Can Companies Improve Their Performance Through Corporate Social Responsibility, With The Mediating Role Of Business Model Innovation And Competitive Advantage?

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ABSTRACT: The present study intends to examine the impact of corporate social responsibility components, as proposed by Carroll, together with environmental responsibility, on business model innovation, competitive advantage, and firm performance within the context of small and medium-sized enterprises. The results of this study were obtained through the examination of 483 questionnaires collected from small and medium-sized enterprises in Iran. The application of structural equation modelling was employed to assess the validity of the conceptual model. The findings of this study indicate that the various elements of corporate social responsibility (except for philanthropic and environmental aspects) have a direct and statistically significant impact on business model innovation. Furthermore, it is worth noting that business model innovation has a direct and substantial impact on competitive advantage. Moreover, the results of this study demonstrate a direct and substantial impact of competitive advantage on firm performance. This study represents one of the first investigations that particularly analyzes the influence of individual dimensions of corporate social responsibility on the process of business model creation, as far as our knowledge goes. This study incorporates a novel feature, namely environmental responsibility, into Carroll's existing model, in response to the growing significance of environmental concerns. The findings of this study provide managers with an enhanced understanding of corporate social responsibility and its impact on organizational performance. This study demonstrates to managers the significance of directing their attention towards specific dimensions of corporate social responsibility that can potentiate business model innovation.

KEYWORDS - Corporate social responsibility, Environmental responsibility, Business model innovation, Competitive advantage, Firm performance.

INTRODUCTION

I.

Corporate social responsibility (CSR) is a strategic category within organizations' operations that has gained substantial appeal and has experienced tremendous growth concerning sustainable development (Ye et al., 2020). The significance of becoming a socially responsible firm has increased significantly in recent times. The shifting societal norms have led to corresponding changes in the expectations of customers, partners, and staff (Rexhepi et al., 2013). Recently, CSR has gained significant interest and engagement from scholars and academics. Over time, numerous scholars have conducted investigations to examine the potential impact of CSR on organizational performance (Bahta et al., 2021; Hu et al., 2020; Le et al., 2021; Rhou et al., 2016). CSR is extensively recognized as a multifaceted concept that reflects a company's efforts to meet the expectations and demands of its diverse stakeholders concerning the environment, society, and individuals (Ngo & Le, 2023). CSR incorporates a range of initiatives undertaken by firms that ultimately yield societal benefits (Han et al., 2020), and enhance societal conditions (Armstrong & Green, 2013), and the main purpose of this endeavor is to exert a constructive influence on the stakeholders (Armstrong & Green, 2013; Rodríguez et al., 2013).

The concept of the business model has garnered significant attention from researchers, academics, and market participants since the mid-1990s (Zott et al., 2011). The business model encompasses the assessment of the value that organizations offer, the methods employed to generate this value, and the strategies employed to derive profit from the generated value (Magretta, 2002; Remane et al., 2017).

Since the mid-1990s, there have been notable transformations in markets and industries, including but not limited to globalization, the advent of the Internet, and the dynamic nature of markets (Anwar, 2018; Sun et al., 2016). In light of the dynamic and evolving competitive landscape, along with the rapid replication of successful business models by rival firms, there exists a potential peril for business models to lose their efficacy and become outdated (Saebi et al., 2017). One potential solution to address the issue of stagnant business models is to foster business model innovation (BMI) that considers the inherent dynamics of the business environment (Chen, 2022). The use of BMI enables organizations to effectively navigate market fluctuations

and maintain their financial viability (Foss & Saebi, 2017). Consequently, because of the benefits that BMI offers to organizations, scholars and researchers have devoted significant scholarly interest to this subject in recent years (Anwar, 2018; Chen, 2022; Cosenz & Noto, 2018; Futterer et al., 2018). Given the increasing prominence of CSR in the delivery of value propositions to customers, it is probable that there would be a significant correlation between CSR and BMI. Several groundbreaking studies have explored the potential correlation involving these two phenomena (Carayannis et al., 2014; Futterer et al., 2018; Schneider & Spieth, 2013). CSR initiatives that address the broader goal of sustainability, particularly through promoting inclusive growth and targeting low-income consumers, have the potential to drive substantial BMI (Geissdoerfer et al., 2018). In summary, these studies have underscored the significance of CSR as a precursor to BMI, and have advocated for the integration of CSR principles into the business models of enterprises (Hu et al., 2020). BMIs are undertaken for the reason of preserving competitive advantage (CA). With constrained resources in manpower and capital, companies would rather focus CSR activities on few specific issues than develop full strategies of engagement with stakeholders (Chen, 2022). Previous studies have suggested that innovation and CSR should be considered important determinants of firm's performance indicators (Martinez-Conesa et al., 2017).

