CSR in South Europe during the financial crisis and its relation to the financial states of Greek companies

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CSR IN SOUTH EUROPE DURING THE FINANCIAL CRISIS AND ITS RELATION TO THE FINANCIAL STATES OF GREEK COMPANIES

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Abstract

This paper aims at presenting the notion of corporate social responsibility (CSR) in Europe by examining its application in Southern European countries, Greece, Italy, Spain and Portugal, thus, consisting of the major Mediterranean countries not only in terms of proximity but also sharing common features, were at the center of the financial crisis in Europe in 2009. The aforementioned countries are under examination on the one hand as members of Europe, which is the Mediterranean and on the other hand as independent ones. Additionally, the complexity of CSR is presented, its aspects through time, its diversity depending on the geographical position as well as its methods of evaluation. The longitudinal contrastive analysis is the starting point for further improvement as the countries, except for Portugal, are fluctuating within low levels and the Mediterranean in average ones. Furthermore, the examination of the financial state of the Greek companies within the 2015-2016 period, confirms the majority of the literature that the adoption of CSR’s good practices contributes, even partly, to the development of their effectiveness. As a conclusion, the structure of a commonly acceptable measurement model of the National Social Responsibility and the longitudinal measurement will be a useful tool for all involved institutions, with immediate results to both the society and the companies.

JEL Classification: M14  
Key words: CSR, Europe, Mediterranean, Comparative Analysis

1. INTRODUCTION

Over the last decade, due to financial crisis, that appeared in America and European countries, due to climate change, moral dilemmas and issues that arise social concern, the interest in corporate responsibility in society has increased as well as the benefits offered to the community at large. Executives have comprehended that in their effort to raise gain they at the same time have a responsibility towards society (Falck and Heblich 2007). There have been numerous studies and concepts developed relating to how corporations can include matters of corporate responsibility within their entrepreneurship (Melé 2008).

The notion of CSR is complex, multidimensional and related to many similar definitions and has evolved through years, differentiated among geographical areas. Since the appearance in international literature, 60 years ago (Bowen 1953), up until lately, several
definitions have been put forward and many efforts have taken place to present a clear and definite definition (Dahlsrud 2008). For its ambiguity, the scientific community is not to be blamed but numerous other factors, beyond language, such as historical, cultural and socio-economical ones (Argandona and Hoivic 2009) and the fact that CSR is being formed by new tendencies of globalization as well as national political-economic systems (Gjolberg 2009). Same core value, though, of all notions is that they reflect the social benefits of business success and they are comprised of methods and practices that contribute to the amelioration of society in a corporate responsibility framework (Matten and Moon 2008). According to Moon (2014), five common features of the definitions of CSR is the corporation’s responsibility a) towards society b) for society c) conduct of business rules and responsibility d) taking responsibility for society and the environment e) and managing relations in society. Taking into consideration that corporations play the dominant role in the notion of CSR, it is worth noting that the rest of the affiliated members of this notion such as the governments are contributing parties to its development (Albareda et al. 2008).

In Europe, compared to America, based on a research by Aaronson and Reeves (2002), there is a greater acceptance of the government’s role in promoting CSR and corporations work better with governments to ameliorate social circumstances. At the same time, based on evaluation indicators of CSR that have been developed, their correspondence degree from large corporations is the highest in the world (Kolk 2008), although, considering the diversity of cultures and political-economic ideologies, there are different characteristics from one country to another. Indeed, if government actions of EU-15 countries are taking into account, those that involve CSR in Europe, according to Albareda et al (2007), is consisted of four models: a) Normandy region b) countries in central Europe c) the “Agora” of the Mediterranean countries d) United Kingdom and Ireland. Many organizations promoting CSR have been developed in Europe with “CSR Europe” being, among others, the one giving plethora of information on its website (Metaxas 2016) to be the most well-known.

