A CRITICAL STUDY REGARDING THE ELABORATION OF THE CASH FLOW STATEMENT USING THE DIRECT METHOD IN ROMANIA

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Abstract
The direct method, which is the subject of this study, involves the identification and inclusion in the statement of cash flows of the encashments and the payments made by the company. Although IAS 7 recommends the usage of the direct method to prepare the cash flow statement in order to better satisfy the informational need of information users, many enterprises choose to apply the indirect method, due to its simplicity. On this issue we support the idea that the direct cash flow reporting format, relative to the indirect method, leads to better prediction of future firm performance and has a stronger association with share prices. One important conclusion of our paper is that the decision of the users of accounting information, taking into account the cash flows generated by the economic entity, will not relieve them entirely from the effects of manifestation of the unexpected, but certainly reduces their magnitude. It is our belief that all Romanian companies whose financial statements are addressed to a large number of potential users should prepare comprehensive annual financial statements, whether or not the law requires them.

Keywords: The statement of cash flows in Romania, the direct method, the indirect method, IAS 7

JEL: M41

1. Introduction
All the synthesis documents prepared for the end of the fiscal year form the annual financial statements. Their objective is to supply information on the financial position, performance and cash flows of an entity [1].

A complete set of annual financial statements includes according to the International Financial Reporting Standards – IFRS [2]:
- A statement of the financial position (balance sheet);
- A statement of profit and loss;
- A statement of changes in equity;
- A statement of cash flows;
- Notes, comprising a summary of significant accounting policies and other explanatory information;
- A statement of the financial position at the beginning of the earliest comparative period when the entity applies an accounting policy retrospectively or makes a retrospective restatement of the items in its financial statements, or when it reclassifies items in its financial statements.

Normative existing acts in force in Romania currently [3] set the following limits to be used by businesses in their financial statements as size criteria:
- Total assets: 3.650.000 euros;
- Net turnover: 7.300.000 euros;
- Average number of employees during the fiscal year: 50.

Businesses that on a financial year exceed the limits of two of the three criteria, prepare complete annual financial statements including:
- Balance sheet;
- Profit and loss statement;
- Statement of changes in equity;
- Statement of cash flows;
- Notes to the annual financial statements.

Businesses that on a financial year do not exceed the limits of two of the three criteria, prepare simplified annual financial statements including:
- Balance sheet;
- Profit and loss statement;
- Notes to the annual financial statements.

As it can be seen, the provisions of the Romanian legal framework concerning the preparation of the annual financial statements fall within the general framework set by the International Accounting Standards Board (IASB).
2. The classification of the cash flows according to their generating activities

The concept of cash is to be understood in terms of the statement of cash flows as the sum of total money available in the cash desk, in current bank accounts and deposits held on sight, money that the entity can access immediately.

Cash equivalents are short-term financial investments, highly liquid, which are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flow means all the cash and cash equivalents inflows and outflows. The difference between inflows and outflows of cash and cash equivalents is the net cash flow.

By using the statement of cash flows for appreciating the company’s financial performances, it was attempted to remove the highest deficiency regarding the usage of profit as a performance indicator [4].

For the statement of cash flows, the classification of these flows using as a criterion of demarcation the activity which generates cash or cash equivalents, is of particular importance. Using that criterion are defined following classes of cash flows:

- Operating;
- Investment;
- Financing.

Within each class there are encashments and payments. Net cash flows can be calculated for each of the three categories (operating, investing and financing) by determining the difference between encashments and payments. The relation used for this is:

\[
\text{Net cash flow from operating} / = \text{Encashments from operating} / - \text{Payments from operating} /
\]

\[
\text{funding / investment activities} \quad \text{funding / investment activities}
\]

The operating activities include, in accordance with IAS 7 [5], the main revenue-producing activities of the entity and other activities that are not investing activities or financing activities. The cash flows from operating activities is an important part of the statement of cash flows because it shows the success or failure recorded by these activities to generate sufficient cash to repay loans, pay dividends and new investments without having appealed to external sources of financing.