Over the course of history, a multitude of scholars and academics have conducted extensive investigations into the possible influence of CSR on the performance of organizations (Bahta et al., 2021; Hu et al., 2020; Le et al., 2021; Rhou et al., 2016). The present inquiry pertains to whether adherence to social responsibility can have an indirect impact on performance by impacting BMI and CA. In essence, there is a query regarding the feasibility of firms simultaneously upholding their social obligation and achieving profitability.

The existing body of literature exhibits several areas that need attention and resolution. One notable limitation is that a limited number of studies within this particular domain have only examined commercial BMI measurements. The existing scholarly literature mostly focuses on examining the influence of CSR on BMI in relation to social or sustainable business models (Yunus et al., 2010). Social or sustainable business models primarily focus on addressing social and environmental issues, which diverge significantly from commercial company models that primarily prioritize profit development (Geissdoerfer et al., 2018). Nevertheless, the predominant emphasis of most firms lies in strictly commercial business models, with a tendency to overlook social business models due to their primary impetus being profit generation (Dentchev et al., 2016). Hence, the existing body of literature lacks sufficient evidence to definitively ascertain the extent to which corporations demonstrate a genuine inclination towards incorporating CSR into their operational frameworks.

One limitation is the scarcity of research investigating the correlation between CSR and BMI, which hinders a comprehensive understanding of the potential positive impact of CSR on BMI. Furthermore, there is a paucity of studies examining the influence of CSR on BMI. The existing body of literature does not provide a definitive response about the necessity of firms integrating CSR into their business models (Hu et al., 2020).

Furthermore, based on current information, the majority of studies examining the correlation between CSR and BMI have primarily treated BMI as a variable. However, in this particular study, we want to explore the influence of five distinct aspects of CSR on BMI.

This study seeks to examine the correlation between CSR initiatives, CA, and firm performance (FP) within the context of small and medium-sized enterprises (SMEs) in Iran. Within the realm of CSR, various models have been developed. Among these models, one that has gained significant recognition is Carroll's pyramid of social responsibility, comprising four distinct levels (Carroll, 1991; Hamid et al., 2020; Jamali & Karam, 2018; Lu et al., 2020; Smirnova, 2012; Yılmazdogan et al., 2015), and the fifth dimension that we consider for CSR (environmental responsibility).

Therefore, the present study intends to address the following research questions: (i) Is it possible for corporations to strengthen the social elements of their value-generating systems in order to enhance their business models or use CSR-based business strategies to develop altogether new business models? (ii) Does active engagement in CSR initiatives contribute to promote a firm's CA? (iii) Can companies improve their performance through CSR? The introduction should briefly place the study in a broad context and highlight why it is important. It should define the purpose of the work and its significance. Please highlight controversial and diverging hypotheses when necessary. Finally, briefly mention the main aim of the work and highlight the principal conclusions. As far as possible, please keep the introduction comprehensible to scientists outside your particular field of research.

II.

LITERATURE REVIEW

2.1. Corporate Social Responsibility

CSR has emerged as a significant concern for managers and business owners across various countries, both developed and developing. While historical evidence suggests that the consideration of moral principles and societal benefits has been present for centuries (Asongu, 2007), the academic exploration of this subject began in 1953, with subsequent scholarly studies primarily conducted thereafter (Carroll, 1999). The notion of CSR has undergone extensive examination and analysis over time, resulting in the formulation of numerous definitions through various research and evaluations. Each of these definitions offers a distinct perspective on the concept of social responsibility, resulting in divergent interpretations. Nevertheless, a persistent concern among researchers and corporate managers revolves around the perceived financial burden associated with CSR initiatives. Additionally, there is a growing interest in understanding how CSR might impact company performance, particularly in terms of enhancing financial outcomes.

