes**

The activity carried out at the level of the economic entity is very complex and generates a multitude of economic and financial operations which, in turn, permanently change the mass of the patrimony and, implicitly, the value of the balance sheet assets and liabilities through which it is reflected.

Economic operations are those that express patrimonial relations regarding the production or exchange of values, from which are exemplified: the supply of raw materials from suppliers, the obtaining of finished products from the production activity, the delivery of finished products to customers, etc.

In turn, financial transactions represent movements of value without equivalent or value transformations, such as: payment of income tax on the budget, granting a cash advance to an employee, depositing cash at the bank, payment of the obligation to suppliers, etc.

With regard to the double reflection of changes in the mass of assets, it can be emphasized that any simple economic operation, which involves two elements of assets, determines either the increase of assets and, at the same time, of liabilities or their decrease, as the case may be. with the same value, either changes only in assets or only in liabilities, so of two patrimonial elements from the same part of the balance sheet, in the sense that one increases and the other decreases with the same value, so that after any of these changes the following equality is maintained<sup>1</sup>:

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<sup>1</sup> O.M.F.P. no. 1802/2014 for the approval of the Accounting Regulations regarding the individual annual

ECONOMIC GOODS = SOURCES OF FINANCING  
and implicitly: ACTIVE = LIABILITIES

In this context, it can be emphasized that the operations and changes to which we refer fall into two significant categories, namely:

- operations that change the balance sheet total, in the sense of increasing or decreasing it, called volume changes, but which also produce changes in structure both in assets and liabilities;
- operations that cause changes only in assets or only in liabilities, without changing the balance sheet total, called structural changes.

In the case of the first category of economic operations, in the simplest variant, only two patrimonial elements are involved, one of assets and another of liabilities, which increase or decrease simultaneously and with the same value, which determines the increase / decrease in equal measure. of the total related to the asset and of the one corresponding to the liability and, implicitly, of the total balance sheet, which keeps its equality.

In the case of transactions in the second category, only two assets are modified in the simplest form, but both assets or liabilities, in the sense that one increases and the other decreases simultaneously with the same value and, in naturally, the total assets and liabilities, respectively, do not change, and, implicitly, neither the total balance sheet. The changes that occur refer only to the structure of the economic goods and respectively of the financing sources, and the balance sheet equality, not being modified, is the one established prior to making such changes.

In connection with the elements presented above, we consider that it is useful to systematize in the sense of delimiting the four types of changes that occur in the assets and liabilities of the balance sheet due to economic and financial operations that produce changes in the volume and structure of assets. in the following<sup>2</sup>

a. Volume changes in the sense of concomitant increase and with the same value of both an asset balance sheet item and a liability balance sheet item, the balance sheet total is increased by that amount, but the balance sheet equality is maintained.

b. Volume changes in the sense of concomitant decrease and with the same value of two balance sheet items, one of assets and the other of liabilities, the total balance sheet decreases by the respective value, but the balance sheet equality is maintained.

c. Changes in the structure of the balance sheet assets, in the sense that an asset it increases and at the same time and with the same value decreases another element, also of assets, the total balance sheet does not change.

d. Changes in the structure of the balance sheet liability, if a liabilities and at the same time and with the same value decreases another element, also liabilities, the total balance sheet does not change.

## **2. Applications for types of balance sheet changes**

In order to confirm the theoretical elements presented and, implicitly, to facilitate the understanding and retention of their content, the exemplification operation is performed, using a simplified initial balance sheet in the form of an account, with a small number of po-

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financial statements and the consolidated financial statements, M. Of. no. 963 / 30.12.2014

<sup>2</sup> O.M.F.P. no. 1802/2014 for the approval of the Accounting Regulations regarding the individual annual financial statements and the consolidated financial statements, M. Of. no. 963 / 30.12.2014

sitions, both for assets and for liabilities, and only with balances for the beginning of the period, but which allows the concretization of the four types of balance sheet changes.

At the same time, the content (items) of the balance sheet used in the practical activity is taken into account as well as the existence of situations with direct links between the exemplary balance sheet items and the patrimonial elements they reflect, in the sense that a patrimonial element corresponds to a balance sheet item. distinct.