Taking into account individual indicators of CSR and previous efforts of developmental measurement models, there is an effort to develop the “Agora” model, the features of CSR in the Mediterranean compared to the rest of Europe as well as individual evidence - tendencies of Greece, Italy, Spain and Portugal that is of the greatest South European countries - Mediterranean countries. The countries that beyond the geographical attribution and other features they share in common, during the period of the financial crisis in Europe in 2009 were the center of interest. Furthermore, there is an effort to investigate the relation to CSR with the effectiveness and viability of the Greek companies. The results confirm the
differentiation of CSR’s application that is affected by the individual structural particularity of each country, in matters of culture, finance and politics as well as the differentiation of the Mediterranean compared to the rest European countries. CSR contributes to partly ameliorating the companies’ effectiveness and the future examination of the rest of the European countries within a commonly acceptable model that will combine qualitative and quantitative features and will shape the National Indicator of CSR will benefit all parties interested.

2. HISTORICAL BACKGROUND

The notion of CSR has a long history and relates the development of corporations to their role in meeting society’s needs. Despite the fact that a simple form of CSR can be viewed as charity of traders and industrialists before the 20th century, the first reports were made in the 1950s, viewing them as an obligation towards society (Bowen 1953; Heald 1957). During the 1960s, a relation appears between corporations and society (Davis 1960; Frederick 1960; Walton 1967, p.18). The role of parties involved, the social interest in the amelioration of the quality of life, the economic-social-legal responsibility and the corporations’ role as members of the society make their appearance in the 1970 (Eilert and Parket 1973; Sethi 1975; Backman 1975). Furthermore, in the end of that decade, there are three dimensions of CSR presented by Carroll (1979). New definitions and aspects of CSR appear the next decade (Strand 1983; Carroll 1983), while an effort made to investigate the relation between CSR and corporations’ profitability (Cochran and Wood 1984). In a parallel direction, Freeman (1984) presents the theory of parties involved. A few more definitions appear in the 1990 (Hopkins 1998; Khouryetal 1999; Woodward-Clyde 1999). Elkington (1997) presents the theory of ‘Triple Bottom Line’ based on which “corporate solutions and choices are at the same time socially responsible, environmentally correct and financially viable”, while the so called Carroll’s pyramid appears (1991) according to whom “social responsibility of corporations, includes economic, legal, moral and distinct (charity) expectation that society has from business corporations at a period of time...”. In the end of the decade, the world economic forum in Davos took place, where social responsibility made official as social necessity. Thereafter, the scientific community was focused upon empirical and comparative analysis without leaving out, though, any new definitions not only from European (European Commission 2002) but also from Global organizations.

3. COMPLEXITY
From the plethora of definitions, notions and aspects, despite the numerous publications, the CSR remains a notion that lacks clarity (Clarkson 1995). The fact that CSR occurs in different places, for different people and for different reasons (Campbell 2007) contributes to its complexity. The variations and the diversity of its aspects affect implementation, management and orientation on behalf of corporations, bearing in mind the factors in regional and national framework (Maon et al. 2017). Every business domain in every environment sets different goals, different interested, different ability or knowledge to comprehend the notion of CSR and to turn it into action (Metaxas 2016).

Different political-economic systems create a different functioning environment for corporations; such a fact is affecting the notion of CSR (Gjølberg 2009). In addition, the different cultures, the different languages, the different legislation, the different policies promoted by public sector, motivations and goals of each company, influence the final form of CSR. Companies cannot function on an individual level (Metaxas and Tsavdaridou, 2013), but it cannot be set aside that higher corporate executives play a significant role on its outcome, like individual entities, as with their decision-making, strategies are formed and decisions are made and initiatives applied based on the CSR (Aguinis and Glavas 2012).

Finally, except for the corporate executives, the motives of basic parties involved form CSR (Matten and Moon 2008). According to Argandona and Hoivic (2009), besides corporations’ moral, governments’ moral, public organizations’ moral, the press, the consumers and generally all parties involved must be under consideration.

The notion of CSR is even more complex and wider if one considers the similar notion with which it is related to and most of the times complements each other. A particular characteristic is the notion of corporate ethics (Rossouw 2011), corporate governance and corporate viability. Moreover, notions which do not contain the word ‘corporate’, such as human rights, globalization, protection of the environment, education, corruption, supply chain management, professional conduct and many more are related to others more or less to CSR.

