THE RELATION BETWEEN CASH FLOWS AND ECONOMIC PERFORMANCE IN THE DIGITAL AGE: AN EMPIRICAL ANALYSIS

Salvatore Ferri *, Alberto Tron **, Raffaele Fiume *, Gaetano Della Corte ***

* Department of Business and Economic Studies, Parthenope University of Naples, Italy
** Department of Finance, Bocconi University of Milan, Italy
*** Corresponding author, Department of Law and Economics of Productive Activities, Sapienza University of Rome, Italy
Contact details: Faculty of Economics, University of Rome, Sapienza, Via del Castro Laurenziano, 9, 00161, Roma RM, Italy

Cash flows analysis plays an increasingly important role in the study of business dynamics since cash flows play a key role in the company’s economic performance, not only from a standpoint but also in predictive terms. The literature on the subject is poor in number and depth of research, the samples analyzed so far are limited and the statistical tools are weak. Retracing the steps of past research, we studied the relationships between cash flows of several management areas and economic performance, using a complete sample of Italian listed companies in the 2008-2017 period with more solid statistical tools compared to previous studies. The database used to collect all the balance sheet data necessary to conduct our research is Amadeus of the Bureau Van Dijk platform, which already shows reclassified and easily comparable financial statements. Correlation and multiple regression analysis were used to assess if our cash flow proxies could be strong predictors of future cash flow and, consequently, of business performance. The flows for investments and the ability to generate cash, where the latter is positively correlated with future profitability, manage to explain, together with the net cash generation of the company, a large part of the variability of the operating income produced in subsequent periods. The flows from investments seem to be the most suitable for correctly classifying the most profitable companies in the medium-long term, while cash generation, deriving from the characteristic activity, contributes to providing answers, about corporate profitability, on shorter time horizons.

Keywords: Earnings, Cash Flows, Forecasting Future Cash Flow


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1. INTRODUCTION
Current financial statements are a comprehensive description of the enterprise, which characterize not only their financial and property status, but also the risks and prospects that allows making a comprehensive picture of the market activities (Pelekh, Khocha, & Holovchak, 2019). The financial
statement plays an increasingly important role in both the Italian and international business dynamics. It is the only document that directly provides data on the company's liquidity and solvency in assets, liabilities and net worth. While the balance sheet provides information on stock values at a given instant, such as a photograph taken periodically (quarterly, semi-annually, annually) and the income statement shows flow quantities based on economic dynamics, the financial statement is able to highlight the provenance of resources relating to different management areas, as well as the total management of the company. The sentence “cash flow doesn’t lie” is motivated above all in comparison with the magnitudes of the income statement, where many items can divert or disguise the real results. The same values, however, fail to dictate consequences on the cash items. The impact of magnitudes is not considered in cases where it is determined with highly subjective criteria and, therefore, can be modified and influenced by targeted budget policies. On the other hand, it should be emphasized that even cash flows are not totally free from possible manipulations by the editor of the financial statements of a company that can determine misleading influences on all quantities. According to the International Accounting Standard Board (IASB), the principal objective of financial statements is to enable users to assess the firm's ability to generate sustainable future cash flows for decision-making purposes.

The International Financial Reporting Standards (IFRS) suggest two options, namely the accrual basis and the cash basis of accounting. The importance of cash flows for the corporate existence of the firm cannot be overemphasized, it is akin to the life-preserving role which blood plays to living creatures, hence its crucial role in the decision-making process of users is of utmost importance (Takhtaei & Karimi, 2013).

According to Tron and Greco (2012), the cash flow indexes express more objectively the real business situation since they are purified from economic maneuvers that can influence the net profit. Several studies have examined the correlation between the results and future cash flows (Finger, 1994; Dechow, Kothari, & Watts, 1998; Barth, Cram, & Nelson, 2001). Some of them have shown that both accounting earnings and cash flows can forecast future performance. Others have supported the assertion of the Financial Accounting Standards Board (FASB), emphasizing the superiority of earnings in relation to cash flow (Waldron & Jordan, 2010; Ebaid, 2011; Takhtaei & Karimi, 2013; Moeinaddin, Ardakani, & Akhoondzadeh, 2012; Jemaa, Toukabri, & Jilani, 2015). By contrast, for others it is the cash flow that has the most interesting predictive power (Farshadfar, Ng, & Brimble, 2008; Habib, 2010; Al-Deb'e, 2011; Senan, 2019).

