Financial Analysis and Sustainability: Comparative study of listed companies in Lisbon and Madrid

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Abstract: The world economy is going through a period of difficult economic context because of the measures imposed by the COVID-19 pandemic. The Iberian economies have macroeconomic imbalances that add to the uncertainty of the current times. Listed companies are a sample of the most relevant companies in each country, so understanding their financial status is crucial to identify weaknesses. This study will begin in 2010, the year when the sovereign debt crisis began and of the implementation of the new accounting standards system in Portugal, and will last until 2020, the last year with accounting information available at the beginning of this study and of major changes in the world economic scenario. It was defined a sample of 46 listed companies in Lisbon and Madrid, from 3 sectors: Manufacturing (C); Electricity, Gas, Steam, Hot and Cold Water and Air-Cold (D); Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles (G). The respective sectorial data were also collected. This work resorted to the Univariable Analysis of commonly employed economic and financial indicators and to the Multivariable Analysis models for Corporate Sustainability Prediction and Value Creation applied to the samples and the average sector companies. At the end, it was verified, globally, a better performance of the companies of the Spanish sample and sectors, although there is some heterogeneity in the conclusions between sections. There was also a deterioration in the indicator values of the average sample and sectoral companies of both countries in the years of more difficult macroeconomic environment.

Keywords: Financial Analysis; Stock market; Performance; Value creation

1. Introduction

The 2008 financial crisis was the biggest shock to the world economy since the Great Depression of 1929 and profoundly changed the functioning of economies (Soros, 2008), leading to the sovereign debt crisis in 2010 in Europe. The markets' distrust in the ability of economic agents to pay their debts in a scenario of low structural growth led to a generalized increase in interest rates, severely affecting the economies of the South, namely Portugal and Spain.

Since 2020, because of the COVID-19 pandemic, the economic scenario is once again shrouded in great uncertainty. It is therefore essential for each country to understand the evolution and current state of its companies and their sectors to identify potential weaknesses.

This research will use financial and sustainability analysis as a diagnostic technique. We will evaluate non-financial companies listed in Lisbon and Madrid. Listed companies are usually considered to be some of the leading companies in each sector and their performance is an important barometer of the economic sentiment (Arestis et al., 2001). The Iberian perspective was chosen not only because of the geographical, political, commercial, and cultural proximity, but also because of the similarities of the business fabric of the two countries (González, 2010). The time horizon of this analysis will be from 2010, the year in which the use of a new accounting system was started in Portugal, to 2020 since, at the time of the beginning of this work, the accounting reports for 2021 had not yet been released.

The present work intends to assess the performance, evolution, current financial situation, and sustainability of the companies listed in Lisbon and Madrid. To this end, firstly, a literature review of economic and financial analysis and value creation will be carried out. In the end, it is intended to answer the following questions:

1. Of those studied, which country has the listed companies and their respective sectors in better financial conditions to face an eventual adverse scenario?
2. In which of the two countries do listed companies and their respective sectors present greater efficiency and capacity to

generate results?
3. Which country has the companies with the most attractive indicators for investors?
4. Within the sample, which country has the samples and sectors with greater value creation?

2. Literature Review

Systems of accountability

Considering that the accounting data, namely those present in the Financial Statements, are the main source of information for the preparation of financial analysis, it is necessary to make a framework of the regulations that govern the preparation of accounts.

In Spain, the new *Plan General de Contabilidad* was approved in 2007, through the enactment of Royal Decree 1514/2007, based on the International Financial Reporting Standards (IFRS) adopted by the European Union, resulting in the reform of the Spanish accounting standardization system promoting the harmonization with the European model (Alijarde, 2010; Correia, 2013). With the same purpose, in Portugal the *Sistema de Normalização Contabilística* was approved in 2009, enshrined in Decree Law 158/2009 (Antão et al., 2007; Pinheiro et al., 2013). Still, since 2005, EU listed companies are required to use IFRS in the preparation of their accounts.

Financial Analysis

According to Brealey et al. (2011), the financial analysis aims to assess the current financial status of an organization and thus understand its possible evolution. For this, and according to Carvalho das Neves (2012) and van Horne & Wachowicz (2008), it makes use of a set of techniques that allow to evaluate and interpret the economic and financial situation of the company, to transform the data present in the Financial Statements into useful information for the decision-making process. Thus, financial analysis reveals itself as one of the main tools for the assessment of a company's sustainability, i.e., the maximization of the company's total value and its non-reduction allowing its continuity (Hediger, 2010).