In recent years, scholars have conducted investigations on the direct and indirect effects of CSR on FP (Bahta et al., 2021; Hu et al., 2020; Kang et al., 2010; Key & Popkin, 1998; Le et al., 2021; McWilliams & Siegel, 2000; Rhou et al., 2016; Roman et al., 1999). Numerous studies have examined the direct and indirect effects of CSR on FP, with a prevailing consensus suggesting a correlation between CSR and FP (Bahta et al., 2021; Frooman, 1997; Griffin & Mahon, 1997; Key & Popkin, 1998; Le Thanh et al., 2021; Roman et al., 1999; Waddock & Graves, 1997) ; Saeidi et al., 2015). The study performed by Saeidi et al. (2015) examined the impact of CSR on FP. The research focused on Iranian enterprises revealed that the association between CSR and FP is characterized by complete mediation. In contemporary times, the significance of CSR on CA has emerged as a distinct area of scholarly investigation, garnering increasing attention from researchers and scholars alike (Nyuur et al., 2019; Porter & Kramer, 2006). Scholars have reached the determination that CSR can serve as a strategic instrument for organizations to attain CA (Porter & Kramer, 2006; Zhao et al., 2019).

2.2. Economic Responsibility

The economic dimension of CSR pertains to the corporation's obligations and duties towards its diverse stakeholders in terms of economic matters (Abdulalem & Basri, 2018). The economic dimensions of CSR are frequently misconstrued as being interchangeable with matters pertaining solely to finance. However, the economic responsibility entails more than just firms being financially accountable and documenting employment statistics and debts in their most recent corporate responsibility report. The economic aspect of CSR should primarily focus on assessing the direct and indirect economic responsibility refers to the several components that constitute the concept (Uddin et al., 2008). The findings of Hu et al. (2020) suggest that CSR has a statistically significant and favorable impact on BMI. Therefore, we propose this hypothesis:

H1. Economic CSR has direct and significant effects on BMI.

2.3. Legal Responsibility

CSR is a multidisciplinary field that intersects with various branches of law, encompassing international law, European law, corporate law, corporate governance, tort law, contract law, procedural law, labor law, environmental law, and criminal law. Each of these domains has a significant role in the improvement of CSR, and eventually in addressing the critical global concerns that exist (Lambooy, 2014). The legal component is a matter of potential significance for governments in both welfare nations and emerging states. The legal requirements of companies might hypothetically aid a government in succeeding its welfare state objectives, which may be of a political nature or justified in legal mandates (Buhmann, 2006). The legal aspect pertains to the obligations of an entity to adhere to the laws and regulations established by governing authorities (Abdulalem & Basri, 2018). McWilliams & Siegel (2000) suggested that the involvement in CSR initiatives and the effective use of resources can potentially contribute to a rise in investment in research and development, thus leading to enhanced levels of innovation. Therefore, we propose this hypothesis:

H2. Legal CSR has direct and significant effects on BMI.

2.4. Ethical Responsibility

The ethical dimension pertains to the corporation's commitment to exhibit fairness in decision-making and performance, extending beyond its legal responsibilities (Abdulalem & Basri, 2018). Effective CSR management involves intricate ethical considerations and requires the organization to prepare well-informed and justified ethical assessments regarding what is morally correct and beneficial for all its stakeholders. In order to make ethical judgements that are well-informed and supported, firms must engage in a thorough analysis and evaluation of the concepts, principles, and theories that they rely on to establish and justify their management philosophies and normative assertions regarding social responsibility (García-Rosell et al., 2023). McWilliams and Siegel (2000) state that it has been determined that corporations engaged in CSR initiatives reap advantages,

such as the ability to cultivate goods that have socially responsible attributes. Therefore, we propose this hypothesis:

H3. Ethical CSR has direct and significant effects on BMI.