Most of the definitions for CSR include, according to Dahlsrud (2008) one or more of the following aspects: a) parties involved b) social c) financial aspect d) volunteering e) environmental. Following Rahman (2011) all definitions cover one or more of the domains below: a) obligation towards society b) participation of parties interested c) amelioration of the quality of life d) economic growth e) moral entrepreneurial practice f) legislation g) volunteering h) human rights i) protection of the environment j) transparency and accountability.
4. QUALITATIVE MEASUREMENT INDICATORS

Conclusively, the more prevalent definitions of CSR are not suitable as a base for contrastive measurement of its practices (Gjolberg 2009). By measuring CRS, corporations can define their strengths and weaknesses, form a strategy and seize opportunities (Kok et al., 2001; Sirgy, 2002). Meanwhile, the configuration of a national indicator of CRS per country or regional area, contributes to forming strategies on behalf of governments and public authorities, in recording tendencies and issues that arise as well as in analyzing of phenomena. The development of valid and reliable indicators is a significant factor in the process of measurement (Carroll, 2000). This is the reason why some global indicators been developed which are used in international literature and studies for assessment of corporate responsibility not only among areas but also among corporations. Each indicator collects evidence and contributes to the assessment of CSR of one or more of the above aspects. The number of corporations implementing variables of indicators or those certified shapes the national indicator (Skouloudis et al., 2016). Of the most prevalent indicators, that combined a respectively full picture of social being shaped, are the following:

a) **Global Reporting Initiative**, a series of essays, reports and notifications from organizations irrespective of size and domain, relating to the governance way and the environmental, social and economic achievements.

b) **UN Global Compact**, initiative developed by the United Nations and reaches out to companies to support and adopt within their function a total of ten generally acceptable principles that concern, among others, the protection of human rights, working role-models, environmental management and measures against corruption.

c) **KPMG’s Survey of Corporate Responsibility Reporting**, regarding non-profitable corporate essays of 100 (N100) and 250 (N250) largest companies. It, also, includes an analysis of the state, evaluations and comparative data.

d) **Dow Jones Sustainability Index** which is based on the analysis of corporate finances, environmental and social achievements, estimating matters such as corporate governance, risk management, climate change, standards of supply chain and working practices. There are criteria concerning choice of the greatest companies and it includes companies having the best practices.

e) **FTSE4Good**, measures the efficacy of companies that suffice the global acknowledged standards of CSR.

f) **Global 100**, a list of 100 worldwide most viable companies in the world that annually announced in the Global Economic Forum in Davos. The Canadian magazine ‘Corporate
Knights’ in cooperation with the research company “Innovest Strategic Value Advisors” is developing the list.

g) ISO 14001, a standard system of environmental management that developed by the International Organization for Standardization (ISO).

h) SA8000, an auditing certification standard for decent working conditions (human rights, working practices, etc).

5. MEASUREMENT ATTEMPTS

Despite the fact that the CSR’s problem of measuring, due to its complexity and differentiation, fact noted years ago (Waddock and Grvaes 1997), there have been many different attempts since 2000 and thereafter (Wood 2010). Matten and Moon (2004) and Habisch et al. (2005), were the first ones to have mentioned the national indicator of CSR. According to Soana (2011), the attempts to measure the national indicator are divided into five categories, based on the method employed a) content analysis b) use of questionnaires c) use of one-dimensional indicators d) comparing reputation e) evaluating code of conduct-ethos.