In summary, empirical evidence as to which of accrual earnings or cash flow is superior in predicting future cash flow is limited and mixed. Based on mainstream literature on the predictable ability of cash flows, this research focused on the study of the predictive ability of cash flows with respect to company performance measured by a specific indicator, ROA. For the reasons explained above, the research question of this research is the sequent: can the company’s cash flows be predictive of the company’s future economic performance?

The remainder of the article is organized as follows: Section 2 provides a review of the relevant literature. Section 3 specifies the model and the discusses methodology and data selection process. The results of the empirical contribution are presented in Section 4. Finally, the conclusion, implications, limitations and possible directions for future research are set out in Section 5.

2. LITERATURE REVIEW

Several research findings collected from the existing literature on the comparative abilities of accrual-based earnings versus operating cash flows in the prediction of future operating cash flows are mixed, contradictory or inconclusive. Forecasting cash flows is a key element in the life of companies, used by owners to plan future cash movements to remove any threat from insolvency and illiquidity crises (Barth et al., 2001). Javedan and Largani (2014) claim that it’s through predicting cash flow that the most important information is provided to the users inside and outside organizations.

Taking as a starting point the FASB assertion about the ability of earnings to act as a predictor towards future cash flows (1978), scholars have focused on the study of prediction of future cash flow by using cash flow and earnings as predictor variables and prediction of future cash flow by using cash flow, earnings and accruals as combined predictor variables (Mulenga & Bhatia, 2017). According to FASB, the primary task and objective of financial reporting is predicting future cash flow to help investors, creditors, and others to assess the amount and timing of prospective cash flows. In its Conceptual Framework No.1 the FASB states that information about earnings and its components are generally more predictive of future cash flows than current cash flow (FASB, 1978).

The pioneering study by Greenberg, Johnson, and Ramesh (1986) finds empirical evidence that agrees with the FASB’s (1978) assertion with respect to the superiority of earnings over cash flow from operations and states that current earnings are a better predictor of future cash flows than current period cash flows. Dechow (1994) studied the ability of accruals in predicting some measures of the firm’s performance, such as earnings and cash flows. He found that earnings are the best measurement tool rather than cash flows in examining the short-term performance, and, furthermore, that cash flows have some matching and timing problems in reflecting the firm performance compared to earnings.

Based on a sample of 51 companies of the Taiwan Stock Exchange, Janatrostami (1999) investigated the earnings role in forecasting cash flows and future earnings. He found that historical earnings are a good predictor for future earnings, but also for future cash flows. Furthermore, he states that earnings and historical cash flows are a good predictor for future cash flows and, finally, that earnings versus cash flow do not have much superiority in forecasting future cash flows.

An important research (Barth et al., 2001) examines the association between current period
cash flows and current period accrual components on future cash flows. They disaggregated accruals and show that earnings superiority for predicting future cash flows stems from disaggregating earnings into aggregated cash flows and components of accruals. They argue that various accrual components of earnings capture different information about the firm’s cash flows related to past transactions, which affect cash flow prediction. Their findings also reveal that the components of accruals do play a significant role in the prediction of future cash flows.

In line with the general conclusions of Murdoch and Krause (1990), Percy and Stokes (1992), and Kim and Kross (2003), based on the regression model used by Dechow et al. (1998) and the cross-sectional approach, revealed that earnings were more powerful than cash flow from operations in predicting future cash flows, as the coefficients of earnings increased over the time frame. The study supports the FASB assertion since it reported that the accuracy of prediction of future cash flow based on current earnings has improved over the time period and, therefore, current earnings are superior predictors of future cash flows to current cash flows.

Aghaei and Shakeri (2010) studied the cash flow ability and earnings accruals components in forecasting cash flow of accepted companies in Tehran Stock Exchange over the period between 2003 till 2007. The results showed that earnings, cash flow and accrual components have a predictive ability of future cash flow.