We believe that an easy way to identify the cash flows generated by operating activities is by exclusion, i.e. by eliminating investment and financing activities, fewer and more easily identified from this point of view, of the total business activities. Remaining activities are operating and their related encashments and payments will be classified as cash flows generated by operating activities.

Investment activities are the acquisition and disposal of long-term fixed assets and other investments not included in cash equivalents.

Financing activities are activities that result in changes in the size and composition of the equity and debts of the entity.

There are transactions that can generate cash flows that fall into several categories of activities. Thus, for example, the payment for a loan including the interest can be broken down into the following activities: interest paid may be included in cash flows from operating activities and the principal will be included in cash flows released from financing activities. On the other hand the encashment of a loan made by an entity other than those classified as financial institutions, which includes a certain interest received can be broken down into the following activities: interest received may be included in the cash flows generated by operating activities and the principal will be included in cash flows released from investing activities.

The interests received or paid may be treated as we said as the international financial reporting standards provide special treatment for both cash flows representing interest and those which are dividends. Thus, interest paid and interest and dividends received may be classified as operating cash flows or, alternatively, the interest paid may be classified as financing cash flows and interest and dividends received may be classified as cash flows from investment. Dividends paid may be classified as financing cash flows or, alternatively, in the category of operating cash flows.

3. The direct method of elaborating the statement of cash flows

For the preparation and presentation of the statement of cash flows can be used two methods, which are set out in IAS 7:

- The direct method;
- The indirect method.

The direct method, which is the subject of this study, involves the identification and inclusion in the statement of cash flows of the encashments and the payments made by the company. As a general rule, are not allowed offsets between encashments and payments, so the statement of cash flows includes gross values.

IAS 7 recommends companies to reveal information about cash flows using the direct method because it
provides the most detailed information on the components of the net operating cash flow. Also, according to Orpurt and Zhang [6], “the direct method is valuable to investors when forecasting future cash flows and earnings”.

Although IAS 7 recommends the usage of the direct method to prepare the cash flow statement in order to better satisfy the informational need of information users, many enterprises choose to apply the indirect method, due to its simplicity. On this issue we support the idea that “past period direct method cash flow data predict future operating cash flow better than indirect method cash flow data”, stated by Krishnan and Largay III [7]. Supporting the same idea Bradbury [8] affirms “that the direct cash flow reporting format, relative to the indirect method, leads to better prediction of future firm performance and has a stronger association with share prices”.

According to the legal Romanian framework, cash flows can be shown using the following presentation format (which is indicative and may be supplemented by any other encashments or payments that can occur in various concrete situations), if the firm chooses the direct method:

\[
\begin{align*}
\text{Encashments from customers} & \quad (+) \\
\text{Payments to suppliers and employees} & \quad (-) \\
\text{Interest paid} & \quad (-) \\
\text{Profit tax paid} & \quad (-) \\
\text{Encashments from insurance against earthquakes} & \quad (+) \\
\text{= Net cash flow from operating activities} \\
\text{Payments for purchase of shares} & \quad (-) \\
\text{Payments to acquire tangible fixed assets} & \quad (-) \\
\text{Encashments from the sale of tangible assets} & \quad (+) \\
\text{Interest received} & \quad (+) \\
\text{Dividends received} & \quad (+) \\
\text{= Net cash flow from investing activities} \\
\text{Encashments from the issue of shares} & \quad (+) \\
\text{Encashments from long term borrowings} & \quad (+) \\
\text{Payments of financial leasing liabilities} & \quad (-) \\
\text{Dividends paid} & \quad (-) \\
\text{= Net cash flow from financing activities} \\
\text{Net increase in cash and cash equivalents (operating, investing and financing)} & \quad (1) \\
\text{Cash and cash equivalents at beginning of the fiscal year} & \quad (2) \\
\text{Cash and cash equivalents at end of the fiscal year} & \quad (1 + 2)
\end{align*}
\]

When applying the direct method, information on gross cash flows can be obtained in two ways, namely the direct logic and the residual logic.