All attempts either to record CSR or compare various countries concern only one year, the longitudinal progress is not being examined and only the methodology is being differentiated. Maugnan and Ralston (2002) as well as Chapple and Moon (2005) proceeded into measuring CSR by performing content analysis, Vitell and Paolillo (2004), Turker (2009), Boesso and Kumar (2009), Kourula (2010) tried to measure it by the use of questionnaires and factor analysis. In 2010, Jackson and Apostolakou attempted with the use of various criteria of CSR’s dimensions and Sustainable Asset Management (SAM)’s elements to form the national indicator and compare the European Countries’ results. Midttun et al. (2006) measuring it by the use of multiple quantitative factors, while Gjolberg (2009) combining each country’s company participation into forming nine one-dimensional indicators, she presented a new measurement model of CSR and compared the results of twenty countries concerning 2007. This model which Skouloudis et al. (2016) have further extended with the use of sixteen one-dimensional indicators and compared the results of eighty-six countries for the year 2012. In comparison, Esteban et al. (2018), in their attempt to avoid the restrictions of Gjolberg’s model (2009), evaluating twenty-two practices-initiatives of corporations connected to their viability and CSR on a scale from 0-4, they suggest that with a macro financial process, a model of configuring the national indicator of CSR and present the findings of countries for the year 2014.

6. CONNECTION OF CSR AND FINANCIAL STATES
The difficulty of investigating the relation between the CSR and the financial development-position of the companies has occurred since 1985, when Ullmann through his research realized the ambiguity and the difficulty of this. Many factors crate difficulties towards this effort, mainly some having to do with the methodology of measuring CSR, that is based on indicators, models, questionnaires, etc. and the evaluation method of the financial status of the companies, that is based on the stock broking value, the profit share, the financial situation, etc. Another problem pinpointed by Karagiorgos (2010) is that the relation is bidirectional in the sense that the CSR practices are possibly leading to the amelioration of the companies’ financial status and that the companies with remarkable financial position participate in CSR practices. According to Margolis and Walsh (2003) within the majority of the studies, CSR is the independent variable.

Mercedes (2016) confirm the ambiguity and uncertainty concerning the existence of possible positive or negative relation more recently, as a plethora of studies, depending on the methodology, has drawn different conclusions. Indeed, the literature of Beurden and Gossling’s studies (2008) as well as Choi et al. (2010) shows a rather positive correlation between CSR and effectiveness-viability of the company. A positive correlation occurs in the studies of Wahba (2008), Ji-ming, et al. (2009), Rettab et al (2009), Nelling and Webb (2009), Wang (2010), Karegiorgos (2010) concerning Greek companies’ empirical analysis, Mercedes (2016) relating to Spanish companies. On the contrary, Aupperle et al. (1985), Wood and Jones (2005) and Brammer et al. (2006) found out a negative relation. Fombrun and Shanley (1990), Teoh et al. (1999), McWilliams and Siegel (2000), Lopez et al. (2007) and Mittal et al. (2008) found a neutral relation or they can’t result a safe conclusion.

Scope of the research is to find out whether CSR has been influenced by the financial crisis that appeared in America and mainly in the European Zone, as its consequences and impact is differentiated from one country to another. Karaibrahimoglu (2010) noticed a downfall of CSR due to the financial crisis, which was larger in America compared to Europe, in contrast to Charitoudi et al. (2011) and Giannarakis and Theotokas (2011), who concluded that there has been a rise of CSR practices in an attempt to ameliorate their image and relation to society. Additionally, Lins et al. (2017) confirm that during the crisis, companies with higher CSR had better results. Fernandez and Souto (2009), even though they did not establish a relation between CSR and financial situations, they consider that the crisis will have to be perceived as an opportunity to redefine the companies’ role within society and not to be thought of as an obstacle because of the rise in implementation cost. Charitoudi et al. (2011) also support this view.

7. METHODOLOGY

An attempt to present the longitudinal evolution of CSR of the countries under investigation during the financial crisis from 2009 to 2016 taken place. Forming the national CSR indicator per year and analysis of the implementation degree of politics and CSR methods during these years, data of individual indicators will be taken into consideration and
establishing a connection to Gjolberg (2009) application model type 1, though, with certain differentiations. The comparative analysis of data concerns a) the under investigation countries of Greece, Italy, Spain and Portugal and b) between these countries as an undivided geographical Mediterranean area, compared to the rest European regions.