2.5. Philanthropic Responsibility

The philanthropic obligation encompasses the broadest range of discretionary judgment and decisionmaking for corporations, as they determine specific actions or charitable contributions with the intention of benefiting society. The roots of this form of accountability can be traced back to the perception that business and society are intricately interconnected in an organic manner. (Jamali & Mirshak, 2007). The philanthropic aspect pertains to the obligation of engaging in endeavors that advance the well-being of individuals (Abdulalem & Basri, 2018). Philanthropy encompasses more than simply fulfilling corporate citizenship; rather, it entails a responsibility to address the needs of stakeholders through various means, such as implementing social welfare initiatives and supporting educational, artistic, and cultural endeavors (Ahmadu et al., 2018). Martinez-Conesa, Soto-Acosta, and Palacios-Manzano (2017) aimed to demonstrate the substantial influence of CSR on fostering innovation within firms. Therefore, we propose this hypothesis:

H4. Philanthropic CSR has direct and significant effects on BMI.

2.6. Environmental Responsibility

The environmental dimension pertains to the efficient management of available resources, ensuring their preservation for future generations (MO, 2019). Companies would proactively endeavor to integrate environmental concerns into their operations and activities. This entails the encouragement of the benefits associated with environmentally sustainable products, the promotion of eco-tourism, and the cultivation of environmentally conscious behavior within the workplace environment (Rashid et al., 2014). Environmentally responsible business practices are considered a component of CSR due to their tendency to be motivated by factors beyond just financial gain, although they may still yield economic benefits. Moreover, these policies are not universally mandated by legislation and ultimately contribute to the betterment of society (Babiak & Trendafilova, 2011). The environmental dimension of CSR encompasses the responsibility to address the environmental consequences of a company's activities, products, & infrastructure. This entails the reduction of waste and emissions, the optimization of resource efficiency and productivity, and the avoidance of practices that could potentially compromise the sustainable utilization of a nation's resources for future generations (Mazurkiewicz, 2004). Halkos and Skouloudis (2018) demonstrated that the commitment of companies to CSR practices has a positive impact on the promotion of innovation. Therefore, we propose this hypothesis:

H5. Environmental CSR has direct and significant effects on BMI.

2.7. Business Model Innovation

The word "BMI" has gained prominence in recent times, with several authors presenting diverse definitions for this concept. Nevertheless, the primary concern over BMI is to CA and enhanced FP (Anwar, 2018). BMI has been seen as a fundamental requirement for organizations to effectively respond to changing circumstances and sustain high levels of performance in the long run (Anwar, 2018; Chen, 2022; Clauss, 2017; Cosenz & Noto, 2018; Evans et al., 2017; Foss & Saebi, 2018; Futterer et al., 2018). The concept of BMI entails a strategic framework that outlines the methods through which organizations can generate value and effectively deliver this value to their client base. In essence, BMI pertains to the evaluation of the business's performance and its ability to generate value for its shareholders (Cosenz & Noto, 2018). In a general sense, it can be posited that BMI pertains to the generation and delivery of novel value propositions to clients (Ghezzi et al., 2015). The BMI serves as a valuable tool for firms in their efforts to attract new clients. Additionally, it enables companies to establish dynamic advantages that pose challenges for competitors within the sector, making imitation a formidable task (Ghezzi et al., 2015; Hu et al., 2020). Anwar (2018) examined the significance of BMI in relation to the performance of SMEs, as well as the potential mediating function of CA. The results of this study suggest that BMI has a direct and statistically significant influence on the performance of both CA and SMEs. Therefore, we propose this hypothesis:

H6. BMI positively and significantly effects CA.