Univariate Analysis

Univariate analysis, also commonly known as the ratio analysis, is traditionally used in financial analysis. Its simplicity and relative direct application using information present in the Financial Statements contribute to its widespread use.

This technique involves mainly the construction and interpretation of ratios that allow the relationship of magnitudes, summarizing and systematizing the financial information enabling a more appropriate reading than would simply be obtained from absolute values. It consists of applying a set of indicators separately and successively (Antão & Peres, 2018). Correia (2012) and Vieira (2020) recall that the fact that each ratio is evaluated separately may lead to interpretative errors. It should be referenced the work of Beaver (1966), one of the forerunners of this technique, who used individual ratio analysis to classify companies as healthy or not. Although it is widely used, Atrill (2012), Breia et al. (2014), Faello (2015) and Fernandes et al. (2019) point out some limitations and constraints that the analyst should keep in mind:

- They evaluate quantitative elements, not reflecting a qualitative appreciation of them - two identical values do not necessarily have the same meaning;
- They require a comparative, temporal or sectorial standard, since calculated individually, it conditions the reading and comparability of the ratios;
- Permeability to the accounting principles and practices used.

<u>Liquidity</u>

Measures a company's ability to honor its short-term commitments by comparing its short-term obligations to its available resources (van Horne & Wachowicz, 2008).

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

Although there is no consensus on the minimum desirable value, it will be used the value 1.2 recommended by Marques et al. (2009).

<u>Debt and Capital Structure</u>

These ratios focus on the medium-long term equilibrium and seek to characterize the relative importance of the different sources of financing, assessing the ability of the company to solve its commitments. As examples:

$$Equity\ Ratio = \frac{Equity}{Assets}$$

Evaluates the independence of the company in relation to debt, showing the portion of Assets financed by Equity. Authors such as Fernandes et al. (2019) point out as a minimum desirable value of 33%.

The other ratios used were the Debt Structure and the Times interest Earned Ratio.

The Debt Structure ratio seeks to characterize the composition of Liabilities according to their temporal maturity. The higher the value of this ratio, the greater the weight of that liability under study in the debt which may cause greater liquidity efforts.

The Times Interest Earned Ratio translates the company's ability to meet financial charges based on its operating results. In general, the higher this value is, the more likely the company will be able to meet interest payments without difficulty.

Profitability

Profitability indicators assess the degree of efficiency of the application of resources in terms of generating results and are, according to Breia et al. (2014), essential for assessing the company's long-term sustainability. For example, according to Carvalho das Neves (2012), Return on Equity is the indicator favored by shareholders and investors, since it evaluates the rate of return on capital held by them. Jorge (2010) indicates that this ratio allows shareholders to verify whether the return compensates the risk of holding capital in the company through its comparison with capital market rates of return.

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Equity}}$$

The Net Margin is considered one of the most relevant ratios as it measures the percentage of Turnover that translates into profit considering all expenses.

The Operating Margin translates the gain obtained in operational terms for each monetary unit sold, allowing to verify the weight of operating costs in the company's results.

The Return on Assets evaluates the net return for each monetary unit of Assets, considering all the company's costs during the fiscal year. A higher profitability is indicative of a higher capacity of the assets to generate net return.

Risk

In the analysis of risk ratios, it is intended to evaluate the sensitivity of current data in relation to possible future changes in turnover (Breia et al., 2014). The Degree of Combined Leverage allows measuring the sensitivity of Earnings Before Taxes to the structure of operating and financial expenses due to the changes in Turnover.

$$Degree\ of\ Combined\ Levarage = \frac{Contribuiton\ Margin}{Earnings\ before\ taxes}$$

Performance

According to Breia et al. (2014), the operating ratios are intended to evaluate the degree of efficiency in the use of the resources applied in the company. Net Operating Cycle, according to the Banco de Portugal (2019), translates the period that companies take from the acquisition and transformation of inventories to their sale and consequent receipt from customers.

$$Net\ Operating\ Cycle = Average\ Inventory\ Period + Average\ Recivebles\ Period - Average\ Payment\ Period$$

Market

According to Elmerraji (2022), market indicators are used to evaluate the current price of a company's stock helping investors to understand if the stock or the company is correctly valued by the market. These ratios, according to Breia et al. (2014), represent the investors' view of the company's sustainability and are methods to support decisions and investment returns. According to Chen (2022), Return on Market Value (ROM) is used by analysts and investors to compare the performance of companies of different sizes. A relatively high ROM may suggest that a company Is undervalued since It shows profits of an order higher than its market value.