**Type 1 Gjolberg Model (2009)**

\[
\sum_{i=1}^{n} \frac{\text{Company number indicator } x_i \text{ for country } A}{\text{Total number of companies indicator } X_i \text{ for all countries}} \times \frac{\text{GDP of country } A}{\text{Total GDP of all countries}}
\]

For each one of the individual indicators, the number of companies of each country participating in its configuration is divided with the total number of the companies of the countries that are considered. Following, the result is adjusted to the GDP of each country; the GDP of each country is being divided with each country’s GDP to have results based on the size and financial dynamics of each country. Afterwards, in order to prevent erroneous results and fluctuation of results can be pertained; National CSR is transformed into a natural algorithm. The results over 0 depict a positive relation of the country and the CRS’s indicator, whereas the results lower that 0 depict the opposite. For the configuration and analysis of CSR among European regions, the type is being configured based on type 2.

**Type 2 CSR Model of European regions**

\[
\sum_{i=1}^{n} \frac{\text{Number of companies } x_i \text{ for region } A}{\text{Total number of companies } X_i \text{ for all regions}} \times \frac{\text{GDP of region } A}{\text{Total GDP of all regions}}
\]

Based on its complex nature, there needs to be an implementation of the “multiple indicators, multiple causes (MIMIC) model” (Elsayed and Paton, 2005; Karagiorgos 2010). Combining the categorization of CRS indicators of Midttun et al. (2006) and Zhen-Yu Zhao et al. (2012), four grouped categories are shaped, as Table 1 illustrates, from which the most important and representative ones have been chosen. They considered the more suitable ones for the current longitudinal study. Its selection based on the following: a) are universal indicators and the under examination countries can be included b) are representative of the different aspects of CSR and their combination allows for examination of CSR as a total notion, c) offer data for all the years of the time period of the financial crisis 2009-2016, except for the KPMG’s Survey and FTSE4Good indicators, because there is no evidence for the years 2010, 2012 and
2014. About the indicators of these years, the average been used between previous and following year.

**TABLE 1: Categorization of Indicators**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socially Responsible Investment (SRI)</td>
<td>FTSE4Good, Dow Jones Sustainability Index</td>
</tr>
<tr>
<td>Initiatives</td>
<td>UN Global Compact, Global 100</td>
</tr>
<tr>
<td>Reporting</td>
<td>GRI, KPMG</td>
</tr>
<tr>
<td>Standard - Guidelines</td>
<td>ISO 14001, SA 8000</td>
</tr>
</tbody>
</table>

Concerning 2015-2016, where based on the above model CSR has an upward tendency in Greece, an inspection will take place if the Greek companies belong to “CSR Hellas”, the most famous organisazion for CSR and member of “CSR Europe” from 2000, and adopt CRS actions appear an important statistical difference concerning efficiency and viability to those not belonging to the organization.

For the examination of the existence of the positive relation of the financial situation of the Greek companies and CSR, a statistical hypothesis inspection will be implemented, based on which the significant difference of the mediums of the two independent samples will be examined (Branco and Rodrigues 2008; Giannarakis and Theotokas 2011; Charitoudi et al. 2011). More specifically, the two-sample t-test hypothesis test will be used (Snedecor and Cochran, 1989) with confidence intervals of 1%, 5% και 10%:

**Ho:** the average efficiency and viability of corporations having adopted CSR does not differ from those of corporations that have not adopted CSR.

**H1:** the average efficiency and viability of corporations having adopted CSR is greater than those of corporations that have not adopted.