2.8. Competitive Advantage

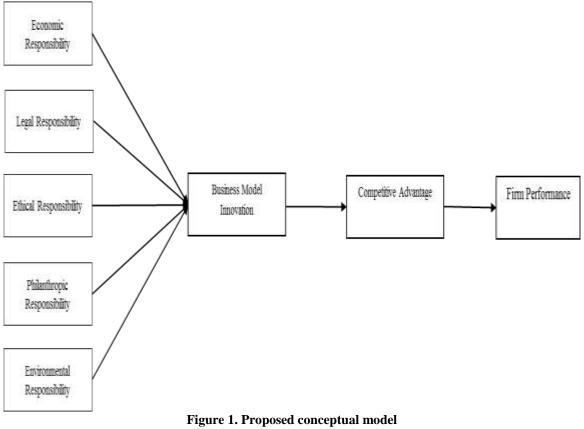
CA is defined as "a firm's strategic advantages over its competitors in the industry, which enables it to perform against competitors and competing firms" (Porter, 2012). In the current business landscape, the concept of CA has gathered considerable attention from organizations due to its substantial impact on their financial and market performance (Batista et al., 2016). The resource-based theory posits that organizations can achieve distinction by possessing resources, competencies, and capacities that are valuable, scarce, and difficult to imitate. This serves as a foundation for establishing a lasting CA (Barney, 1991). CA refers to the distinctive

resources or capabilities possessed by a business that are challenging to replicate or surpass. These resources or talents enable the firm to attain a superior or optimal long-term position in comparison to its competitors (Kimani, 2015). Hence, it is imperative for a corporation to possess resources that are not readily replicable or acquirable by competitors. Consequently, the acquisition of these resources enables them to attain a competitive edge (Cho and Pucik, 2005). Numerous research have established a correlation between CA and FP (Anwar, 2018; Bapat & Mazumdar, 2015; Saeidi et al., 2015). Therefore, we propose this hypothesis:

H7. CA positively and significantly affects FP.

2.9. Conceptual model

The conceptual model of this study originated from various studies (Abeysekara et al., 2019; Anwar, 2018; Handoko et al., 2015; Hu et al., 2020; Nyuur et al., 2019; Saeidi et al., 2015; Songling et al., 2018; Zhao et al., 2019) presented in the literature review (see Fig. 1).



Source: Own elaboration.

III. METHODOLOGY AND RESEARCH METHODS

According to Kline (2015), it is recommended to employ multiple elements for the purpose of measuring a structure, rather than relying on a single item. Hence, in the present study, three instruments were employed to assess the research constructs associated with each variable, specifically, three items for each CSR dimension based on Han et al. (2020), and nine items for BMI based on Hu et al. (2020), five items for CA based on Eyasu and Arefayne (2020), and six items for FP based on Nguyen et al. (2021).

The data for this study was gathered through in-person interviews, resulting in a total of 483 valid questionnaires being obtained for the survey. According to Galbreath and Shum (2012), in the sphere of CSR, structural equation modelling (SEM) is considered to be a more advantageous analytical approach compared to traditional regression analysis. The data analysis was developed using SPSS version 21 and AMOS version 24 software.

IV. **RESULTS**

The first paragraph under each heading or subheading should be flush left, and subsequent paragraphs should have a five-space indentation. A colon is inserted before an equation is presented, but there is no punctuation following the equation. All equations are numbered and referred to in the text solely by a number

enclosed in a round bracket (i.e., (3) reads as "equation 3"). Ensure that any miscellaneous numbering system you use in your paper cannot be confused with a reference [4] or an equation (3) designation.

Table 1 presents the information pertaining to the firms. A total of 83 individuals, comprising 17.2% of the overall population of owners, were included in the study. Out of the total of 483 responses, it was found that 145 respondents (30.0%) held senior managerial positions, 145 respondents (30.0%) were in middle management roles, and 110 respondents (22.8%) were identified as being in operations management. Out of the companies included in the data collection, 11% operate in the information and communication technology sector, 19.9% belong to the finance and banking industry, 19.9% are part of the pharmaceutical chemical industry, 24.4% are involved in the construction sector, 14.5% are in the field of education, and the remaining 10.4% are categorized under various other industries. A total of seventy-one individuals who possess ownership or managerial roles within these organizations oversee a workforce ranging from 20 to 50 workers. Additionally, there are 125 owners or managers who supervise companies with 51 to 100 employees, while another 125 individuals are responsible for companies employing 101 to 150 individuals. Furthermore, there are 116 owners or managers overseeing companies with 151 to 200 employees, and finally, 46 individuals are in charge of companies with a workforce ranging from 201 to 250 personnel. A total of 320 enterprises commenced their operations a decade ago, with 156 firms initiating operations between 11 and 20 years ago, and 107 firms having been operational for more than 21 years.

