We are IntechOpen, the world’s leading publisher of Open Access books
Built by scientists, for scientists

6,600
Open access books available

177,000
International authors and editors

195M
Downloads

154
Countries delivered to

TOP 1%
Our authors are among the most cited scientists

12.2%
Contributors from top 500 universities

WEB OF SCIENCE™
Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com
Chapter

Impact of Short-Term Management on Portuguese and Spanish Firms’ Performance

Carmem Leal, Diogo Rocha and Elisabete Neves

Abstract

An effective and efficient working capital management ensures companies a greater ability to survive in an increasingly competitive and challenging business world and therefore plays a key role in the manager’s operational and financial decisions. Thus, the main objective of this chapter is to show empirically the extent to which working capital management influences the measures of business performance evaluation. To achieve the proposed objective, the ROA, ROE, and Tobin’s Q were used as measures of performance. For this study, data from Portuguese and Spanish companies were used, which are listed on Euronext Lisbon and the Madrid Stock Exchange, respectively, resulting in a final sample of 106 companies. The methodology used to test the hypotheses formulated was dynamic panel data methodology (with GMM system) for a period between 2010 and 2016. The results obtained in this research show, in a general way, that there are significant differences in the determinants of performance depending on the samples used, whether they are the Spanish Sample or the Portuguese Sample.

Keywords: working capital management, business performance measures, financial analysis, dynamic panel data, Iberian companies

1. Introduction

The literature on the corporate finance area has been directed toward long-term management, more specifically to investment issues [1], capital structure [2], dividends [3], and business evaluation [4].

Although medium- and long-term management (LTM) is extremely important for the creation of a company’s value, it is necessary that short-term management is carefully treated, since individual LTM decisions cannot create value for the company alone.

More recently, companies have been placing greater emphasis on the impact that short-term management has on corporate performance because a large part of the account balances presented in the accounts relates to short-term investments and resources [5].
It should be noted that managers must perceive a balance between each component of short-term management to maximize the company's value and ensure a higher organizational performance as well as a better competitive advantage [6].

In the last years, and as a result of the increase in competitiveness among companies, the management of current assets as an aid in the search for greater profitability has been the target of the Academy's interest [5, 7, 8].

A wide range of authors [8–10] considers that the Cash Conversion Cycle (CCC) is one of the most important short-term management measures and, therefore, the most used to study this subject, since in these author's studies they measure the impact that this variable has on corporate performance.

Thus, the Cash Conversion Cycle assumes a relevant role in the present study, since it is considered that this variable encompasses a set of preponderant factors for the short-term management and the firms' survival. These factors can be translated into three concepts: Average Collection Period (ACP), Average Stocking Period (ASP), and Average Payments Period (APP). This being said, in this chapter, six models will be investigated and each of the dependent variables (ROA, ROE, and Tobin's Q) will have two models. The existence of two models for each of the dependent variables is due to the fact that in the first instance each of the components of the CCC (ACP, ASP, and APP) is tested individually, and only then the CCC is tested in a single variable. Each of the six previously referenced models will be tested on two samples, namely the Spain Sample and the Portugal Sample.

In this sense, the present work aims to analyze the impact of short-term management on the performance of Iberian companies. For this, some hypotheses will be raised according to the existing literature, that is intended to be corroborated, to understand which are the determining variables in the explanation of corporate performance. Specifically, there will be used as explanatory variables, the Cash Conversion Cycle, ACP, ASP and APP, and current ratio. On the other hand, leverage, firm size, and tangible fixed assets will be used as control variables.

Additionally, it is intended to increase the literature related to the topic addressed throughout this chapter, since this subject is still little debated and discussed. After the crisis of 2008, short-term management assumed a greater preponderance, and consequently, the number of published studies on short-term management [11] increased. This study will be directed to large companies in Portugal and Spain, listed on the corresponding stock exchanges, for the period between 2010 and 2016. The final sample resulted in 106 companies, which resulted in a total of 660 observations.

In short, this article is organized as follows—in Section 2 the literature review and respective hypotheses will be presented. Section 3 presents the methodology for the study. Sections 4 and 5 will present the main results and the conclusion, respectively.

2. Literature review and hypothesis definition

In the financial literature, there are several measures of corporate performance evaluation. Some of these measures have been more consensual and are the so-called traditional measures [12].

Therefore, the fact that there is no specific performance measure that guarantees greater efficiency and effectiveness than the other measures lead to the use of three measures of performance evaluation, more specifically Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q.
2.1 Average collection period (ACP)

The Average Collection Period is one of the components of the Cash Conversion Cycle and is characterized as the time (calculated in days or months) that, on average, companies take time to charge their customers what they sell to them.

According to García-Teruel, Deloof, Pais and Mathuva et al. [5, 9, 10, 13], when it comes to the relationship between ACP and performance, we find that the larger the firm’s ACP, the smaller the business performance will be. In the specific case of García-Teruel et al. [5], a negative relationship between ACP and ROA arises because the companies increase the average time of receipt of their clients so that they can increase purchases. However, although with these companies increase sales, the consequent increase in the ACP implies a decrease in ROA. Thus, according to the authors, a more restrictive credit policy by reducing the payment time of the clients, contributes to better performance.

The negative relationship between accounts receivable and profitability found by the authors mentioned above suggests that less profitable companies will try to reduce the ACP promptly to close and reduce the differences in the Cash Conversion Cycle. Regarding Tobin’s Q as a performance measure, a positive relationship was observed between ACP and Tobin’s Q in Ref. [14].

Regarding these studies, it is possible to define the following hypothesis:

H1: there is a significant relationship between the Average Collection Period and the corporate performance measures (with no predicted sign).

2.2 Average stocking period (ASP)

The Average Stocking Period shows how long a product on average is in stock, so, it is expected that the lower the ASP, the greater the turnover of the product.