In Griffin and Mahon’s research (1997), they concluded from the popular indicators for measuring the financial efficiency of the companies are the following indicators that have repeatedly used in surveys of comparison and measurement (Waddock and Graves 1997; Lopez et al. 2007; Lee et al. 2009; Aras et al. 2010, Artiach et al. 2010; Mercedes 2016).

a) Return on assets – ROA based on the quotient of profits-damages before taxes/ total of Assets

b) Return on Sales –ROS based on the quotient profits-damages before taxes/ Sales
c) Return on equity – ROE based on the quotient profits-damages before taxes/ own funds

The sample is consisted of Greek companies that are members of “CSR Hellas” and companies that belong to the Greek stock market as can be shown in Table 2. For the sample
to be representative, the companies that will be chosen have similar activities and equal finances. For this reason, companies that belong to “CSR Hellas” and the Greek stock market divided into seven categories: 1) Raw materials, 2) Food- drinks 3) House appliances 4) Technology-software 5) Services 6) Health-personal hygiene 7) Others. The Banks, due to their unique characteristics and the different financial situations that they present, have been excluded. From the companies of the Greek stock market companies belonging to the “CSR Hellas” were excluded, in order for the independence of the two population to arise. No sample was taken from the category “Others”, as the diversity of the companies and the unique characteristics of certain working sectors would have provided non comparable results. Based on the population size of each category samples were taken from 4 to 5 companies from each category and 10 companies from the category “Services”, as they consist of about 30% of the total population and in this way they consist of 30% of the sample. The sample’s size was chosen randomly (same sample number from both populations) is presented in Table 3.

**TABLE 2:** Greek Company Population

<table>
<thead>
<tr>
<th>CSR HELLAS</th>
<th>STOCK MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total members</td>
<td>130</td>
</tr>
<tr>
<td>Population except for banks</td>
<td>125</td>
</tr>
<tr>
<td>Population except for banks and members of “CSR Hellas”</td>
<td>177</td>
</tr>
<tr>
<td>Population except for “others” category</td>
<td>71</td>
</tr>
<tr>
<td>Population except for “others” category</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: [www.csrhellas.net](http://www.csrhellas.net), [www.hcmc.gr](http://www.hcmc.gr)

**TABLE 3:** Sample Categorization

<table>
<thead>
<tr>
<th>Categories</th>
<th>CSR HELLAS</th>
<th>STOCK MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Food- drinks</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>House appliances</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Technology-software</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Services</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>Health-personal hygiene</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: [www.csrhellas.net](http://www.csrhellas.net), [www.hcmc.gr](http://www.hcmc.gr)

8. CSR ANALYSIS

As for the GRI it can be noted that the countries have a positive sign, except for Italy, and the largest positive evolution to be presented by Greece, which has first place for 2016. The Mediterranean countries show a downward course, resulting in a negative sign, as all regions besides the Northern European ones.
As for the *KPMG* indicator, only Greece shows a remarkable rise, the rest of the countries remain steady and Portugal is in the first place. As Mediterranean, countries present a positive sign throughout the period, more than the Central European countries and the UK. The northern European countries are first by far.

As for the *Global 100*, all the countries present significant fluctuations, especially during 2012-2015. Since 2013 and thereafter, Portugal is in the first place, Greece and Italy are the entire time negative and Spain is almost constantly with a positive sign. As Mediterranean countries, they take the last place with a negative sign, yet again, with the 2010 exception, the Northern European countries are first.

As for the *FSTE4Good* indicator, Greece presents a significant downfall from 2011 to 2013 and then goes on showing a significant rise up to 2016, enough to make a comeback within the 2009 positive levels being first. Spain and Portugal have a downfall and Italy has a negative sign during this period. The Northern European countries and the UK are by far lower than the rest of the countries that have a negative sign during the whole period.

As for the *ISO14001* indicator, Greece managed to reach Portugal in 2015 and 2016 that is third place throughout the period. Italy since 2014 and thereafter has been in the first place. As Mediterranean counties, they are first place and then the UK follows. The northern European countries since 2013 have a negative sign, fact that applies for the central European one since 2009.

As for the *SA8000* indicator, Italy is the sole country with a positive sign and indeed presents a remarkable stability. Spain is in the last place and actually bears a negative sign like the rest of the countries, despite the fluctuations throughout the years, 2016 has the same level as 2009. As Mediterranean counties, they are the only ones with a positive sign and a steady course. The rest of the regions are mostly negative and have a downward since 2015.