$$ROM = \frac{\text{Net Profit}}{\text{Market Capitalisation}}$$

The Earnings per share (EPS) serves as an indicator of profitability for investors, representing the result per unit of shareholder ownership. The EPS of two different companies is not comparable as companies can choose their share structure in terms of volume and value, however, its evolution over time is an important indicator.
The Price-to-Earnings (P/E) compares the stock's market price to its EPS. This ratio is often used by analysts and investors to determine the relative value of the company's shares, assessing whether the share price is over or undervalued.
The Price-to-Book Ratio measures the market's valuation relative to its book value. McClure (2022) states that it is often used by investors to check whether a company is under or overvalued. Low values of this ratio, namely below 1, may indicate that the company's shares are undervalued. However, this can be due to poor performance of the company, so a more comprehensive analysis should be made.
The Dividend Yield corresponds to the ratio between the dividend and the price at which the share is being traded. In a more superficial analysis, a higher Dividend Yield indicates that the company has a greater capacity to remunerate shareholders, via dividends, than its competitors.
It is necessary, however, to be careful when analyzing this ratio. A higher Dividend Yield will not necessarily mean a higher return for the shareholder. This indicator does not consider the future growth prospects of the company.

Multivariate Analysis

Multivariate Analysis is traditionally defined as the technique in which the impact of several independent variables at the same time, previously selected, on a given dependent variable is assessed. This identifies the set of relevant independent variables and their respective gradients that best explain the event under study for the defined sample. This process results in a model, via an equation, which can subsequently be applied to other data sets (Olkin & Sampson, 2001; Bartholomew, 2010; Grech & Calleja, 2018).

Corporate Sustainability Forecast Models

The accounting assumption of going concern relates to the fact that a company is sufficiently financially stable to honor its obligations in the foreseeable future (Kenton, 2021). In other words, it has to do with the firm's ability to continue its business while avoiding bankruptcy. Thus, Sustainability Forecast Models are of special relevance as one of the main tools for evaluating this assumption.
According to Bellovary et al. (2007), the most used methods since 1968 have been MDA, Logit and Probit analysis. Peres & Antão (2018b) highlight the applicability, simplicity, and effectiveness of MDA and that, despite its limitations, no other model has yet been presented that offers such a good balance of these three characteristics. Carvalho das Neves (2012) says that the pioneering work of Altman (1968) has become a standard in bankruptcy risk studies and that it becomes very difficult to refer to other more representative works. Thus, due to its international scope, one of the models to be used will be Altman's Z-score.

$$Z_1 = 1{,}2x_1 + 1{,}4x_2 + 3{,}3x_3 + 0{,}6x_4 + 0{,}999x_5$$

$X_1 = \frac{\text{Working capital}}{\text{Assets}}$; $X_2 = \frac{\text{Retained Earnings}}{Assets}$;
$X_3 = \frac{\text{EBIT}}{\text{Assets}}$; $X_4 = \frac{\text{Market Capitalisation}}{\text{Assets}}$; $X_5 = \frac{\text{Turnover}}{\text{Assets}}$.

For the average sectorial companies, it will be used another model by Altman (2002) for non-listed companies.
Another model of international scope that will be applied is the CA-Score, developed in 1987 by Jean Legault at the University of Quebec, which is of special interest since its use is recommended by the Order of Chartered Accountants of Quebec (Peres, 2014).
For the selection of other models more adapted to the Iberian reality, it was analyzed the extensive research of Peres (2014), Antão & Peres (2018) and Peres & Antão (2018a, 2018b) about the effectiveness of bankruptcy prediction models applied to samples of Portuguese and Spanish companies. From the set of models analyzed by the mentioned authors, the models of Carvalho das Neves (2012) and Monelos et al. (2013) were selected. These methods were developed considering the Portuguese and Spanish framework, respectively, and present an improvement in effectiveness when compared to Altman's model.

Value Creation

Value creation is one of the main objectives of any company since it is essential for the growth and continuity of the company. Stern et al. (1998) write that until the introduction of EVA®, the model that dominated financial management in most large American companies was based on Earnings per share. However, the development and subsequent further research into value creation models has changed this paradigm. In fact, works such as Weissenrieder's (1999) and Vasconcelos et al. (2019) point out that a management model focused on shareholder value creation tends to improve the company's economic-financial performance and lead to greater market valuation.