		Total (n = 483)
	Ν	Percentage (%)
Position		
Owners	83	17.2
Senior manager	145	30.0
Middle management	145	30.0
Operations management	110	22.8
Industry		
ICT	53	11.0
Finance and banking	96	19.9
Pharmaceutical chemical	96	19.9
Construction	118	24.4
Education	70	14.5
Other	50	10.4
Size of firms		
20–50 employees	71	14.7
51–100 employees	125	25.9
101–150 employees	125	25.9
151–200 employees	116	24.0
201–250 employees	46	9.5
Age of firms		
10 years and less	220	45.5
11–20 years	156	32.3
21 and above years	107	22.2

Source: Research data.

The result of the measurement model test showed a good fit to the data: $\chi^2 = 729.628$, df= 436, $\chi^2/df=$ 1.673, RMSEA= 0.037, PNFI= 0.729, GFI= 0.912, AGFI= 0.893, CFI = 0.922, IFI= 0.924, TLI= 0.912). In Fig. 2, the CFA has been depicted.

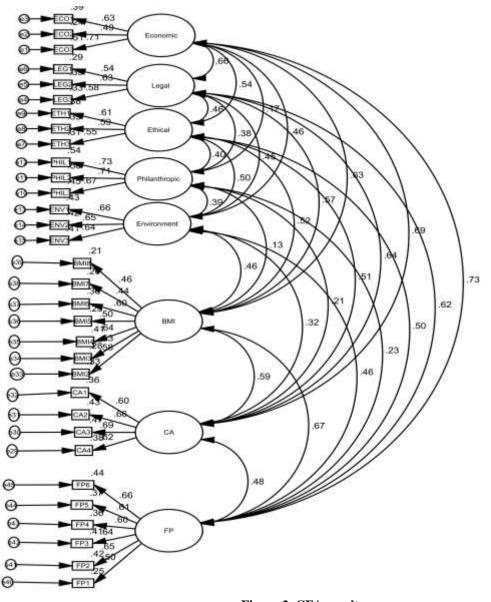


Figure 2. CFA result Source: Research data.

Table 2 shows that all factor loadings and Cronbach's α , Composite Reliability (CR) and Average Variance (AVE). In the data analysis stage, two questions were considered for BMI (including BMI 1 and BMI 9 questions) and one question was considered for CA (including CA 1 question) due to the incompatibility of the answers given to them with other answers and inconsistencies in the model were eliminated.

Based on Table 2, the standardized factor loadings of most items are higher than 0.5, the three recommended threshold value by Hair et al. (2019). However, the standardized factor loadings of three items are between 4 and 5. Based on Guadagnoli and Velicer (1988) standardized factor loadings higher than 0.4 are considered stable. Therefore, the standardized factor loadings are all statistically significant. Cronbach's alphas of four items is between 6 and 7. According to Cronbach (1951) and Hajjar (2018) A reliable item can be indicated by a Cronbach's alpha score exceeding 0.6. Table 3 also shows the CR and AVE. Based on Hair et al. (2019), CR above 0.7 shows good internal consistency, and as shown in the table, all the numbers related to CR are higher than 0.7. According to Chin (1998) and Jr et al. (2017), to achieve an acceptable level of convergent validity, the AVE of each latent construct should be higher than or equal to 0.50. Based on the table, the AVE of three variables is higher than 0.5, but the AVE of five variables is less than 0.5. Based on for the table, all convergent validity of the construct is considered acceptable.