Waldron and Jordan (2010) argue that earnings plus depreciation and amortization achieve superior results to other predictor variables. The position of the FASB in this regard is more apparent as it asserts that accrual-based earnings have higher predictive ability than cash flows themselves in predicting future cash flows (FASB, 1978, p. 43).

Ehaid (2011) in his study involving Egyptian firms over a period of eight years (1999-2007) examines the comparative abilities of current period cash flows and earnings (and its components) to predict one-year-ahead cash flow from operations. The study, using the cash flow prediction models (developed by Barth et al. (2001)) disaggregates earnings into cash flows and major components of accruals and tests whether it enhances the ability of earnings in predicting future cash flows. The results of the study show that aggregate earnings have the superior predictive ability of future cash flows to current cash flows.

A study by Takhtae and Karimi (2013), which supports the FASB assertion on the superiority of earnings in predicting future cash flows, revealed that earnings outperform cash flow from operations, while Moeinaddin et al. (2012) concluded that earnings and earnings plus depreciation and amortization outperform other predictor variables in the prediction of future cash flows. Yet, Takhtaei and Karimi (2013) show that predicting operating cash flows with the use of historical earnings is possible significantly, and this result, in addition to confirming the adequacy of the FASB statement, is consistent with the results of the study carried out by Greenberg et al. (1986), Dechow et al. (1998), Murdoch and Krause (1990), Lorek and Willinger (1996), Barth et al. (2001).

Jemâa et al. (2015) predicted future cash flow of listed Tunisian companies and find that earnings are a better predictor of future cash flow than cash flow from operations. In particular, the study shows that the disaggregation of earnings into two components (cash flow from operations and total accruals) and the disaggregation of total accruals into its major components (change in accounts receivable; change in inventory; change in accounts payable, amortization, and other accruals) significantly enhance the ability of earnings in predicting future cash flows; it supports the FASB assertion and the ideas developed by some authors (McBeth, 1993; Barth et al., 2001) that the effects of the information contained in the accounting earnings to predict future cash flows may not be sincere in the course of the following year, but their predictive effects can be delayed for periods exceeding of one year later.

In line with prior studies (Greenberg et al., 1986; Simons, 1994; Dechow et al., 1998; Kim & Kross, 2005; Pae, 2005; Ehaid, 2011; Chong, 2012), Frank (2018) has examined the comparative abilities of gross accrual-based and cash-based accounting information to predict future operating cash flows on quoted Nigerian non-financial companies and his research provides direct empirical evidence substantiating that accrual-based accounting information is superior to cash-based accounting information for future cash flows prediction, at least within the Nigerian context.

Wilson (1986) and Lorek and Willinger (2009) showed the outperformance of the research models using additional variables from the company’s financial statements rather than earnings or cash flows only. Three indicators were developed to predict the future cash flow: cash flow from operations, operating income, and current accruals. They formulated their own model in comparison with Wilson’s model and another time series model. They concluded that their model, which was based on quarterly cash flow data, was more superior to other models. McBeth (1993) findings refuted FASB’s assertion that earnings were a superior predictor of future cash flow. Its results have been discordant since he states that neither earnings nor cash flows provided superior power in predicting future cash flows for US listed firms.

Finger (1994) argued that cash flow from operations seemed to be a better predictor of future cash flow than earnings. He states that cash flow is a better short-term predictor of cash flow than earnings, both in and out of sample, and the two are approximately equivalent long-term. The evidence shows that earnings can help predict earnings and cash flow but do not support the FASB statement that earnings are a better predictor of cash flow than cash flow. Al-Attar and Hussain (2004), with a study based on a sample of UK firms, used cash flow from operations, earnings, and its components and argue that the cash flow from operations was better than earnings in predicting future cash flows.