As for the *UN GLOBAL*, Spain is constantly in the first place. Greece since 2011 has a negative sign, much more that Italy which is always in the last place. As Mediterranean counties, they have a positive sign, leaving the Northern countries behind. The UK is in the last place having a negative sign at all times.

As for *Dow Jones* indicator, Greece during 2012-2013 and Portugal during 2014-2015, both present a significant downfall. Spain takes over the first place over the last years and is the only one bearing a positive sign. As Mediterranean, counties since 2012 and thereafter they show an upward course with a negative sign, resulting them to be in the last place. On the contrary, the northern European countries showing an upward course and managed to get ahead of the UK since 2015.
According to the combination model of the above indicators, Portugal managed from the negative levels and the second place to get ahead of Spain in 2012, despite the downward course it had since 2014. Greece and Italy especially since 2012 and thereafter appear significant fluctuation, in 2016 they appear slight improvement in relation to their 2009 image. As Mediterranean counties, they are steadily in the second place, right before the Northern European countries with a negative sign from 2014 and afterwards, while since 2015 an attempt to overcome this has been taking place. The central European countries, even being in the last place, they present a steady upward course. In short, the longitudinal evolution of the countries presented in the figures 1 to 6 and the European regions in figure 7.

**FIGURE 1: CSR in Greece**

![CSR in Greece](image)

**FIGURE 2: CSR in Italy**

![CSR in Italy](image)
FIGURE 5: CSR of Individual Indicators in the Mediterranean Countries

FIGURE 6: CSR New Model in the Mediterranean Countries
9. CSR AND FINANCIAL STATES

The finding of this sample of the Greek companies cannot lead to a safe conclusion as they differentiate depending on the evaluation indicator of the financial situation being employed. In all inspection, there has been an equality inspection test of the two fluctuations and for the ROA and ROS indicators there is indication that no equality exists (p-value 0,00), for the ROE indicator the indications are not to strong (p-value 0,062).

Taking into consideration the ROA indicator of this sample, the “CSR Hellas” companies that employ good CSR practices show statistically important better results (p-value 0,008) concerning their efficiency of their asset elements, as table 4.

The average efficiency of the elements of the Greek companies’ assets which employ good CSR practices are greater than the average of the asset elements of the Greek companies that do not employ in the Greek stock exchange market. With a 99% probability, this difference is from 0, 71% and more, with a 95% probability the difference is 7, 79% and above, with a 90% probability the difference is 11,48% and more. The average efficiency of the asset elements of the “CSR Hellas” companies is 22, 05% when the average efficiency of those companies that do not belong to it is negative and is -2,23%. 50% of the companies which follow the CSR policies have efficiency of their assets above 2, 54% compared to the companies that do not do so, resulting in 50% efficiency of -0,35% and below.

TABLE 4: Analysis of ROA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Count</th>
<th>Mean</th>
<th>SE</th>
<th>StDev</th>
<th>Variance</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA CSR</td>
<td>66</td>
<td>0.2205</td>
<td>0.0947</td>
<td>0.7691</td>
<td>0.5915</td>
<td>0.0254</td>
</tr>
<tr>
<td>ROA</td>
<td>66</td>
<td>-0.0223</td>
<td>0.0131</td>
<td>0.1065</td>
<td>0.0113</td>
<td>-0.00355</td>
</tr>
</tbody>
</table>
Taking into consideration the ROS indicator and based on the current sample we cannot claim that the average profit margin of the companies from the two categories are statistically different (p-value 0.438), as shown in Table 5. Therefore, the average profit margin of the companies that are members of the ‘CSR Hellas’ is up to 3.93% is statistically equal to the average profit margin of the companies that are not members is up to 2.93%. 50% of the companies that are “CRS Hellas” members have a margin of net profit over 3.61%, which is relatively close to the average, while on the contrary 50% of the non member companies have a profit margin of net profit 0.47%, which below the average, that is for the specific category of companies, there is a positive asymmetry and the greatest percentage of the companies is being accumulated in the lower rates of the variable.