A. The direct logic implies the taking of the encashments and payments in cash or cash equivalents directly
from the accounting information system - which is recommended to be organized so that these encashments and payments are already there, highlighted on activities and operations - and their grouping consistent with the structure of the cash flow statement. In this situation, when recording accounting transactions in cash or cash equivalents, one may indicate whether they affect operating, investing or financing. In this case, at the moment of the elaboration of the financial statements regrouping the cash flows on activities and on types of operations within these activities, would be easy. If the accounting records of cash flows are not mentioning their generating activities from the beginning, in a large enterprise, the use of the direct logic involves a highly significant further work. It is practically necessary in this situation to reconsider all the cash flows recorded during the analyzed period and the scrupulous treatment of the treasury operations that can be allocated to several types of activities.

To present the concrete way of preparation of the cash flow statement using the direct logic, we suppose that a company has at the time of preparation of the annual financial statements the following information provided in its treasury accounts (amounts in the accounts are already aggregated by type of operations):

<table>
<thead>
<tr>
<th>Table no 1. The statement of cash flows prepared using the direct method (applying the direct logic) - lei -</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation</strong></td>
</tr>
<tr>
<td>Encashments from customers (+)</td>
</tr>
<tr>
<td>Payments to suppliers (-)</td>
</tr>
<tr>
<td>Payments to employees (-)</td>
</tr>
<tr>
<td>Interest paid (-)</td>
</tr>
<tr>
<td>Profit tax paid (-)</td>
</tr>
<tr>
<td>Encashments from insurance against earthquakes (+)</td>
</tr>
<tr>
<td>= Net cash flow from operating activities</td>
</tr>
<tr>
<td>Payments to acquire financial fixed assets (-)</td>
</tr>
</tbody>
</table>
We can see that the activities of the company in the period under review have led to a net increase in cash and cash equivalents in the period of 509,000 lei. The only activity that has generated positive cash flows of 676,000 lei was the financing activity through the encashment of a long-term borrowing of 1,000,000 lei. The operating and investing activities generated negative cash flows of 72,000 lei and 95,000 lei, which indicates that the entity is in a delicate situation if we look from the perspective of its ability to secure the needed cash and cash equivalents. The activities that were developed cannot generate the necessary resources to pay the dividends due to the shareholders of the company.

B. The residual logic is based on the idea that economic transactions are accounted for under the principle of double-entry and applying the logic of accounting records. In this context other information can be also derived from the recordings made, namely information on the cash flows generated during the period. The elaboration of the statement of cash flows using the direct method, i.e. the presentation of information in terms of encashments and payments, does not mandatory implies the adaption of the accounting information system for the preparation of this financial statement.

The value of each cash flow will not be taken directly from accounting information system. Information from the balance sheet and the profit and loss account will be adjusted in order to achieve the value of payments and encashments in cash and cash equivalents.

In order to determine the encashments of receivables, applying the logic of accounting records, we should use the information from the balance sheet and the profit and loss account as it follows:

\[ \text{Receivables balance final} = \text{Receivables balance initial} + \text{Revenues from receivables} \]

hence the:

\[ \text{Receivables encashesments decrease} = \text{Receivables balance initial} + \text{Revenues from receivables increase} \]

To determine the payments from debts by applying the logic of accounting records are used information from
the balance sheet and the profit and loss account, as follows:

\[
\text{Debts} - \text{final balance} = \text{Debts} - \text{initial balance} + \text{Debts increase} - \text{Debts payments (debts decrease)}
\]

hence the:

\[
\text{Debts payments (debts decrease)} = \text{Debts} - \text{initial balance} + \text{Debts increase} - \text{Debts} - \text{final balance}
\]

To present the concrete way of preparation of the statement of cash flows using the residual logic, we suppose that a company has at the time of the preparation of the annual financial statements the following information (this firm’s accounting is not being organized so that the amounts of cash and cash equivalents are already aggregated within treasury accounts, on activities and operations):