It is also necessary to emphasize that, for methodological reasons, the items selected from the list balance sheet are presented in the form of account balance, and the values of economic operations are subsequently recorded in the balance sheet in lei, so not in thousands of lei, as established for the preparation.

On the other hand, it is mentioned that after the resolution of each economic operation and implicitly of the type of balance sheet change to which it refers, a balance sheet is drawn up through which the changes that occur compared to the previous balance sheet are highlighted. each type of balance sheet change.

The types of balance sheet changes are exemplified in the order in which they were presented using the hypothetical data in the following table.

- in lei -

**BALANCE SHEET**  
**Initial**

| <b>ACTIVE</b>   |   | <b>LIABILITIES</b>   |                            |
|---|---|--|----------------------------|
| Name of items   | Initial balances                        | Name of items  | Initial balances           |
| <ul style="list-style-type: none"> <li>• Technological equipment</li> <li>• Raw materials</li> <li>• Consumables</li> </ul> | <p>30.000</p> <p>2.000</p> <p>1.500</p> | <ul style="list-style-type: none"> <li>• Paid subscribed capital</li> <li>• Reserves</li> </ul>  | <p>35.000</p> <p>1.100</p> |
| <ul style="list-style-type: none"> <li>• Finished products</li> </ul>   | <p>3.200</p>                            | <ul style="list-style-type: none"> <li>• Suppliers</li> <li>• Miscellaneous creditors</li> </ul> | <p>6.000</p> <p>4.000</p>  |
| <ul style="list-style-type: none"> <li>• House</li> <li>• Current bank accounts</li> <li>• Customers</li> </ul>             | <p>800</p> <p>10.000</p> <p>4.000</p>   | <ul style="list-style-type: none"> <li>• Short-term bank loans</li> </ul>                        | <p>5.400</p>               |
| <b>TOTAL ACTIVE</b>   | 51.500                                  | <b>TOTAL LIABILITIES</b>   | 51.500                     |

In order to view the balance sheet changes, we will draw up a balance sheet after each transaction. According to the legal provisions, the balance sheet is drawn up annually and not after each transaction.

**a. Volume changes in the sense of increase**

The economic and financial operations that produce this type of balance sheet change determine the concomitant increase and with the same value of both elements, one of

economic goods and another of financing sources, as well as of two items, one of assets and the other of liabilities, as well as of the balance sheet total. Operations of this nature include:

- subscription of contributions for the establishment or increase of the share capital;
- receiving a short-term bank loan;
- supply of various stocks;
- purchasing a building, etc.

**Transaction no. 1.** The entity purchases goods from a supplier in the amount of 2.000 lei.

This operation determines the concomitant increase, with the amount of 2.000 lei, of the elements regarding:

- "Goods" increases from 0 (zero) to 2.000 lei;
- "Suppliers" increases from 6.000 lei to 8.000 lei;
- the total balance sheet, respectively of the assets and liabilities, increases from 51.500 lei, to 53.500 lei, as it appears from the balance sheet drawn up following transaction no.1.

- in lei -

**BALANCE SHEET**  
**concluded after transaction no. 1**

| <b>ACTIVE</b>             |                  | <b>LIABILITIES</b>        |                  |
|---------------------------|------------------|---------------------------|------------------|
| Name of items             | Initial balances | Name of items             | Initial balances |
| • Technological equipment | 30.000           | • Paid subscribed capital | 35.000           |
| • Raw materials           | 2.000            | • Reserves                | 1.100            |
| • Consumables             | 1.500            | • Suppliers               | 8.000            |
| • Finished products       | 2.000            | • Miscellaneous creditors | 4.000            |
| • Goods                   | 3.200            | • Short-term bank loans   | 5.400            |
| • House                   | 800              |                           |                  |
| • Current bank accounts   | 10.000           |                           |                  |
| • Customers               | 4.000            |                           |                  |
| <b>TOTAL ACTIVE</b>       | <b>53.500</b>    | <b>TOTAL LIABILITIES</b>  | <b>53.500</b>    |

Comparing the data from the above balance sheet with those from the initial balance sheet, it is found:

- ♣ the concomitant increase and with the same amount of two patrimonial elements, one of assets and another of liabilities, and of the total of each of these balance sheet parts;
- ♣ changing the structure of economic goods and financing sources;
- ♣ the increase by the same amount of the mass of the patrimony and by this of the total of the balance sheet, which maintains its equality.