In line with Finger’s studies, Jordan et al. (2007) indicated that the best cash flow predictors aren’t just cash flow or accruals but, probably, a combination of them. Using a sample of listed Australian companies, Farshadfar et al. (2008) and Habib (2010) revealed that cash flow from operations shows a superior ability to predict future cash flows when compared
to other predictor variables used in their study. Following the aforementioned studies of Barth et al. (2001) and Al-Attar and Hussain (2004), Farshadfar et al. (2008) examined the earnings relative ability and cash flows in forecasting future cash flows. Their study calls into question the position of the accounting standard setters, and in particular the FASB, that accrual-based earnings are better than cash flows in predicting future cash flows. Their findings, furthermore, are not in line with the empirical evidence provided by earlier studies (Bowen, Burgstahler, & Daley, 1986; Percy & Stokes, 1992) which claim that traditional measures of cash flows are more relevant than cash flow from operations. The results show that operating cash flows is better in forecasting future cash flows than earnings and cash that have been calculated with traditional methods. Moreover, in parallel with the increase in the company size, the superiority of operating cash flow in comparison to earnings in forecasting operating cash flows gets more power.

Al-Debi'e (2011) examines the predictive ability of current operating cash flows and current earnings for future operating cash flows for a sample of service and industrial shareholding companies listed on the Amman Stock Exchange in Jordan during the period 2000-2009. The results provided evidence for the superiority of cash flow from operations in predicting future cash flows of earnings for future operating cash flows for one- to three-year-ahead forecast horizons.

In line with the study of McBeth (1993), the results reported by Senan (2019) show that earnings and cash flows have equal predictive ability in forecasting future cash flows, while the disaggregation of earnings into different accrual components decreases the predictive ability. Further, the results of the study are in contrast to the assertion of FASB that earnings have a better ability than cash flows in forecasting future cash flows.

3. RESEARCH METHODOLOGY

The main objective of this study is to contribute to the existing research on the predictive ability of cash flows to forecast future cash flows and performance by providing new evidence from the Italian business context, that is far under-explored in this area of study. In order to fill this gap, we investigate the ability of cash flows to predict future cash flows and, moreover, whether it is able to provide decisive investment information both for the individuals inside the organizations and the subjects outside them, on a sample of 168 Italian listed companies in the 2008-2017 period.

Similar to prior research (Kim & Kross, 2005; Dechow et al., 1998), correlation and multiple regression analysis were used to assess if our cash flow proxies could be strong predictors of future cash flow and subsequently of business performance.

3.1. Research hypotheses

Based on mainstream literature on the predictive ability of cash flows, we expected that cash flows components can influence the firm performance (ROA), since, as stated by Tron and Greco (2012), the ability to produce cash is positively correlated with future profitability, and the flows for investments, together with the net cash generation of the company, manage to explain a large part of the variability of the operating income produced in subsequent periods.

In the null form, we propose the following research hypothesis:

H1: Return on assets (ROA) of year N is influenced by cash flow (CF) N-1.

Our key variable is an accounting-based proxy for cash flow. The choice of this proxy variable is supported by prior cash flow forecast ability research, as shown previously.

3.2. Data source

The choice of the database used to collect all the balance sheet and income statement data fell on Amadeus of the Bureau Van Dijk platform, which already shows reclassified and easily comparable financial statements. The greatest advantage of using this reclassification with respect to the use of financial statements in a civil law format, such as those available on the Aida database of the same platform, is that the reclassification allows a quicker reconstruction of the cash flow statement using the indirect method, starting from the flow variables of the income statement and changes in the balance sheet stock sizes.

The selection of the sample has objective and replicable criteria: the selected company had to be active and listed on a regulated market; in addition, they had to be located in Italy. In doing so, we obtained 277 companies that met the above requirements. The parameters used for the selection of the companies within the sample were quite rigid with respect to the availability of balance sheet data. For this reason, any company that did not have fundamental data for subsequent analyzes for several consecutive years has been removed from the sample; this choice was dictated by an excess of subjectivity otherwise required for the reconstruction of the absent values.

A sample of 176 companies was thus obtained, each with 10 years of consolidated financial statements, from 2008 to 2017. For construction reasons, the first year from which cash flow values can be obtained is 2009, in fact, the first year (2008) was discarded and used only to determine the variations in the stock quantities of the balance sheet to calculate the typical flows of 2009

3.3. Dependent and independent variables

We have selected an accounting measure as proxies for firm performance which has been diffusely used in prior CF forecasting research:

\[
\text{ROA (return on assets)} = \frac{\text{Net income}}{\text{Total assets}}
\]  

(1)

The indirect method was used for reporting cash flows, starting from the balance sheet and income statement, as reclassified from Amadeus, the database used for the research. The independent variables relating to the identifiable management areas are the followings:

- cash flow for investments in fixed assets (CFI);
- cash flow related to corporate dynamics (CFS);
- cash flow from financing (CFF);
- cash flow for extraordinary components (CFCX);
- global net cash flow (CF).