- Merchandise – final balance 7,300 lei (371)
- Merchandise – initial balance 1,700 lei (371)
- Receivables from customers – final balance 3,100 lei (4111)
- Receivables from customers - initial balance 2,100 lei (4111)
- Debts to suppliers – initial balance 450 lei (401)
- Debts to suppliers – final balance 390 lei (401)
- Profit tax payable – final balance 1,100 lei (441)
- Profit tax payable – initial balance 1,300 lei (441)
- Salaries payable – final balance 340 lei (421)
- Salaries payable – initial balance 100 lei (421)
- Interest payable – initial balance 900 lei (168)
- Interest payable – final balance 1,400 lei (168)
- Energie expenses 1,200 lei (605)
- Expenses with the sold merchandise 8,500 lei (607)
- Salary expenses 5,540 lei (641)
- Interest expenses 2,100 lei (666)
- Profit tax expenses 1,800 lei (691)
- Revenue from merchandise sold 19,700 lei (707)
- Receivables from sale of fixed tangible assets – initial and final balance 2,500 lei (461)
- Fixed tangible assets – final balance 6,700 lei (21X)
- Fixed tangible assets – initial balance 3,400 lei (21X)
- Expenses with fixed tangible assets sold 66,800 lei (6583)
- Depreciation of fixed tangible assets sold 23,200 (D 281X)
- Fixed assets suppliers – initial balance 23,000 lei (404)
- Fixed assets suppliers – final balance 14,200 lei (404)
- Revenue from the sale of fixed tangible assets 105,000 lei (7583)
- Long term borrowings – initial balance 50,000 lei (162)
- Long term borrowings – final balance 40,000 lei (162)
- Long term borrowings encashed in the period under review 15,000 lei (C 162)

In this situation, to prepare the statement of cash flows using the residual logic, the following steps need to be made:

1. Is determined the amount of encashments from customer receivables, as follows:

\[
\text{Receivables from customers - final balance (4111)} = \text{Receivables from customers - initial balance (4111)} + \text{Revenue from merchandise sold (707)} - \text{Customer receivables encashments (receivables decrease)}
\]

hence the:

\[
\text{Customer receivables encashments (receivables decrease)} = \text{Receivables from customers - initial balance (4111)} + \text{Revenue from merchandise sold (707)} - \text{Receivables from customers - final balance (4111)}
\]
Revenues from merchandise sold and the increase of customer receivables are equal hence the:

\[
\text{Customer receivables} = 2.100 + 19.700 - 3.100
\]

\[
\text{Customer receivables} = 18.700
\]

2. Is determined the amount of the merchandise bought from suppliers, as follows:

\[
\text{Merchandise - final balance (371)} = \text{Merchandise - initial balance (371)} + \text{Merchandise bought from suppliers (371)} - \text{Merchandise exits (607)}
\]

hence the:

\[
\text{Merchandise bought from suppliers (371)} = \text{Merchandise - final balance (371)} - \text{Merchandise exits (607)} + \text{Merchandise - initial balance (371)}
\]

hence the:

\[
\text{Merchandise bought from suppliers (371)} = 7.300 + 8.500 - 1.700
\]

\[
\text{Merchandise bought from suppliers (371)} = 14.100
\]

3. Is determined the amount paid to suppliers, as follows:

\[
\text{Debts to suppliers - final balance (401)} = \text{Debts to suppliers - initial balance (401)} + \text{Increase in debts to suppliers (401)} - \text{Debts paid to suppliers (decrease in debts to suppliers)}
\]

hence the:

\[
\text{Debts paid to suppliers (decrease in debts to suppliers)} = \text{Debts to suppliers - initial balance (401)} + \text{Increase in debts to suppliers (401)} - \text{Debts to suppliers - final balance (401)}
\]

* The increase in debts to suppliers is equal with the purchases of merchandise and energy

hence the:

\[
\text{Debts paid to suppliers (decrease in debts to suppliers)} = 450 + 14.100 + 1.200 - 390
\]

\[
\text{Debts paid to suppliers (decrease in debts to suppliers)} = 15.360
\]