The aspects highlighted above are suggested in the following.

- The equality of the initial balance was:

$$\text{ACTIVE} : 51.500 = \text{LIABILITIES} : 51.500$$

- Equality of the balance sheet drawn up following transaction no. 1 and the changes it has determined (marked with X) are as follows:

$$\begin{array}{r} \text{ACTIVE (51.500)+ 2.000 = LIABILITIES (51.500) + 2.000} \\ (53.500) \qquad\qquad\qquad (53.500) \end{array}$$

and:

$$\text{ACTIVE} + X = \text{LIABILITIES} + X$$

The algebraic expression for the type of balance change is:

$$A + X = P + X$$

### b. Volume changes in the direction of decrease

This type of balance sheet change is generated by operations that reduce at the same time and with the same amount two assets, one of economic goods and another of sources of financing, as well as two items, one of assets and the other of liabilities, and also the total balance sheet. , respectively assets and liabilities. Among the operations that produce such changes are:

- payment of profit tax;
- payment from the bank of a commercial obligation arising from the supply of goods;
- repayment of a short-term bank loan;
- payment in cash of salary obligations, etc.

**Transaction no. 2.** The obligation to the supplier in the amount of 1,500 lei regarding the supplied consumables is paid.

This transaction determines the concomitant decrease, with the amount of 1,500 lei, of the elements regarding:

- "Current accounts with banks" decreases from 10,000 lei to 8,500 lei;
- "Suppliers" decreases from 8,000 lei to 6,500 lei;
- the total balance sheet, respectively of the assets and liabilities, decreases from 53,500 lei to 52,000 lei, as it appears from the balance sheet drawn up following the analyzed transaction and presented in the following table.

- în lei -

### BALANCE SHEET concluded after transaction no.2

| <b>ACTIVE</b>             |                  | <b>LIABILITIES</b>        |                  |
|---------------------------|------------------|---------------------------|------------------|
| Name of items             | Initial balances | Name of items             | Initial balances |
| • Technological equipment | 30.000           | • Paid subscribed capital | 35.000           |
| • Raw materials           | 2.000            | • Reserves                | 1.100            |
| • Consumables             | 1.500            | • Suppliers               | 6.500            |
| • Finished products       | 2.000            | • Miscellaneous creditors | 4.000            |
| • Goods                   | 3.200            | • Short-term bank loans   | 5.400            |
| • House                   | 800              |                           |                  |
| • Current bank accounts   | 8.500            |                           |                  |
| • Customers               | 4.000            |                           |                  |
| <b>TOTAL ACTIVE</b>       | <b>52.000</b>    | <b>TOTAL LIABILITIES</b>  | <b>52.000</b>    |

Comparing the data from this balance sheet with those from the previous balance sheet, it is found:

- ♣ the concomitant diminution and with the same amount of two patrimonial elements, one of assets and another of liabilities, and of the total of each of these balance sheet parts;

- ♣ changing the structure of economic goods and financing sources;

- ♣ the decrease by the same amount of the mass of the patrimony and by this of the total of the balance sheet, which maintains its equality.

The aspects highlighted above are suggested in the following.