### TABLE 5: Analysis of ROS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Count</th>
<th>Mean</th>
<th>SE Mean</th>
<th>StDev</th>
<th>Variance</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS CSR</td>
<td>66</td>
<td>0.0393</td>
<td>0.0135</td>
<td>0.1098</td>
<td>0.0121</td>
<td>0.0361</td>
</tr>
<tr>
<td>ROS Stockmark</td>
<td>66</td>
<td>0.0293</td>
<td>0.0622</td>
<td>0.5050</td>
<td>0.2551</td>
<td>0.0047</td>
</tr>
</tbody>
</table>

Taking into consideration the ROE indicator of the current sample, there are significant indications (p-value 0.016) that the average efficiency of the capitals of the member companies of the “CSR Hellas” are statistically greater that the average efficiency of the same capitals of the non-member companies, as shown in Table 6. With a 99% probability, this difference is up to 8.46% and more, with a probability of 95% the difference is 21.74% and over, and with a probability of 90% the difference is 37.67% and more. The average efficiency of the same capitals of member companies of the “CSR Hellas” have an efficiency of 69.90% when the average efficiency of the same capitals of the non-member companies is fluctuated in negative signs and is -23.40%. 50% of the member companies have an efficiency of the same capitals over than 74.10%, which is slightly above the average, while 50% of the non member companies have an efficiency up tp 3.34%, which is higher than the
average rate, mainly meaning that the largest percentage of the population from this category is being accumulated in the higher rates of the variable.

### TABLE 6: Analysis of ROE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Count</th>
<th>Mean</th>
<th>SE Mean</th>
<th>StDev</th>
<th>Variance</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE CSR</td>
<td>66</td>
<td>0.699</td>
<td>0.338</td>
<td>2.750</td>
<td>7.560</td>
<td>0.0741</td>
</tr>
<tr>
<td>ROE Stockmarket</td>
<td>66</td>
<td>-0.234</td>
<td>0.268</td>
<td>2.177</td>
<td>4.740</td>
<td>0.0334</td>
</tr>
</tbody>
</table>

Estimate for difference: 0,933000
99% lower bound for difference: 0.084610
95% lower bound for difference: 0.217477
90% lower bound for difference: 0.376727

T-Test of difference = 0 (vs >): T-Value = 2.16 P-Value = 0.016 DF = 123

### 10. CONCLUSIONS

The aim has been for CRS to be recorder and for the longitudinal evolution to be examined in the big Southern European counties of Greece, Italy, Spain, and Portugal, taking into account individual quantitative indicators and combining them. The evidence has been used to compare the countries as well as to compare their geographic Mediterranean region where they belong in relation to the rest of the European countries. In addition, the aim has been to investigate the relation of CSR to the efficiency of the corporations and to find out whether the benefits of these practices are reflected in the financial situations.

The results have confirmed the differentiation and variety of CSR among different areas, even among counties that belong to the same geographical region. When referring to CSR one should be very specific about the aspect and dimension being examined, as the differentiation among them might be significant and their occurrence might vary. Adopting CSR good practices and the implementation methods are shaped by the individual political-financial systems of the countries and by the social and cultural characteristics.

More specifically, combining individual indicators, Greece and Italy, that is two countries which are still at the centre of attention when it comes to financial crisis, they present very low levels and follow the same more or less developmental course in time. Spain follows a more steady course but within negative levels, whereas Portugal shows a higher increase. The Mediterranean region must have the Northern European countries as a role model in order to escape from the roughly zero or negative levels so far.

The longitudinal evolution of the aforementioned countries may be a very useful tool for constitutions, institutions and governments in order to locate problems and shortages so that
they can make examples of the other countries, those of Northern Europe, to make decisions and to set effective policies. Possibly, the rise of CSR could be a step toward the exit from the financial crisis, as it not only benefits society, but it also partly contributes to the rise of effectiveness and viability of those companies that adopt it.

A CSR National indicator that will come from a combination of qualitative indicators, which will have been checked for their significance and correlation with the addition of qualitative features, such as legislature, education, government policies, etc, will contribute to the comparison among countries as well as to the following up of their longitudinal evolution.

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