Economic Value Added (EVA®)

Stern Management Value (2021) states that EVA® measures the value that a company creates, or destroys, each year by valuing the EBIT minus the cost of invested capital, both owned and borrowed. Brealey et al. (2011) mention that to see if a firm actually builds value, the cost of capital must be considered. Burchman (2019) states that the great advantage of EVA® has always been that it combines three crucial metrics - revenues, invested capital and cost of capital. Thus, and according to Kramer & Peters (2001), EVA® can be considered as a very relevant indicator of a company's performance, for a given period.

$$EVA^{®} = NOPAT - IC \times WACC$$

NOPAT=Net Operational Profit After Taxes; IC=Invested Capital; WACC: Weighted Average Cost of Capital

Market Value Added (MVA)

Kramer & Peters (2001) define the MVA as a cumulative measure of the value created by the company more than the capital invested by shareholders, translating as the difference between the total value of the company, reflecting the market valuation, the Enterprise Value (EV), and the capital invested.

$$MVA = EV - IC$$

3. Methodology

The objective of this work is the comparative evaluation of the economic-financial performance and sustainability of listed companies in Lisbon and Madrid and its comparison with the respective sectors. The methodology has been developed bearing in mind the objective of the work, seeking to answer the starting questions proposed in Chapter 1.

Characterization of the sample

For the sample definition, all listed companies in Lisbon and Madrid were collected. From these, all financial companies and those listed after 2010 were excluded. The remaining were grouped according to *Classificação Portuguesa de Atividades Económicas-Rev3* and *Classificación Nacional de Actividades Económicas 2009* sections, excluding all sectors with representativeness lower than 3 firms and those that it would not be possible to build a portfolio of comparable sizes between the two countries. This process resulted in a sample of 46 firms from sections C, D and G

Methods of analysis

The analysis of firms' performance will be done through their evaluation at 6 levels, relating it to the indicators and models presented in Chapter 2 as follows:

- Financial Equilibrium: Liquidity Indicators and Debt and Capital Structure Indicators;
- Profitability: Profitability Indicators;
- Risk: Risk Indicators and Corporate Sustainability Forecasting Models;
- Efficiency: Performance Indicators;
- Stock Performance: Market Indicators and MVA;
- Value Creation: EVA® and MVA Models.

The referred indicators and models were applied to the different sample and sector average companies, performing a Trend Analysis for each one. Next, a Comparative Analysis was carried out between the groups to understand the performance and relative current state of each one.

4. Empirical study

Macroeconomic review

A company does not act in an isolated system but within its economic context. The Iberian economies were strongly affected by the 2010 crisis, seeing in those years strong reductions in their GDP, with the Spanish economy recovering more quickly. After the expansion

period, in 2020, due to the consequences of COVID-19, they registered historic falls of 7.6% and 10.8% in Portugal and Spain, considerably above the European average of 5.9% (PORDATA, 2021b).
The Portuguese economy continues to have several weaknesses such as high debt, low productivity, and a level of investment below the European average. Whereas in 2014 the Spanish economy had a productivity corresponding to 100.3% of the European average, it closed 2020 with a value of 94.6% (PORDATA, 2021a).
Despite their fragilities, the Spanish GDP per capita is considerably higher than the Portuguese, thus revealing a greater dynamism of the Spanish economy.

Stock market review
The stock exchange allows numerous investors and institutions to trade shares of listed companies or other eligible financial instruments in a regulated and controlled manner. Due to the large number of participants and the competition between them, the stock exchange has the function of assisting in determining the fair price of an asset and ensures liquidity in various markets (Chen, 2021).
The main indices of the Lisbon and Madrid stock exchange are the PSI and the IBEX 35, respectively. In both cases, the 2020 stock prices are far from the 2010 values without ever having been surpassed. Comparing these two years, the PSI depreciated 43% and the IBEX 35 34% (Euronext, 2022; Investing, 2022). This fact clearly demonstrates the strong impact of the 2010 crisis on the capital markets of the two countries.