García-Teruel, Deloof and Pais et al. [5, 9, 10] in their studies concluded that the ASP and performance are negatively related. In contrast, Mathuva et al. [13] determined a positive relationship between ASP and performance. For this author, the higher the company’s level of stocks, the lower the likelihood of stock-outs of the company. However, Kim et al. [15] suggest that there are counterparts to the fact that there are large volumes of stocks of raw materials and commodities, and they argue that a large volume of stocks may increase the likelihood of goods not being sold or exceeding the validity date, thus contributing to the increase of losses, which implies the minimization of corporate profits.

According to the literature, and there being no consensus among the several studies, the hypothesis to be formulated will be the following:

H2: there is a significant relationship between the Average Stocking Period and the corporate performance measures (with no predicted sign).

2.3 Average payments period (APP)

The last component of the Cash Conversion Cycle to be presented will be the Average Payment Period. This ratio indicates the time (calculated in days or months) that, on average, companies take to pay their suppliers.

García-Teruel and Deloof et al. [5, 9] concluded that there is a negative relationship between APP and profitability. According to Deloof et al. [9], this happens because companies that have a bigger difficulty in settling their accounts with suppliers have lower profitability levels. In the same line of thinking, a study by Pais et al. [10] for
Portuguese SMEs, concluded that there is a negative relationship between APP and ROA. However Mathuva et al. [13] argued that the larger the APP, the longer the period that the suppliers finance the company’s activities. In this sense, the author identified a positive and significant relationship between APP and profitability. Nurein et al. [14] using Tobin’s Q as a performance measure, came to the conclusion that the APP is positively related to Tobin’s Q, thus sharing Mathuva et al. [13] conclusion. Considering the previous conclusions, it is possible to formulate the following hypothesis: H3: there is a significant relationship between the Average Payments Period and the corporate performance measures (with no predicted sign).

2.4 Cash conversion cycle

The Cash Conversion Cycle was developed by Richards et al. [16] and characterizes as being the time interval since the company has expenses in the acquisition of raw materials from its suppliers until the moment it sells its products to its clients [17]. Uyar et al. [18] argues that companies with shorter CCC are more profitable because they are less dependent on external financing and therefore, they will have to bear lower costs than a company with a longer CCC, which consequently will make them more cost-effective. Regarding Tobin’s Q as an evaluation measure of performance, it is found that for Vural et al. [19] there is a positive and significant relationship between the Cash Conversion Cycle and Tobin’s Q, so an increase in CCC will lead to an increase in Tobin’s Q. Despite this, Mohamad et al. [20] and Nurein et al. [14], when conducting two studies in Malaysia, concluded that CCC negatively affects Tobin’s Q, arguing that a lower CCC means higher performance when measured according to Tobin’s Q. Although there is no unanimity in the empirical literature, the vast majority defends the existence of a negative relationship between CCC and corporate performance. Thus, the following hypothesis will be defined: H4: there is a significant relationship between the CCC and the corporate performance measures (with no predicted sign).

2.5 Current ratio

Following Husna et al. [21] current ratio consists of the ease with which assets held by companies can be converted into means of payment, that is, the ability of companies to meet their obligations as they mature. According to Uyar et al. [18], the way companies manage their liquidity is fundamental regardless of their size. Raheman and Eljelly et al. [22, 23] found a negative relationship between the current ratio and corporate performance. According to Eljelly et al. [23], the negative relationship results from the companies’ need to constantly present high levels of liquidity, and this causes companies to arise unnecessary costs that will lead to loss of profitability. Jose et al. [7] point out that there is a negative relationship between current ratio and performance, which results from the lack of efficient liquidity management,
obliging companies to use external financing to meet the short-term obligations, which will entail costs for organizations, and therefore, the company's profitability will decrease.

However, Goddard, Fagiolo and Safdar et al. [24–26] show the existence of a positive relationship between the variables in question. According to Goddard et al. [24], the companies with the highest levels of liquidity, besides being the companies with the best profitability, are also the ones with the greatest ability and flexibility to adapt more quickly to the changes to which they are subject.

Following this reasoning Fagiolo et al. [25] argue that firms with higher levels of liquidity are able to overcome certain obstacles that may arise when companies resort to external financing.

Du et al. [27] conducting a study in Chinese companies, have concluded that there is a positive relationship between current ratio and Tobin’s Q, which they justify with Holmström et al. [28] arguments since for these authors, companies that manage to maintain adequate levels of liquidity are able to avoid potential risks to the company, contributing to increase the company's value.

Considering the divergence in the previous results, the hypothesis to be formulated will be the following:

H5: there is a significant relationship between the current ratio and corporate performance measures (with no predicted sign).

2.6 Leverage

Leverage is a very important variable for companies because, in addition to the explicit costs that arise with leverage, a bad decision can increase the company's financial risk and, consequently, affect its profitability. The use of external financing would only leverage the ROE due to the effect of the fiscal economy of interest and on the assumption that ROA exceeds the average cost of borrowing.

Pais, Vural, Goddard and Muritala et al. [10, 19, 24, 29] argue that between debt and corporate performance (when measured through ROA, ROE, and Tobin’s Q) there is a negative relationship.

Goddard et al. [24] argues that the negative relationship between variables arises because, during the period when companies are paying off the debt, they are losing investment opportunities in projects that could generate returns for the company.

Although many studies advocate the existence of a negative relationship between leverage and corporate performance, some authors stand up for the existence of a positive relationship between these variables.

Olokoyo et al. [30] conducting a study on 101 listed companies in Nigeria, concluded that debt positively influences Tobin's Q. However, when using ROA as an evaluation measure of performance, the author observes that leverage negatively influences ROA.

Also Berger and Adams et al. [31, 32] have concluded that there is not always a negative relationship between leverage and performance, that is, the fact that a company uses external financing does not mean less performance. Even more debt can imply more and better investments and this can leverage the company's profitability.