- The equality of the previous balance was:

$$\text{ACTIVE: } 53.500 \text{ lei} = \text{LIABILITIES: } 53.500 \text{ lei}$$

- The equality of the balance sheet drawn up following transaction no. 2 and the changes that it determined (marked with X) are as follows:

$$\begin{array}{r} \text{ACTIVE (53.500)} - 1.500 = \text{LIABILITIES (53.500)} - 1.500 \\ (52.000) \qquad \qquad \qquad (52.000) \end{array}$$

$$\text{ACTIVE} - X = \text{LIABILITIES} - X$$

The algebraic expression for type two balance change is:

$$\mathbf{A - X = P - X}$$

### **c. Structural changes in the balance sheet assets**

The economic and financial operations that produce this type of balance sheet change determine the increase of one element of assets and at the same time and with the same amount the decrease of another element, also of assets, so both of economic goods. The balance sheet total, namely assets and liabilities, remains unchanged. Among the operations that generate such changes are:

- the transfer of consumables in its own management regarding the sale of goods;
- the purchase of goods settled from a cash advance;
- purchase, with cash payment, travel tickets;
- the collection by transfer of the receivable from a client, etc.

Transaction no. 3. The amount of 3.000 lei with payment order is collected from customers. This operation determines the concomitant modification, with the amount of 3.000 lei, of two elements, as follows:

- "Current accounts with banks" increases from 8.500 lei to 11.500 lei;
- "Customers" decreases from 4.000 lei to 1.000 lei;
- the total balance sheet, respectively the assets and liabilities, is not affected, it remains at the level of the amount of 52.000 lei, which also results from the balance sheet drawn up following the exemplified operation and presented in the following table.

**BALANCE SHEET**  
**concluded after transaction no.3**

| <b>ACTIVE</b>             |                  | <b>LIABILITIES</b>        |                  |
|---------------------------|------------------|---------------------------|------------------|
| Name of items             | Initial balances | Name of items             | Initial balances |
| • Technological equipment | 30.000           | • Paid subscribed capital | 35.000           |
| • Raw materials           | 2.000            | • Reserves                | 1.100            |
| • Consumables             | 1.500            |                           |                  |
| • Finished products       | 2.000            | • Suppliers               | 6.500            |
| • Goods                   | 3.200            |                           |                  |
| • House                   | 800              |                           |                  |
| • Current bank accounts   | 11.500           | • Miscellaneous creditors | 4.000            |
| • Customers               | 1.000            | • Short-term bank loans   | 5.400            |
| <b>TOTAL ACTIVE</b>       | <b>52.000</b>    | <b>TOTAL LIABILITIES</b>  | <b>52.000</b>    |

Comparing the data from this balance sheet with those from the previous balance sheet, it is found:

♣ the decrease of patrimonial element of assets simultaneously with the increase of another patrimonial element, also of assets;

♣ the change only in the structure of the economic goods, without influencing the elements regarding the total assets and, implicitly, of the balance sheet, nor the structure of the financing sources;

The aspects highlighted above are suggested in the following.

- The equality of the previous balance was:

$$\text{ACTIVE: } 52.000 = \text{LIABILITIES: } 52.000$$

- Equality of the balance sheet drawn up following transaction no. 3 and the changes it has determined (marked with X) are as follows:

$$\text{ACTIVE } (52.000) + 3.000 - 3.000 = \text{LIABILITIES } (52.000)$$

$$(52.000) \qquad \qquad \qquad (52.000)$$

and

$$\text{ACTIVE} + X - X = \text{LIABILITIES}$$

The algebraic expression of type three of the two-year modification is of the form:

$$\mathbf{A + X - X = P}$$

**d. Structural changes in the liabilities of the balance sheet**

This type of balance sheet change is determined by the operations that produce the increase of one element of liabilities and at the same time and with the same amount the decrease of another element, also of liabilities, so both sources of financing. The balance sheet total, namely assets and liabilities, remains unchanged.



- Among the operations that generate such changes are:
- • payment of the debt to a supplier directly from a bank loan;
- • the establishment of the paid-up share capital as a result of receiving the previously subscribed contribution;
- • acceptance of a commercial bill payable (promissory note) by a supplier of goods;
- • incorporation of reserves in the share capital, etc.

**Transaction no. 4.** The debt is paid to a supplier, in the amount of 4.000 lei, directly from a short-term bank loan.

This operation determines the simultaneous modification, with the amount of 4.000 lei, of two elements, as follows:

- "Suppliers" decreases from 6.500 lei to 2.500 lei;
- "Short-term bank loans" increase from 5.400 lei to 9.400 lei
- the total balance sheet, respectively of the assets and liabilities, is not affected, it remains at the level of the amount of 52.000 lei, which also results from the balance sheet drawn up following the exemplified transaction and presented in the table below.