...
The cash flow for investments (CFI) is obtained as the sum of the change in the capital assets of fixed assets, including tangible, intangible assets and the financial revenue income statement item, as this last component is generated by the financial assets held as fixed assets and is therefore relevant to investment management.

The cash flow related to corporate dynamics (CFS) is obtained by subtracting the variation in the shareholder funds item from the profit for the year. It indicates the net result from the point of view of liquidity, obtained following any increases in paid-up share capital or the distribution of profits to shareholders.

The cash flow from financing (CFF) indicates if the company has opened or redeemed loans during the year, the value is obtained based on the change in the balance sheet items relating to short-term debts and long-term debts.

The cash flow for extraordinary components (CFXC) indicates the impact on the extraordinary management fund captured using the extraordinary profit/loss income statement item.

Finally, the global net cash flow (CF) is obtained as a sum of the components described above and coincides with the change in the balance sheet item called cash and cash equivalents.

### 3.4 Regression model

The regression analysis consists in a regression equation (model).

It explores the relationship between the cash flows available in the financial statement and the future economic performance of the company.

As regards the analyzed variable (ROA), some of its multi-year derivations were used in the analysis, specifically the averages over the entire period under consideration, i.e. from 2009 to 2017 (since, as previously stated, 2008 was discarded and used only to calculate the variations in the stock quantities of the balance sheet in order to calculate the typical 2009 flows), averages over four-year sub-periods, specifically 2010-2013 and 2014-2017, to make the values, thus derived, completely exploitable for statistical analysis. As far as cash flow variables are concerned, they have been used both as long-term averages and as a single-period flow, to be able to investigate the different connection over time between cash flows and future income. Companies that did not have fundamental data for subsequent analyzes for three consecutive years have been removed from the analysis.

\[
ROA_{1417_i} = \beta_0 + \beta_2CFF_{1013_i} + \beta_2CFI_{1013_i} + \\
\beta_3CFS_{1013_i} + \beta_4CFXC_{1013_i} + \beta_5CFF_{1013_i} + \epsilon_i \quad (2)
\]

### 4. RESULTS

Table 1 below shows Pearson pairwise correlation results for the dependent and independent variables for an initial exploration of their relationships. Pearson correlations are related to the sample of companies with consolidated financial statements, general analysis, 2010-2013 period vs. 2014-2017 period. Correlations analysis also helps detect the presence of multicollinearity among explanatory variables. According to Kennedy (1985), multicollinearity should be considered a serious concern only if the correlation between predictors exceeds 0.8. As shown in Table 1, the correlation coefficients between explanatory variables range from a low of -0.6487 to a high of 0.4379.

| Table 1. Correlation analysis of dependent and independent variables |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| ROA1417         | CF1013          | CFI1013         | CFS1013         | CFXC1013        | CFF1013         |
| 1.0000          | 0.4379*         | -0.2121*        | -0.6487*        | 0.2976*         | -0.5267*        |
| 0.4379*         | 1.0000          | -0.2306*        | 0.0000          | -0.3585*        | -0.02392*       |
| -0.2121*        | -0.2306*        | 1.0000          | 0.0000          | -0.02392*       | 1.0000          |
| -0.6487*        | 0.2976*         | -0.3585*        | 1.0000          | 0.0000          | 0.0000          |
| 0.2976*         | -0.5267*        | -0.02392*       | 1.0000          | 0.0000          | 0.0000          |

Notes: Only the values with a confidence level of 1% are visible.