Regarding the divergence of opinions presented by the various studies, the hypothesis will be the following:

H6: there is a significant relationship between the leverage and the corporate performance measures (with no predicted sign).
2.7 Firm size

The firm size is a preponderant factor in investment decisions, in access to external financing, in access to capital markets, among others [33].

According to Jose, Banos-Caballero, Serrasqueiro and Lee et al. [7, 8, 34, 35], what makes large-scale enterprises more profitable is their ability to increase production while at the same time reducing the average cost of production and thus taking advantage of economies of scale.

Although the existing literature finds a positive relationship between firm size and performance, there are studies that prove the existence of a negative relationship between these variables. In this sense, Goddard et al. [24] show a negative relationship between firm size and profitability (ROA). For these authors, the reason behind this relationship is the less interference and control of the owners in the manager's activities, due to the increase of the size of the companies. In this way, the manager's investment options can increase their personal benefits, however, it contributes to the decrease of the company's performance.

In addition, Yoon et al. [36] shares the idea that increasing the size of the company beyond the ideal level can reduce the firm's performance.

So, in this sense, the following hypothesis is presented:

H7: there is a significant relationship between the firm size and the corporate performance measures (with no predicted sign).

2.8 Tangible fixed assets

Several studies [34, 37–39] show that tangible fixed assets can be a variable that has an impact on the performance of the firms, and as such will be used in this study as a control variable.

Asset tangibility refers to the composition of the asset of an organization. A company that has sufficient assets can use them as collateral in the event of liquidation, allowing the company easier access to external sources of financing, as Singh et al. [11] refer.

Serrasqueiro et al. [34] concluded that tangible fixed assets negatively influence corporate performance. The Portuguese authors followed the arguments of Serrasqueiro and Nucci et al. [34, 39] to support the result obtained in their study. The argument used by them advocates that companies that are more inclined to innovate and invest in R & D activities are those that present greater opportunities for long-term investment and, consequently, higher performance. In this way, companies that invest more in intangible assets will be more profitable than those that make their investments in tangible assets.

Maina et al. [38] concluded that there is a negative and significant relationship between tangible fixed assets and ROE. The authors add that companies that invest heavily in tangible assets will experience a decrease in ROE. This result goes against the one found by Muritala et al. [29]. This author found a negative and significant relationship between the two variables. As for the relationship found between tangible fixed assets and Tobin’s Q, the results reveal a negative and significant relationship.

Considering all the studies presented for the tangible fixed assets the hypothesis to be formulated is the following:

H8: There is a significant relationship between tangible fixed assets and corporate performance measures (with no predicted sign).
3. Data, variables, and methodology

3.1 Sample

To carry out this research, a quantitative approach was used, based on the Amadeus database. Therefore, the sample of this article covers the period from 2010 to 2016, thus giving rise to an unbalanced panel with 106 non-financial companies, corresponding to a total of 660 observations.

This study’s sample was limited to non-financial firms, since the companies from the financial sector have distinct characteristics from non-financial companies, and as such, they must be studied in an independent way [40, 41]. In addition to the financial companies, the companies of the sports sector were also eliminated from the sample, since they use a different accounting system in the preparation of their financial statements. Considering the sample’s definition, companies that had little information for the desired indicators (e.g., did not have information for 4 consecutive years) were excluded [42].

3.2 Selection and description of variables

Considering the literature review, Table 1 shows the form of calculation of each of the variables used in this article.

3.2.1 Estimation method

To test the proposed hypotheses, the dynamic panel data methodology was used. This methodology allows the only one-time model to aggregate time-series and cross-section data.

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Method of calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on assets (ROA)</td>
<td>ROA = ( \frac{\text{EBIT}}{\text{total assets}} )</td>
</tr>
<tr>
<td>Return on equity (ROE)</td>
<td>ROE = ( \frac{\text{net profit}}{\text{equity}} )</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>( \text{Tobin’s Q} = \frac{\text{market value}}{\text{total assets}} )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Method of calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average collection period (ACP)</td>
<td>( \text{ACP} = \frac{\text{receivables}}{\text{sales}} \times 365 )</td>
</tr>
<tr>
<td>Average stocking period (ASP)</td>
<td>( \text{ASP} = \frac{\text{cost of goods sold}}{\text{stocks}} \times 365 )</td>
</tr>
<tr>
<td>Average payments period (APP)</td>
<td>( \text{APP} = \frac{\text{payables}}{\text{cost of goods sold}} \times 365 )</td>
</tr>
<tr>
<td>Cash conversion cycle (CCC)</td>
<td>( \text{CCC} = \text{ACP} + \text{ASP} - \text{APP} )</td>
</tr>
<tr>
<td>Current ratio (CR)</td>
<td>( \text{CR} = \frac{\text{current assets}}{\text{current liabilities}} )</td>
</tr>
<tr>
<td>Leverage (Lev)</td>
<td>( \text{Lev} = \frac{\text{debt}}{\text{total assets}} )</td>
</tr>
<tr>
<td>Firm size (Size)</td>
<td>( \text{Size} = \log(\text{total assets}) )</td>
</tr>
<tr>
<td>Tangible fixed assets (Tang)</td>
<td>( \text{Tang} = \frac{\text{tangible fixed assets}}{\text{total assets}} )</td>
</tr>
</tbody>
</table>

Table 1. Selection and description of variables.
According to Neves et al. [43], some of the advantages associated with the use of this methodology are—the control of individual heterogeneity, correction of endogeneity, the existence of less collinearity between variables, the possibility of handling high amounts of information, and greater efficiency in estimation.

Thus, unlike the cross-section analysis, panel data allows the control of individual heterogeneity. This point is fundamental for the accomplishment of the present work, since the performance of each company is directly related to the individual specificities of each one of the companies, and without the control of heterogeneity, the obtained results could be biased. Moreover, this methodology allows solving another fundamental point, namely endogeneity (which arises from the causal relationship that the various dependent variables (ROE, ROA, and Tobin’s Q) may have with the explanatory variables of the study).