4. Is determined the amount of profit tax paid, as follows:

\[
\text{Profit tax payable} = \text{Profit tax payable} + \text{Increase in profit tax} - \text{Profit tax paid}
\]
4. Is determined the amount of paid salaries, as follows:

\[
\text{Salaries payable} \quad \text{final balance (421)} \quad = \quad \text{Salaries payable} \quad \text{initial balance (421)} \quad + \quad \text{Increase in salaries payable} \quad \text{641} \quad - \quad \text{Salaries paid} \quad \text{decrease in debts}
\]

\[
\text{hence the:}
\]

\[
\text{Salaries paid} \quad \text{decrease in debts} \quad = \quad \text{Salaries payable} \quad \text{initial balance (421)} \quad + \quad \text{Increase in salaries payable} \quad \text{641} \quad - \quad \text{Salaries payable} \quad \text{final balance (421)}
\]

\[
\text{hence the:}
\]

\[
\text{Salaries paid} \quad \text{decrease in debts} \quad = \quad 100 \quad + \quad 5.540 \quad - \quad 340
\]

\[
\text{Salaries paid (decrease in debts)} \quad = \quad 5.300
\]

5. Is determined the amount of paid salaries, as follows:

\[
\text{Profit tax paid} \quad \text{(decrease in debts)} \quad = \quad \text{Profit tax payable} \quad \text{initial balance (441)} \quad + \quad \text{Increase in profit tax payable} \quad \text{691} \quad - \quad \text{Profit tax payable} \quad \text{final balance (441)}
\]

\[
\text{hence the:}
\]

\[
\text{Profit tax paid} \quad \text{(decrease in debts)} \quad = \quad 1.300 \quad + \quad 1.800 \quad - \quad 1.100
\]

\[
\text{Profit tax paid (decrease in debts)} \quad = \quad 2.000
\]

6. Is determined the amount of interest paid, as follows:

\[
\text{Interest payable} \quad \text{final balance (168)} \quad = \quad \text{Interest payable – initial balance (168)} \quad + \quad \text{Increase in interest payable} \quad \text{666} \quad - \quad \text{Interest paid (decrease in debts)}
\]

\[
\text{hence the:}
\]

\[
\text{Interest paid (decrease in debts)} \quad = \quad 900 \quad + \quad 2.100 \quad - \quad 1.400
\]

\[
\text{Interest paid (decrease in debts)} \quad = \quad 1.600
\]

7. Is determined the amount of encashed receivables from the sale of fixed tangible assets, as follows:

\[
\text{Receivables from the sale of fixed tangible assets – final balance} \quad = \quad \text{Receivables from the sale of fixed tangible assets – initial balance} \quad + \quad \text{Revenue from the sale of fixed tangible assets (7583)} \quad - \quad \text{Encashed receivables from the sale of fixed tangible assets}
\]
hence the:

\[
\text{Encashed receivables} = \text{Receivables from the sale of fixed tangible assets} + \text{Revenue from the sale of fixed tangible assets} - \text{Receivables from the sale of fixed tangible assets} - \text{initial balance (461)}
\]

\[
\text{Encashed receivables} = \text{Revenue from the sale of fixed tangible assets} - \text{initial balance (7583)}
\]

\[
\text{Encashed receivables} = \text{Revenue from the sale of fixed tangible assets} - \text{final balance (461)}
\]

\[
\text{Encashed receivables} = \text{Revenue from the sale of fixed tangible assets} - \text{initial balance (7583)} - \text{final balance (461)}
\]

* The revenues from the sale of fixed tangible assets and the increase of receivables from the sale of fixed tangible assets are equal

hence the:

\[
\text{Encashed receivables} = 2.500 + 105.000 - 2.500
\]

\[
\text{Encashed receivables} = 105.000
\]

8. Is determined the value of fixed tangible assets bought from the suppliers, as follows:

\[
\text{Fixed tangible assets bought} = \text{Fixed tangible assets} - \text{initial balance (21X)} + \text{Fixed tangible assets bought} - \text{Initial balance (21X)} - \text{Exits of fixed tangible assets (6583 si 281X)}
\]

hence the:

\[
\text{Fixed tangible assets bought} = 6.700 + 66.800 + 23.200 - 3.400
\]

\[
\text{Fixed tangible assets bought} = 93.300
\]