Results indicate global net cash flow is positively and significantly correlated with the return-on-assets ratio. Cash flow for investments in fixed assets is negatively and significantly correlated with ROA. Cash flow related to corporate dynamics is shown to have a negative and significant correlation with ROA and a negative and significant correlation with global net cash flow. Noticably, cash flow for extraordinary components is the only cash flow component that is not significantly correlated with ROA and other cash flow variables. Finally, cash flow from financing shows a positive and significant correlation only with ROA, while with cash flow for investments in fixed assets, cash flow related to corporate dynamics and cash flow for extraordinary components, it has a negative and significant correlation. Table 2 shows the result of the regression model for the performance variable.

| Table 2. Regression results |
|---------------------------|-----------------|----------------|----------------|
| Coef.                     | Std. Err.       | t              | P > |t|   |
| CF1013                    | -0.552312       | 0.078739       | 7.01 | 0.000 | 1.08 |
| CFI1013                   | -0.557434       | 0.093452       | 6.93 | 0.000 | 1.63 |
| CFS1013                   | -1.060499       | 0.845256       | -12.56 | 0.000 | 1.35 |
| CFXC1013                  | -0.6904732      | 0.203218       | -3.45 | 0.001 | 1.12 |
| CFF1013                   | -0.3776747      | 0.093704       | -3.84 | 0.000 | 1.99 |
| Adj. R²                   | 0.6161          |                |      | 0.000 |      |
| F                        | 57.17           |                |      |      |      |

Notes: * p < 0.05; ** p < 0.01; *** p < 0.001.
An additional test for multicollinearity was conducted by estimating the variance inflation factors (VIF). Using a fairly conservative cut-off value of VIF = 3, relative to recommended values of 5 or 10 (Craney & Surles, 2002), no serious concern of multicollinearity among predictors was detected across the model. In order to highlight a possible presence of multicollinearity among the regressors, linear regressions are performed with the regressor as a dependent variable and all the other regressors as independent variables.

The Table 3 below shows the values of the posttestimate "estatvif" command, and these values, obtained with 1/(1 - R-squared) of each internal regression performed, represent the degree of linear dependence between the independent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFI1013</td>
<td>1.08</td>
<td>0.925379</td>
</tr>
<tr>
<td>CHI1013</td>
<td>1.63</td>
<td>0.611791</td>
</tr>
<tr>
<td>CF1013</td>
<td>1.35</td>
<td>0.741969</td>
</tr>
<tr>
<td>CFX1013</td>
<td>1.12</td>
<td>0.894000</td>
</tr>
<tr>
<td>CFI1013</td>
<td>1.99</td>
<td>0.502860</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.43</td>
<td></td>
</tr>
</tbody>
</table>

To avoid a loss of R-squared, i.e. of the variability of ROA1417, explained by the variation of the regressors, instead of eliminating CFF1013 from the dependent variables, the aforementioned variable was regressed on the remaining independent variables. Therefore, due to the difference between the values of CFF1013 and the fitted values of the same variable, its residues were obtained and inserted within the new regression.

\[
\text{CFF1013}_i = \beta_0 + \beta_1 \text{CFI1013}_i + \beta_2 \text{CF1013}_i + \beta_3 \text{CF1013}_{i-1} + \beta_4 \text{CFXC1013}_i + \varepsilon_i \\
(i = 1…176)
\]

\[
\text{ResidualCFF1013}_i = \text{CFF1013}_i - \text{CFF1013}_i' \\
(i = 1…176)
\]

\[
\text{ROA1417} = \beta_0 + \beta_1 \text{CFI1013}_i + \beta_2 \text{CF1013}_i + \beta_3 \text{CF1013}_{i-1} + \beta_4 \text{CFXC1013}_i + \beta_5 \text{ResidualCFF1013}_i + \varepsilon_i \\
(i = 1…176)
\]