Consequently, endogeneity can be a problem in the model of the present work, and therefore, it is necessary to keep it controlled.

Specifically, we use all the variables on the right side of the model with t-1 mismatches for the level equations, as Blundell et al. [44] suggested, by deriving the system estimator used in this article.

The models to be tested throughout this article are presented below:

Model 1: \( \text{ROA}_a = \beta_0 + \beta_1(\text{ACP})_a + \beta_2(\text{AS})_a + \beta_3(\text{APP})_a + \beta_4(\text{CR})_a + \beta_5(\text{Lev})_a + \beta_6(\text{Size})_a + \beta_7(\text{Tang})_a + \mu_a \)

Model 2: \( \text{ROA}_a = \beta_0 + \beta_1(\text{CCC})_a + \beta_2(\text{CR})_a + \beta_3(\text{Lev})_a + \beta_4(\text{Size})_a + \beta_5(\text{Tang})_a + \mu_a \)

Model 3: \( \text{ROE}_a = \beta_0 + \beta_1(\text{ACP})_a + \beta_2(\text{AS})_a + \beta_3(\text{APP})_a + \beta_4(\text{CR})_a + \beta_5(\text{Lev})_a + \beta_6(\text{Size})_a + \beta_7(\text{Tang})_a + \mu_a \)

Model 4: \( \text{ROE}_a = \beta_0 + \beta_1(\text{CCC})_a + \beta_2(\text{CR})_a + \beta_3(\text{Lev})_a + \beta_4(\text{Size})_a + \beta_5(\text{Tang})_a + \mu_a \)

Model 5: \( \text{Tobin’s Q}_a = \beta_0 + \beta_1(\text{ACP})_a + \beta_2(\text{AS})_a + \beta_3(\text{APP})_a + \beta_4(\text{CR})_a + \beta_5(\text{Lev})_a + \beta_6(\text{Size})_a + \beta_7(\text{Tang})_a + \mu_a \)

Model 6: \( \text{Tobin’s Q}_a = \beta_0 + \beta_1(\text{CCC})_a + \beta_2(\text{CR})_a + \beta_3(\text{Lev})_a + \beta_4(\text{Size})_a + \beta_5(\text{Tang})_a + \mu_a \)

## 4. Results and discussion

In this chapter, the main results of this article will be presented and discussed. Firstly, the Descriptive Statistics of each of the three samples will be presented and then the main results.

### 4.1 Descriptive statistics

Table 2 provides summary statistics (mean, standard deviation, minimum and maximum) of the variables used in the construction of the dependent and explanatory variables.

Table 3 presents summary statistics (mean, standard deviation, minimum and maximum) of the variables used in the construction of the dependent and explanatory variables.

### 4.2 Model 1: estimation

Based on Table 4, the fact that ACP negatively influences ROA means that Spanish companies will have to reduce their client’s ACP so that they can increase the
Variables | Mean | Standard deviation | Minimum | Maximum |
---|---|---|---|---|
ROA | 3.767568 | 9.055842 | −34.73 | 53.01 |
ROE | 2.907545 | 33.57112 | −182.3 | 144.93 |
Tobin’s Q | 0.8021636 | 1.13628 | 0 | 7.42 |
ACP | 92.63409 | 60.09211 | 0 | 279 |
ASP | 21.59545 | 40.98847 | 0 | 298 |
APP | 65.34773 | 45.43186 | 0 | 267 |
CCC | 48.88182 | 71.83697 | −190 | 387 |
CR | 1.420523 | 0.8410572 | 0.09 | 9.67 |
Lev | 0.6380227 | 0.2234283 | 0.1 | 2.52 |
Size | 13.86105 | 2.264694 | 6.39 | 18.68 |
Tang | 0.2906364 | 0.2153083 | 0 | 0.92 |

Table 2.
Descriptive statistics of Spain.

Variables | Mean | Standard deviation | Minimum | Maximum |
---|---|---|---|---|
ROA | 2.483682 | 5.35625 | −14.99 | 22.47 |
ROE | 2.517182 | 24.36511 | −164.57 | 66.28 |
Tobin’s Q | 0.3380296 | 0.3407419 | 0.01 | 1.82 |
ACP | 94.32727 | 61.42473 | 0 | 294 |
ASP | 32.35909 | 50.10339 | 1 | 279 |
APP | 70.86364 | 41.08649 | 0 | 187 |
CCC | 55.82273 | 76.83732 | −131 | 399 |
CR | 1.200591 | 0.8291296 | 0.13 | 7.54 |
Lev | 0.6591364 | 0.1738621 | 0.07 | 1.09 |
Size | 13.01314 | 1.990146 | 8.06 | 17.6 |
Tang | 0.3101818 | 0.1919498 | 0 | 0.69 |

Table 3.
Descriptive statistics of Portugal.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>−4.786997</td>
<td>5.971701</td>
<td>−0.80</td>
</tr>
<tr>
<td>ACP</td>
<td>−0.0448544</td>
<td>0.0134737</td>
<td>−3.33</td>
</tr>
<tr>
<td>ASP</td>
<td>0.0024074</td>
<td>0.0154443</td>
<td>0.16</td>
</tr>
<tr>
<td>APP</td>
<td>0.0215348</td>
<td>0.0134551</td>
<td>1.60</td>
</tr>
<tr>
<td>CR</td>
<td>1.217,916</td>
<td>0.6472035</td>
<td>1.88</td>
</tr>
<tr>
<td>Lev</td>
<td>−19.4286</td>
<td>2.739318</td>
<td>−7.09</td>
</tr>
<tr>
<td>Size</td>
<td>1.371543</td>
<td>0.4403209</td>
<td>3.11</td>
</tr>
<tr>
<td>Tang</td>
<td>7.386,296</td>
<td>5.573,588</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Impact of Short-Term Management on Portuguese and Spanish Firms’ Performance
DOI: http://dx.doi.org/10.5772/intechopen.103009
Banking and Accounting Issues

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sargan</td>
<td>23.91367(19)</td>
<td>0.1995</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>242.88(8)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>–36.218</td>
<td>0.0003</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>–0.09622</td>
<td>0.9233</td>
<td></td>
</tr>
</tbody>
</table>

Note: the regression is performed using an unbalanced data panel consisting of 68 companies and 440 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 3% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as $\chi^2$ under a null hypothesis without significance, with degrees of freedom in parentheses.