Sectorial review
The Manufacturing Industry, section C, is the set of activities that transform, by any process, raw materials into new products Instituto Nacional de Estatística (2022a). According to Instituto Nacional de Estatística (2022b, 2022c) and Instituto Nacional de Estadística (2022a, 2022c), in both countries the number of companies decreased, but the aggregate turnover of the sector increased, indicating an improvement in the efficiency of this sector, both in Portugal and Spain.
Section D comprises the companies that supply the utilities. Although they are usually private companies, they operate in a sector of high public interest and are therefore highly regulated. The stocks of these companies usually have lower levels of volatility and are seen as a stable source of dividends (Murphy, 2021).
Although Portugal, according to Instituto Nacional de Estatística (2022a, 2022b) saw a 617% increase in the number of companies in this sector in the years under review, aggregate turnover grew by only 8%. This shows that most of the new companies in this sector are relatively small and important. In Spain there was a 20% decrease in the number of companies in this sector with a 10% decrease in aggregate turnover (Instituto Nacional de Estadística, 2022a, 2022b).

Section G groups the forms of trade and repair of automobiles and motorcycles Instituto Nacional de Estatística (2007). Although in both countries the trends in this sector have been similar, there is a slight better performance in Spain. Although the number of firms fell by 13% and 9% in Portugal and Spain, the turnover grew by 8% and 10%, which may indicate an improvement in the operating efficiency of firms in this sector Instituto Nacional de Estatística, 2022b, 2022c; Instituto Nacional de Estadística, 2022a, 2022b).

Results – Key Questions disclosure
Question 1
Through the analysis of the Liquidity Indicators, it was found that in the sample, the Spanish sample average firms had higher liquidity values than the Portuguese ones without, however, having verified situations of greater concern in terms of short-term Financial Equilibrium apart from the Portuguese sample of section G which registered values much lower than the minimum limit. There were no considerable differences between the average sectoral firms in the two countries. We also point out the case of section D where all the groups studied presented smaller average values, which may be a characteristic of the sector.
In the medium and long-term Financial Equilibrium, the Spanish sample and sector average companies again registered better values, with lower levels of indebtedness and a greater capacity to generate results to cover their financial costs.

Attention should be drawn to the two most worrisome situations with the Portuguese sample average firm in section G and the Spanish sample average firm in section D with Equity Rates of 27% and 30%, respectively, in 2020, considerably below the lower limit of 33%. This fact indicates an over-indebtedness of these firms that may translate into a growing difficulty in meeting their commitments and, ultimately, to their sustainability.

The Spanish samples and sectors also presented lower risk levels, with, globally, lower Degree of Combined Leverage values and fewer "Bankrupt" ratings in the corporate sustainability forecast models.

On a more positive note, for Portugal, contrary to the years of the 2010 crisis, in 2020 none of the sectors presented a Bankrupt classification, possibly indicating a more solid financial position. Although this is a positive indicator, it should be kept in mind that the data for 2020 are very preliminary about the real impact that COVID-19 had on companies.

The analysis shows that, overall, the average sample and sectoral companies in Spain have a more robust financial situation, albeit with the necessary exceptions, which will allow them to face a difficult economic situation with fewer consequences.

Question 2:

The analysis of the Performance Indicators generally indicates more efficient management of the Portuguese sample and sectoral average firms with lower Net Operating Cycle duration.

Regarding profitability there are large differences depending on the sectors. In section C, the Portuguese sample shows a higher capacity to generate results while the sector in Spain registers higher profitability values. In section D, the opposite situation is observed with the Spanish sample and the Portuguese sector having historically higher values in the Profitability Indicators. Even so, in 2018, the sector in Spain started to register higher returns than in Portugal. In section G, there is a clear dominance of Spain, both in terms of sample and sector.

Thus, even though there are indicators that point to a more efficient management of the Portuguese average companies, they compare poorly with the Spanish in the generation of results.

Question 3:

Market Indicators signal an undervaluation of the Portuguese sample average companies in sections C and D. In terms of shareholder remuneration through dividends, higher Dividend Yields are recorded in the Portuguese sample average company in section C, reinforcing the idea of undervaluation of the Portuguese companies analyzed in this sector. However, in section D, the Spanish sample always showed higher relative values of dividend distribution.

In section G there is an undervaluation of the Spanish sample, considering the relative poor performance of the Portuguese sample firms, but the latter have historically higher shareholder remunerations than the Spanish, which may help explain this difference.

The MVA measures value creation from the shareholder's point of view, with the average Spanish sample companies dominating this indicator with higher values in all sections. Overall, the better performance of Spanish firms also leads to their higher relative valuation, helping to explain the difference observed between the samples. A higher MVA will tend to attract more investment.