Table 3. Detail about VIF

Table 4. Regression results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>t</th>
<th>P &gt;</th>
<th>t</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFI1013</td>
<td>-0.4996208***</td>
<td>.0789018</td>
<td>6.33</td>
<td>0.000</td>
<td>1.06</td>
<td>0.941174</td>
<td></td>
</tr>
<tr>
<td>CHI1013</td>
<td>2.365871***</td>
<td>-.0639205</td>
<td>-5.72</td>
<td>0.000</td>
<td>1.06</td>
<td>0.946583</td>
<td></td>
</tr>
<tr>
<td>CFS1013</td>
<td>-1.3326497***</td>
<td>.0760611</td>
<td>-12.26</td>
<td>0.000</td>
<td>1.01</td>
<td>0.992832</td>
<td></td>
</tr>
<tr>
<td>ResidualCFI1013</td>
<td>-1.4776747***</td>
<td>.0896068</td>
<td>-4.79</td>
<td>0.000</td>
<td>1.01</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>cons</td>
<td>0.462832</td>
<td>0.0493132</td>
<td>0.74</td>
<td>0.462</td>
<td>1.00</td>
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</tr>
<tr>
<td>Adj. R²</td>
<td>0.6057</td>
<td></td>
<td></td>
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<th>68.20</th>
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Notes: * p < 0.05; ** p < 0.01; *** p < 0.001.

With reference to our research hypothesis (H1), we found that the sign of the financial management cash flow coefficient remains negative. This could be interpreted as follows: a cash entry through financing brings future profitability if this liquidity is actually invested. Eliminating this component, through the use of CFF residues, which exclude the relationship with investments, essentially remains the negative effect of indebtedness, or rather, its onerousness manifested by the interest expense deriving from it. It is interesting to note that the weight of interest expense not only invalidate future profitability merely due to the direct contribution to the income statement; this emerges from the fact that the coefficient is significantly different from zero when it impacts on future ROA.

Among the regressors remain the variables that actually can be, even at an intuitive level, those that must explain the future profitability of the company, first of all, investments. In addition to these, it is intuitive to take into account also the amount of outgoing cash for the distribution of profits to the shareholders or, likewise, their intervention through the introduction of new share capital, as well as the total cash production at provision for interventions to be used in future years.

Using the data of cash flows from managements that are not related to the current one, i.e. the cash flow for investments, the global net cash flow and the flow linked to the dynamics relating to the shareholders, and the net effect of the loans, we obtain an R-square greater than 50% in the estimation of the average ROA of the period 2013-2016, a very positive result.

Interpreting the signs and values of the coefficients of the regressors, we note that the global net cash flow has a positive influence on future operating income with a beta coefficient = 0.50, the outgoing flow relating to corporate dynamics has a negative coefficient of -0.93 and to follow we observe a positive impact of the investments (an investment represents an outgoing flow, therefore in order to grasp the economic meaning we must invert the sign of the coefficient); the link exists and is explanatory: in this case, the beta coefficient assumes a value of -0.356.

These results are in line with the assumptions of those who claim that cash flows are a better predictor of future cash flows than earnings (Finger, 1994; Al-Attar & Hussain, 2004; Farshadfar et al., 2008; Habib, 2010; Al-Debi’e, 2011).

It is clear that a large part of future operating income derives from investments made in previous periods and, therefore, it is physiological to see how the investments provide the most informative content on economic performance.

5. CONCLUSION

Despite the assumptions relating to an insidious context and a field of research little explored in the literature, the research has produced evidence regarding the existence of a significant link between the cash flows available in the financial statement and the future economic performance of the
company. These results can be helpful, if interpreted and contextualized, for external and internal users of the company. The research is therefore potentially useful to analysts who try to predict the future performance of the company being studied, analyzing the flows of the various management areas and the typical characteristics of the company, as well as internal subjects, where the results can constitute a possible benchmark of comparison with the model studied on the Italian companies of the sample.

Despite the limitations and further investigations to be developed in the future, the present research seems to have taken a step forward compared to the literature currently available. Compared to previous research, we have tried to analyze a larger sample of companies that is representative of the Italian business context. Despite the greater number of the sample, a limitation of the present document could be represented both by the reduced size of the samples used and by a database of financial statements not processed directly by the companies, which could therefore not be free from errors or imperfections.

Possible future investigations could concern further analyzes to be carried out observing the differences between companies of different sectors, for example between manufacturing companies and service companies, or between capital and labor intensive companies. In this way, even more peculiar links between cash flows and economic performance could be identified.

The research field is insidious and the variables analyzed can be influenced by external elements that are not taken into consideration in this paper; therefore, the analysis was carried out with the awareness that this work is free from all presumption of completeness and that the results shown are not definitive and impeccable.

REFERENCES