Table 4. Results of the model (1) for Spain.

Performance of their companies. Thus, if companies manage to reduce their ACP, they will be able to reduce the CCC as well. Therefore, the results follow the reasoning of García-Teruel et al. [5] carried out in Spain as well the studies published by. The results are still in harmony with the studies of Pais and Yazdanfar et al. [10, 45], allowing to corroborate hypothesis 1 previously proposed.

The positive relationship between the current ratio and ROA validates hypothesis 5, as well as the studies carried out by Goddard and Safdar et al. [24, 26]. Goddard et al. [24] argues that the greater the level of liquidity of a company, the greater the company’s ability to face changes of a competitive nature in the markets in which they operate.

Hypothesis 7 contemplates the possibility that the firm size is positively related to performance evaluation measures, and this hypothesis is corroborated by the results found in Table 4. According to Jose and Banos-Caballero et al. [7, 8] what makes the larger companies more profitable is the capacity to increase their production, reducing the average cost of production and taking advantage of economies of scale.

Finally, Table 4 demonstrates a negative relation between leverage and ROA. This relationship supports hypothesis 6 and confirms the studies [10, 30]. According to Goddard et al. [24], the more leveraged firms are, less profitable will be, because while they are paying the debt they are, simultaneously, losing investment opportunities in projects that could generate a return to the company.

Table 5 shows a considerable number of significant variables when the evaluation measure of performance used is ROA, considering the estimated model for Portuguese companies.

The negative relation between APP and ROA found in this study follows the conclusions obtained by Pais et al. [10] for a study of large Portuguese firms. Banos-Caballero and Deloof et al. [8, 9] also reached this relationship, arguing that an increase in APP will lead to a decrease in profitability. The evidence found thus corroborates hypothesis 3.

As can be seen in Table 5, the more leveraged the company’s capital structure, the greater ROA will be, so the results obtained validate hypothesis 6 and the results of Berger and Adams et al. [31, 32] who show that when a company uses external financing does not mean that there will be a decrease in corporate performance. For these authors, managers only need to be able to efficiently manage their resources,
since there is a reduction in cash flows, derived from the regular payment of the debt. In addition, companies sometimes take advantage of the financial leverage effect of increasing debt to increase their profitability levels.

One of the common relationships between Portugal’s sample and Spain’s sample is the existing positive relationship between firm size and ROA, thus confirming hypothesis 7, as well as the studies of [34, 45].

In the Spanish case, we observed a positive relationship between the current ratio and ROA. However, when estimating model 1 for Portuguese companies we verified that the current ratio is not significantly related to ROA.

Another difference between the two samples is due to the existence of a negative relationship between tangible fixed assets and ROA for Portuguese companies, thus being in conformity with hypothesis 8 previously placed.

4.3 Model 2: estimation

The estimation of model 2 for the large Spanish companies, in Table 6, makes it possible to verify that although the CCC is used to the detriment of the ACP, ASP, and APP, the significant relationships are the same in both models.

Also, based on Table 6, it can be seen that CCC has a negative relationship with ROA, which is in accordance with the studies of Uyar and Goddard et al. [18, 24] as well with the hypothesis 4 previously formulated.

Based on the results of Table 7, and comparing to Table 5, we observe that when CCC is used to the detriment of ACP, ASP, and APP, for the sample of large Portuguese companies, some differences arise in both models.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>12.2367</td>
<td>2.629679</td>
<td>-4.65</td>
</tr>
<tr>
<td>ACP</td>
<td>0.006264</td>
<td>0.0079111</td>
<td>0.79</td>
</tr>
<tr>
<td>ASP</td>
<td>-0.0052733</td>
<td>0.0081643</td>
<td>-0.65</td>
</tr>
<tr>
<td>APP</td>
<td>-0.0319109</td>
<td>0.0072112</td>
<td>-4.43</td>
</tr>
<tr>
<td>CR</td>
<td>0.2455387</td>
<td>0.3797602</td>
<td>0.65</td>
</tr>
<tr>
<td>Lev</td>
<td>5.954678</td>
<td>3.010078</td>
<td>1.98</td>
</tr>
<tr>
<td>Size</td>
<td>0.9599293</td>
<td>0.1504516</td>
<td>6.38</td>
</tr>
<tr>
<td>Tang</td>
<td>-4.681794</td>
<td>1.395103</td>
<td>-3.36</td>
</tr>
<tr>
<td>Sargan</td>
<td>24.80384(19)</td>
<td>0.1671</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>3078.66(8)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>-1.5355</td>
<td>0.1246</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>1.0026</td>
<td>0.3160</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 37 companies and 220 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 2% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as $\chi^2$ under a null hypothesis without significance, with degrees of freedom in parentheses.
Thus, when estimating model 2, we highlight the negative relationship between the current ratio and ROA, with a significance level of 1%. This relationship was not observed when model 1 was estimated. However, in the estimation of model 1, one of the variables that was positively related to ROA was leverage. Regarding model 2, leverage ceases to be one of the significant variables.