9. Is determined the amount paid to fixed tangible assets suppliers, as follows:

\[
\text{Fixed assets suppliers} = \text{Fixed assets suppliers} - \text{initial balance (404)} + \text{Increase in debts to fixed assets suppliers} - \text{Payments to fixed assets suppliers} - \text{Initial balance (404)}
\]

hence the:

\[
\text{Payments to fixed assets suppliers} = \text{Fixed assets suppliers} - \text{initial balance (404)} + \text{Increase in debts to fixed assets suppliers} - \text{fixed assets suppliers} - \text{final balance (404)}
\]

* The debts to fixed assets suppliers and the value of fixed tangible assets bought are equal – no. 8

hence the:
Long term borrowings encashed in the period under review = 15,000

11. Is determined the amount of long term borrowings paid, as follows:

\[
\text{Long term borrowings paid} = \text{Long term borrowings initial balance (162)} + \text{Increase in long term borrowings (162)} - \text{Long term borrowings final balance (162)}
\]

hence the:

\[
\text{Long term borrowings paid} = 50,000 + 15,000 - 40,000
\]

\[
\text{Long term borrowings paid} = 25,000
\]

Other accounts the firm uses do not influence the amount of cash and cash equivalents. The amount of cash and cash equivalents at the start of the period was 52,000 lei. The statement of cash flows prepared using the direct method (applying the residual logic) is presented in Table no. 2:

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encashments from customers (+)</td>
<td>18,700</td>
</tr>
<tr>
<td>Payments to suppliers (-)</td>
<td>15,360</td>
</tr>
<tr>
<td>Payments to employees (-)</td>
<td>5,300</td>
</tr>
<tr>
<td>Interest paid (-)</td>
<td>1,600</td>
</tr>
<tr>
<td>Profit tax paid (-)</td>
<td>2,000</td>
</tr>
<tr>
<td>= Net cash flow from operating activities</td>
<td>-5,560</td>
</tr>
<tr>
<td>Payments to acquire tangible fixed assets (-)</td>
<td>102,100</td>
</tr>
<tr>
<td>Encashments from the sale of tangible fixed assets (+)</td>
<td>105,000</td>
</tr>
<tr>
<td>= Net cash flow from investing activities</td>
<td>2,900</td>
</tr>
<tr>
<td>Encashments from long term borrowings (+)</td>
<td>15,000</td>
</tr>
<tr>
<td>Repayment of borrowings (-)</td>
<td>25,000</td>
</tr>
<tr>
<td>= Net cash flow from financing activities</td>
<td>-10,000</td>
</tr>
<tr>
<td>Net increase in cash and cash equivalents (operating, investing)</td>
<td>-12,660</td>
</tr>
</tbody>
</table>
4. Conclusions

The direct method involves an absolute respect for the logic of accounting records, since any "creative" approach can cause some major problems in the preparing of the statement of cash flows, even causing the inability of the use of the residual logic treatment.

We notice that when the firms choose to make the statement of cash flows, any decision of the consumer of accounting information is better founded regarding from the perspective of the informational sources used by him. The users of the financial statements of an enterprise are almost always interested on how the enterprise generates and uses cash and cash equivalents. According to Broome [9] “a comparison of operating cash flow with net income is necessary to evaluate current cash flows from income-producing activities”. The statement of cash flows "provides investors with information needed to assess the company's ability to pay dividends. Their interest is found, rather in cash flows than in accounting or other benefits derived indicators" [10]. But we cannot say that the decision of the users of accounting information, taking into account the cash flows generated by the economic entity, will relieve them entirely from the effects of manifestation of the unexpected, but certainly reduces their magnitude. In conclusion, in our opinion, all Romanian companies whose financial statements are addressed to a large number of potential users should prepare comprehensive annual financial statements, whether or not the law requires them.

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6. References