Thus, it can be verified that in the years considered, the Spanish companies analyzed had a better stock market performance with higher relative market valuations, translating into greater value creation for their shareholders than the Portuguese companies. It should be remembered, according to Sharpe (1961), that the evolution of the market itself is one of the factors that most influences the share price. Thus, the better performance of the IBEX when compared to the PSI may explain part of the relative valuation of the companies listed in Madrid.

Question 4:

Value creation is one of the main objectives of any company and essential for its sustainability. It is interesting to note that different conclusions will be reached depending on the method. EVA® measures a company's value creation by discounting the cost of invested capital from the RBIT.

In this indicator, the average Portuguese sample firms in sections C and D registered higher values than the Spanish ones, indicating a better performance in the

generation of results of these firms at the operational level when considering the costs of equity and borrowed capital. In section G, on the other hand, the average Spanish sample company achieved a much higher average value, reinforcing the poor performance of the Portuguese firms analyzed in this sector.

In sectoral terms the differences were less dramatic. If in section C the Spanish sector obtained a higher EVA®, in sections D and G Portugal obtained slightly higher values. In terms of shareholder value creation, as verified in the previous question, there is a clear dominance of the average Spanish sample companies.

Thus, while in value creation from the standpoint of economic profit the Portuguese sample, except for section G, and sectoral average companies performed well when compared to the Spanish, in the creation of shareholder value they registered much lower values, also explained by the lower relative market valuation in sections C and D.

It is also interesting to note that in both countries, comparing the average sectoral value of EVA® for the years considered, section C was the sector that contributed the most to value creation. Followed by section G and, finally, section D.

5. General Conclusions

The recent economic path of the economies of Portugal and Spain has not been easy. After being strongly affected by the 2010 crisis, the new conjuncture associated to the COVID-19 pandemic has caused a historic contraction of the 2020 GDP of both countries.

It is therefore essential for each country to understand the financial situation of its companies. A sectoral analysis will make it possible to identify future problems, general or sector-specific, and develop mechanisms or policies to mitigate them.

Listed companies are a sample of some of the largest, most efficient, and productive companies in each country. An analysis of these specific companies will allow us to verify the financial state of some of the most important companies and to anticipate possible market responses.

This work allowed us to verify the relatively poor performance of the Portuguese sample firms and sectors compared to the Spanish ones, which, considering the macroeconomic and sectorial analysis of the two countries with focus on the poor productivity of the Portuguese economy, was expected. Even so, the heterogeneity of the situations in the different sectors should be noted, with the previous statement being a generalization of the larger picture.

It is interesting to note the deterioration of the various indicators analyzed in the years of the 2010 crisis in both countries, although more pronounced in Portugal which had a more unfavorable and demanding macroeconomic framework. It should also be noted that the quotes of the main Lisbon and Madrid indices, the PSI and IBEX 35, have not yet reached the values of early 2010.

Overall, Spanish companies showed better indicators in the various areas assessed, obtaining a relatively higher market valuation. The most worrying situation is the Financial Equilibrium of the Portuguese sample average company of section G, with liquidity values well below the others and with signs of over indebtedness and a growing difficulty in meeting their financial costs.

The Portuguese sample average firms in sections C and D stand out in value creation with average EVA® values well above the Spanish ones. Also in sectorial terms, Portugal compared well with Spain with slightly higher values in sections D and G.

Also noteworthy are the good values of Portuguese companies in the Operational Indicators indicating an efficient management of their operating cycle and, considering the Market Indicators, it can be argued an undervaluation of the average Portuguese sample companies in sections C and D compared to the Spanish.

Future lines of research

In a perspective of continuity of the present research it is recommended to extend the time horizon to 2021 which would show more clearly the real impact of the COVID-19 constraints on the companies.

Extending the sample to a larger size could prove useful to increase the number of companies available for analysis, improving the comparability between portfolios. In addition, it would be interesting to verify how listed companies and sectors in Portugal and Spain compare with those from a country outside the Iberian reality.

Another obvious recommendation would be to broaden the profile of indicators and models used. As an illustration, one could indicate the inclusion of Quick Ratio and Cash Ratio. In these two indicators Inventories and Clients are discounted from Current Assets since they carry realization risks.

In Multivariable Analysis it could be interesting to incorporate profitability explanatory models such as Dupont Analysis which, in its different forms, breaks down profitability into different factors that influence it, allowing the identification of areas with worse performance.

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