### Table 6.
Results of the model (2) for Spain.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>−7.099776</td>
<td>7.344084</td>
<td>−0.97</td>
</tr>
<tr>
<td>CCC</td>
<td>−0.025925</td>
<td>0.0133265</td>
<td>−1.95</td>
</tr>
<tr>
<td>CR</td>
<td>1.080459</td>
<td>0.6132817</td>
<td>1.76</td>
</tr>
<tr>
<td>Lev</td>
<td>−19.94105</td>
<td>2.433001</td>
<td>−8.20</td>
</tr>
<tr>
<td>Size</td>
<td>1.425786</td>
<td>0.5076238</td>
<td>2.81</td>
</tr>
<tr>
<td>Tang</td>
<td>9.064535</td>
<td>5.727313</td>
<td>1.58</td>
</tr>
<tr>
<td>Sargan</td>
<td>24.78524(19)</td>
<td>0.1677</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>286.37(6)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−3.7405</td>
<td>0.0002</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>0.1766</td>
<td>0.8598</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 68 companies and 440 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as \( \chi^2 \) under a null hypothesis without significance, with degrees of freedom in parentheses.

### Table 7.
Results of the model (2) for Portugal.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>−12.67382</td>
<td>1.805622</td>
<td>−7.02</td>
</tr>
<tr>
<td>CCC</td>
<td>0.0117469</td>
<td>0.005131</td>
<td>2.29</td>
</tr>
<tr>
<td>CR</td>
<td>−0.468045</td>
<td>0.2460254</td>
<td>−1.90</td>
</tr>
<tr>
<td>Lev</td>
<td>1.82428</td>
<td>2.700528</td>
<td>0.68</td>
</tr>
<tr>
<td>Size</td>
<td>1.045946</td>
<td>0.1348222</td>
<td>7.76</td>
</tr>
<tr>
<td>Tang</td>
<td>−4.035826</td>
<td>2.027262</td>
<td>−1.99</td>
</tr>
<tr>
<td>Sargan</td>
<td>24.01575(19)</td>
<td>0.1955</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>538.09(6)</td>
<td>538.09</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−1.6114</td>
<td>0.1071</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>0.9166</td>
<td>0.3594</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 37 companies and 220 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as \( \chi^2 \) under a null hypothesis without significance, with degrees of freedom in parentheses.
Table 7 demonstrates a positive relationship between CCC and ROA, differing from the relationship between these same variables for the sample of large Spanish companies.

4.4 Model 3: estimation

When the evaluation measure of performance used is ROE, only leverage presents significance with the dependent variable used (see Table 8).

Thus, one can accept hypothesis 6, and corroborate the results of Muritala et al. [29]. The more leveraged companies present higher financial costs, which will contribute to the decrease of ROE [46].

Considering the results presented in Table 9, it is possible to verify that when the sample of the Portuguese companies is used with the ROE as a measure of performance, the number of significant variables increases considerably.

Consistent with hypothesis 1, there is a significant relationship between ACP and ROE, which also corroborates the results of García-Teruel et al. [5], emphasizing the fact that companies increase their ACP to increase their volume of sales, but in their study, the authors concluded that this would not lead to an increase in profitability.

Our results show that a decrease in ASP will lead to an increase in ROE. This inverse relationship between the two variables corroborates hypothesis 2, following Deloof and Pais et al. [9, 10].

According to Sensini et al. [47], when a company experiences a sudden drop in sales aligned with poor stock management, this will increase its losses, and it will decrease its profitability.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD.Error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>202.2626</td>
<td>135.8283</td>
<td>1.49</td>
</tr>
<tr>
<td>ACP</td>
<td>0.0019397</td>
<td>0.0480458</td>
<td>0.04</td>
</tr>
<tr>
<td>ASP</td>
<td>0.065436</td>
<td>0.0948203</td>
<td>0.69</td>
</tr>
<tr>
<td>APP</td>
<td>−0.0787663</td>
<td>0.0574182</td>
<td>−1.37</td>
</tr>
<tr>
<td>CR</td>
<td>−2.471852</td>
<td>2.949592</td>
<td>−0.84</td>
</tr>
<tr>
<td>Lev</td>
<td>−103.8548</td>
<td>21.68979</td>
<td>−4.79</td>
</tr>
<tr>
<td>Size</td>
<td>−8.859585</td>
<td>9.892428</td>
<td>−0.90</td>
</tr>
<tr>
<td>Tang</td>
<td>−3.245457</td>
<td>44.93885</td>
<td>−0.07</td>
</tr>
<tr>
<td>Sargan</td>
<td>15.86487(19)</td>
<td>0.6663</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>344.60(8)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−23.773</td>
<td>0.0174</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>0.42828</td>
<td>0.6684</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 68 companies and 440 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as χ² under a null hypothesis without significance, with degrees of freedom in parentheses.
It should also be pointed out that leverage is negatively related to ROE, following Muritala and Pouraghajan et al. \[29, 46\] conclusions and validating our hypothesis 6.

Regarding the tangible fixed assets, it is possible to verify the existence of an inverse relation with ROE, thus agreeing with Maina et al. \[38\] and confirming our hypothesis 8.

### 4.5 Model 4: estimation

Model 4 for the Spain sample demonstrates that leverage is the only variable that has significance with ROE. The same happens in model 3 estimation, so when ACP, ASP, and APP are compiled in a single variable, the CCC, the significant variables do not change as it is possible to see through Table 10.

In the specific case of the Portuguese companies’ sample, there are a substantial number of significant variables when estimating model 3, however, when the ACP, ASP, and APP are combined into a single variable, the CCC, we see a reduction in the number of significant variables. The differences between the estimation of model 3 and model 4 are due to the loss of significance of ACP and APP, which were excluded from the model to detriment of the CCC, keeping only the leverage and tangible fixed assets as significant variables (Table 11).

### 4.6 Model 5: estimation

When the Spanish companies were tested, considering Tobin’s Q as an evaluation measure of performance, it is possible to verify that ASP shows a positive relationship with Tobin’s Q. This result supports hypothesis 2 and corroborates...
Nurein et al. [14] remarks. Kim et al. [13] argues that high levels of stocks lead to a reduction in the cost of possible disruptions to the productive process of companies and also means that companies do not run the risk of losing customers due to lack of products.
Based on Table 12, we verify a negative relationship between APP and Tobin’s Q, which can be explained by the fact that the companies with the lowest profitability in certain cases are not able to settle the accounts payable [9]. The present relationship thus corroborates hypothesis 3.