- in lei -

**BALANCE SHEET**  
**concluded after transaction no.4**

| <b>ACTIVE</b>             |                  | <b>LIABILITIES</b>        |                  |
|---------------------------|------------------|---------------------------|------------------|
| Name of items             | Initial balances | Name of items             | Initial balances |
| • Technological equipment | 30.000           | • Paid subscribed capital | 35.000           |
| • Raw materials           | 2.000            | • Reserves                | 1.100            |
| • Consumables             | 1.500            |                           |                  |
| • Finished products       | 2.000            | • Suppliers               | 2.500            |
| • Goods                   | 3.200            |                           |                  |
| • House                   | 800              | • Miscellaneous creditors | 4.000            |
|                           |                  | • Short-term bank loans   | 9.400            |
| • Current bank accounts   | 11.500           |                           |                  |
| • Customers               | 1.000            |                           |                  |
| <b>TOTAL ACTIVE</b>       | <b>52.000</b>    | <b>TOTAL LIABILITIES</b>  | <b>52.000</b>    |

Comparing the data from this last balance sheet with those from the previous balance sheet, it is found:

- ♣ the decrease of a patrimonial element of liabilities simultaneously with the increase of another patrimonial element, also of liabilities;

♣ the change only in the structure of the financing sources, without being influenced by the elements regarding the total liability and, implicitly, of the balance sheet, nor the structure of the economic goods;

The issues highlighted above are suggested below.

- The equality of the previous balance was:

$$\text{ACTIVE: } 52.000 = \text{LIABILITIES: } 52.000$$

- Equality of the balance sheet drawn up following transaction no. 4 and the changes it has determined (marked with X) are as follows:

$$\begin{array}{r} \text{ACTIVE: } (52.000) \\ (52.000) \end{array} = \begin{array}{r} \text{LIABILITIES } (52.000) \\ (52.000) \end{array} + 4.000 - 4.000$$

and:

$$\text{ACTIVE} = \text{LIABILITIES} + \text{X} - \text{X}$$

The algebraic expression of the fourth type of balance change is of the form:

$$\mathbf{A = P + X - X}$$

### 3. Conclusions

The issues previously addressed in connection with the balance sheet changes are presented in a systematic and summarized manner below.

- The multitude and diversity of economic and financial operations that are performed within an entity, depending on how it affects the balance sheet, is divided into four groups, and each of them determines a different type of change, there are four types of change in the balance sheet.

- Balance sheet equality is maintained at all times, regardless of type of the change determined by the operations being performed.

- The total balance sheet, respectively of the assets and liabilities, increases in the case of the type one change because, at the same time and with the same amount, one asset and one liability item are increased.

This type of change in volume in the direction of increase is reflected by the algebraic expression:

$$\mathbf{A + X = P + X (1)}$$

-The total balance sheet, respectively of the assets and liabilities, decreases in the case of the type two changes because, at the same time and with the same amount, one asset and one liability item decrease.

This type of volume change in the direction of the decrease is mirrored by the algebraic expression:

$$\mathbf{A - X = P - X (2)}$$

- The total balance sheet, respectively of the assets and liabilities, does not change in the case type three change because, at the same time and with the same amount, one asset increases and another asset decreases as well.

The algebraic expression of this type of change in structure in the balance sheet assets is of the form:

$$\mathbf{A + X - X = P (3)}$$

- The total balance sheet, respectively of the assets and liabilities, does not change in the case type four change because, at the same time and with the same amount, one liability item increases and another liability item decreases as well.

The algebraic expression of this type of structural change in the liabilities of the balance sheet is of the form:

$$\mathbf{A = P + X - X (4)}$$

- Permanent maintenance of balance sheet equality confirms compliance the requirements of the double representation of the patrimony, of the goods that compose it and of the sources of financing, which, represent the main feature of the object of study of the accounting.

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