In line with hypothesis 6, we are faced with a positive relationship between leverage and Tobin’s Q, supported by Olokoyo et al. [30], who argues that high levels of debt are associated with higher performance.

As it is possible to verify in the Spanish companies’ sample, there is a negative relationship between firm size and Tobin’s Q. Therefore, the results support hypothesis 7 and are still compatible with the previous studies of Goddard, Yoon and Rogers et al. [24, 36, 48].

Consistent with hypothesis 1, if companies increase the ACP this will lead to a decrease in performance, especially for less profitable companies, since these companies are more reliant on receiving money from their customers to pay their short-term obligations. This evidence is in accordance with the Deloof, Pais and Mathuva et al. [9, 10, 13] studies, which also indicate that an increase in the ACP will lead to a decrease in performance. From the point of view of García-Teruel et al. [5] firms tend to increase their ACP, since they intend to increase their sales volume, but according to the authors, even if this happens the companies end up suffering a decrease in performance, resulting from the increase in the ACP.

Based on Table 13, it is possible to verify a positive relationship between ASP and Tobin’s Q. These results corroborate hypothesis 2 previously formulated, and according to Nurein et al. [14], a possible justification for the fact that the variables relate positively depends on the inventory presented by the companies, that is, the

### Table 12
Results of the model (5) for Spain.

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>2.245,876</td>
<td>0.5459458</td>
<td>4.04</td>
<td>0.000</td>
</tr>
<tr>
<td>ACP</td>
<td>−0.0008001</td>
<td>0.0005406</td>
<td>−1.48</td>
<td>0.139</td>
</tr>
<tr>
<td>ASP</td>
<td>0.0042012</td>
<td>0.0006628</td>
<td>6.34</td>
<td>0.000***</td>
</tr>
<tr>
<td>APP</td>
<td>−0.0016697</td>
<td>0.0007991</td>
<td>−2.09</td>
<td>0.037**</td>
</tr>
<tr>
<td>CR</td>
<td>0.018317</td>
<td>0.0243078</td>
<td>0.75</td>
<td>0.451</td>
</tr>
<tr>
<td>Lev</td>
<td>0.587777</td>
<td>0.2383076</td>
<td>2.47</td>
<td>0.014**</td>
</tr>
<tr>
<td>Size</td>
<td>−0.15792</td>
<td>0.0398748</td>
<td>−3.96</td>
<td>0.000***</td>
</tr>
<tr>
<td>Tang</td>
<td>−0.3054478</td>
<td>0.3264499</td>
<td>−0.94</td>
<td>0.349</td>
</tr>
<tr>
<td>Sargan</td>
<td>22.02086(19)</td>
<td>0.2832</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>7054.32(8)</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−1.6874</td>
<td>0.0915</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>0.19382</td>
<td>0.8463</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 68 companies and 379 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 2% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as \( \chi^2 \) under a null hypothesis without significance, with degrees of freedom in parentheses.
larger the inventory of a company the greater the possibility of growth and valuation, since it presents a greater capacity for increase your sales. The positive relationship between the current ratio and Tobin’s Q is a relevant result found. What drives companies with higher levels of liquidity to increase their corporate performance comes from the ability of these companies in reducing potential risks [28]. The evidence found thus supports hypothesis 5, in addition to corroborating the study of Du et al. [27].

4.7 Model 6: estimation

Based on the observation of Tables 12 and 14, we observed that the number of significant variables was maintained both in the estimation of model 5 and in the estimation of model 6, although some of the significant variables were not the same in the two estimates.

Based on Table 14, it can be verified that CCC and leverage variables show a positive relationship with Tobin’s Q. On the other hand, the variables firm size and asset tangibility show a negative relationship with the performance measure Tobin’s Q. In this way, it can be concluded that the difference between the two estimates is that the CCC and asset tangibility become significant variables with Tobin’s Q. In contrast, the ASP and APP are no longer significant variables. There are some perceptible differences between models 5 and 6 regarding the significant variables. The highlight in model 6’s estimation was the loss of significance of the tangible fixed assets variable, which was positively related to Tobin’s Q for a significance level of 1%. The ACP and the ASP also cease to be significant when they are replaced by a single variable, namely the CCC.
As already seen in both samples, the results found between leverage and Tobin’s Q reveal a positive relation. Although in many cases the use of external financing is associated with a decrease in corporate performance, this is not always so linear, as it can be seen in (Table 15) [30–32].

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>1.689084</td>
<td>0.4446862</td>
<td>3.80</td>
</tr>
<tr>
<td>CCC</td>
<td>0.0005962</td>
<td>0.0002504</td>
<td>2.38</td>
</tr>
<tr>
<td>CR</td>
<td>0.0310001</td>
<td>0.0216701</td>
<td>1.43</td>
</tr>
<tr>
<td>Lev</td>
<td>0.7807595</td>
<td>0.2457192</td>
<td>3.18</td>
</tr>
<tr>
<td>Size</td>
<td>−0.1406512</td>
<td>0.0340643</td>
<td>−4.13</td>
</tr>
<tr>
<td>Tang</td>
<td>−0.4621222</td>
<td>0.2600277</td>
<td>−1.78</td>
</tr>
<tr>
<td>Sargan</td>
<td>23.6413(19)</td>
<td>0.2013</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>3994.30(6)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−1.6663</td>
<td>0.0957</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>0.33507</td>
<td>0.7376</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 68 companies and 379 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as $\chi^2$ under a null hypothesis without significance, with degrees of freedom in parentheses.

Table 14.
Results of the model (6) for Spain.

As already seen in both samples, the results found between leverage and Tobin’s Q reveal a positive relation. Although in many cases the use of external financing is associated with a decrease in corporate performance, this is not always so linear, as it can be seen in (Table 15) [30–32].

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>STD error</th>
<th>Z</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>1.30377</td>
<td>0.1241634</td>
<td>10.50</td>
</tr>
<tr>
<td>CCC</td>
<td>−0.000054</td>
<td>0.0000774</td>
<td>−0.70</td>
</tr>
<tr>
<td>CR</td>
<td>0.0806346</td>
<td>0.0069785</td>
<td>11.55</td>
</tr>
<tr>
<td>Lev</td>
<td>0.0955987</td>
<td>0.0568119</td>
<td>1.68</td>
</tr>
<tr>
<td>Size</td>
<td>−0.1054368</td>
<td>0.0081945</td>
<td>−12.87</td>
</tr>
<tr>
<td>Tang</td>
<td>0.0778192</td>
<td>0.1008745</td>
<td>0.77</td>
</tr>
<tr>
<td>Sargan</td>
<td>21.10506(19)</td>
<td>0.3310</td>
<td></td>
</tr>
<tr>
<td>Wald</td>
<td>22582.62(6)</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>AR (1)</td>
<td>−2.4825</td>
<td>0.0130</td>
<td></td>
</tr>
<tr>
<td>AR (2)</td>
<td>−0.60043</td>
<td>0.5482</td>
<td></td>
</tr>
</tbody>
</table>

The regression is performed using an unbalanced data panel consisting of 37 companies and 203 observations. The variables are duly defined in the data, variables, and methodology section. It should also be noted that: (i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) the Sargan test with a p value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) the Wald test has a p value less than 5% which means that the joint significance and the coefficients are significant distributed asymptotically as $\chi^2$ under a null hypothesis without significance, with degrees of freedom in parentheses.

Table 15.
Results of the model (6) for Portugal.
The results presented throughout this study show that short-term management variables that have an impact on corporate performance vary according to the dependent variable used to measure corporate performance and also vary across countries.

Between the two samples analyzed, some differences were evident, which may be justified by the way companies are managed. Thus, our results suggest that Portuguese companies are still in a phase of large external financing needs, and therefore probably more exposed to the market and to “external” variables.

On the other hand, Spanish companies already express some preference for the internal management and attitude of the manager, who probably has incentives to act in accordance with the interests of shareholders. Although our results do not test macroeconomic variables and institutional factors, they suggest that Portuguese companies may be facing more agency problems than Spanish ones.

Considering the results obtained, it should be pointed out that the ROE did not present many significant variables, highlighting only leverage, since it is the only significant variable with ROE, for the sample from Spain. This can be justified by the fact that ROE encompasses a wide range of decisions, such as operational, financial, and tax decisions. In spite of all this, it is still worth noting the increase of the significant variables with ROE for the Portuguese sample, this can be justified by the fact that the Portuguese companies need investors. That said, this will be a great measure of evaluation for a future investor.

Finally, when the valuation measure is Tobin’s Q, it is possible to verify that almost all independent variables are significant, especially for the sample of Portuguese firms. In this way, it is possible to affirm that Tobin’s Q is one of the best dependent variables to evaluate corporate performance. This is a variable that shows interest for all internal and external elements of the company.

5. Conclusions

Although short-term management is not the focus of corporate finance, it proves to be an extremely useful and important tool for the efficient functioning of companies, since it facilitates the decision-making of their managers.

The present study aimed to contribute to the increase of the literature since it is a subject that has only taken on a leading role in recent years [11]. It was intended to observe the short-term management’s impact on the Iberian Peninsula’s corporate performance, for which three performance evaluation measures were used, namely ROA, ROE, and Tobin’s Q. As such, a panel of 106 large Iberian companies was used for the period from 2010 to 2016.

Using the panel data methodology, the relevance of some results is emphasized. It is worth noting that companies need to reduce the ACP to increase corporate performance.

It is also highlighted the negative relationship between leverage and ROE, which by the way is the only significant relation for this measure when considering the Spanish sample.

Concerning the interest in using alternative performance variables, this study reveals that the ROA and Tobin’s Q are the variables that best reflect the corporate performance when studying determinants based on short-term management. This result is even more interesting insofar as the ROA is considered a company/accounting variable and Tobin’s Q is a market variable and therefore considers the investor’s perception. Additionally, ROE proves to be the worst measure of performance evaluation.
The main limitations encountered were related to the fact that not all the companies presented in the sample offered all the necessary information for the period under analysis. Moreover, the number of scientific publications on this subject is still scarce, in particular regarding European countries, for example. For this reason, it is intended that this study contributes in a positive way to the increase of existing studies not only in Portugal and Spain but also for studies on this subject in Europe.

In future research, it would be interesting to add more European countries to the sample to conduct a comparative study, but also to introduce countries with different tax systems, common law vs. civil law, to see if the determinants of performance would change. In addition, it would be useful to see whether the determinants vary according to the different economic cycles, bull vs. bear markets, introducing sectoral, macroeconomic, and investor sentiment variables.

Acknowledgements

This work is supported by national funds, through the FCT—Portuguese Foundation for Science and Technology under the project UIDB/04011/2020.

Author details

Carmem Leal¹, Diogo Rocha² and Elisabete Neves³

1 CETRAD—University of Trás-os-Montes e Alto Douro, Vila Real, Portugal
2 University of Trás-os-Montes e Alto Douro, Vila Real, Portugal
3 ISCAC|Coimbra Business School, Coimbra, Portugal

*Address all correspondence to: cleal@utad.pt
References


[33] Kedzior M, Grabinska B, Grabinski K, Kedzior D. Capital structure choices in technology firms:
Impact of Short-Term Management on Portuguese and Spanish Firms’ Performance
DOI: http://dx.doi.org/10.5772/intechopen.103009