Measurement items	Factor loading	Cronbach's α	CR	AVE
Economic Responsibility		0.607	0.840	0.331
ECO1	0.628			
ECO2	0.493			
ECO3	0.712			
Legal Responsibility		0.602	0.853	0.412
Leg1	0.538			
Leg2	0.628			
Leg3	0.577			
Ethical Responsibility		0.612	0.880	0.530
Eth1	0.615			
Eth2	0.592			
Eth3	0.555			
Philanthropic Responsibility		0.747	0.933	0.597
Phi1	0.734			
Phi2	0.708			
Phi3	0.674			
Environmental Responsibility		0.683	0.914	0.502
Env1	0.660			
Env2	0.651			
Env3	0.640			
Business Model Innovation		0.736	0.954	0.305
BMI2	0.577			
BMI3	0.530			
BMI4	0.636			
BMI5	0.500			
BMI6	0.597			
BMI7	0.443			
BMI8	0.460			
Competitive Advantage		0.735	0.930	0.462
CA1	0.604			
CA2	0.658			
CA3	0.688			
CA4	0.620			
Firm Performance	0.407	0.776	0.944	0.386
FP1	0.497			
FP2	0.648			
FP3	0.644			
FP4	0.604			
FP5	0.606			
FP6	0.661			

Table 2. Properties of the measurement model (n= 483)

Source: Research data.

In Table 3, the numbers related to the evaluation of (Henseler et al., 2015) is given. Based on (Henseler et al., 2015) HTMT greater than 0.90 indicates lack of discriminant validity. As shown in Table 3, all the numbers related to this rate are lower than this amount.

Table 3. Heterotrait-Monotrait Ratio (HTMT)								
	ECO	LEG	ETH	PHIL	ENV	BMI	CA	FP
ECO								
LEG	0.661							
ETH	0.541	0.457						
PHIL	0.173	0.385	0.405					
ENV	0.464	0.453	0.504	0.389				
BMI	0.696	0.641	0.507	0.211	0.316			
CA	0.632	0.574	0.517	0.126	0.463	0.589		
FP	0.733	0.623	0.503	0.254	0.464	0.480	0.675	

Note. ECO= Economic CSR; LEG= Legal CSR; ETH= Ethical CSR; PHIL= Philanthropic CSR; ENV= Environmental CSR; BMI= Business Model Innovation; CA= Competitive Advantage; FP= Firm Performance

Table 4 and Fig. 3 show the results of SEM.

Table 4. Results of SEM (n= 483)							
Paths	Standardized coefficients	t- value	p- value	Hypotheses			
H1. Economic CSR has direct and significant effects on BMI.	0.337	3.506	0.000	Supported			
H2. Legal CSR has direct and significant effects on BMI.	0.368	3.679	0.000	Supported			
H3. Ethical CSR has direct and significant effects on BMI.	0.258	2.976	0.003	Supported			
H4. Philanthropic CSR has direct and significant effects on BMI.	-0.162	-2.445	0.014	Not Supported			
H5. Environmental CSR has direct and significant effects on BMI.	0.100	1.430	0.153	Not Supported			
H6. BMI has direct and significant effects on CA.	0.816	8.704	0.000	Supported			
H7. CA has direct and significant effects on FP.	0.647	7.120	0.000	Supported			

Note. R-square (R2): BMI (0.662); CA (0.666); FP (0.418).

According to standardized coefficients, t-value and p-value, Table 4 and Figure 3, economic CSR has direct and significant effect on BMI (β = 0.337, p < .01). This result supports hypothesis 1. Legal CSR has a direct and significant effect on BMI (β = 0.368, p < .01). This result supports hypothesis 2. Ethical CSR has a direct and significant effect on BMI (β = 0.258, p < .015). This result supports hypothesis 3. The philanthropic CSR has a significant inverse effect on BMI (β = -0.162, p < .05). This result rejects hypothesis 4. Environmental CSR has a direct effect on BMI, but this effect is not significant (β = 0.100, p > .05). This result reject hypothesis 5. BMI has a direct and significant effect on FP (β = 0.816, p < .01) and as a result hypothesis 6 is supported. Finally, CA has a significant effect on FP (β = 0.647, p < .01), and as a result, hypothesis 7 is supported.

Table 4 shows that R-square (R2) value for BMI is 0.662 which means that CSR dimension could affect the BMI variable by 66.2% while the remaining 33.8% was the influence of other variables which was not included in this study. R-square (R2) value for CA is 0.666, which means that BMI could affect the CA variable by 66.6% while the remaining 33.4% concerns the influence of other variables not included in this study. Finally, R-square (R2) value for FP is 0.418 which means that CA could affect the FP variable by 41.8% while the remaining 58.2% regards the influence of other variables not included in this study.

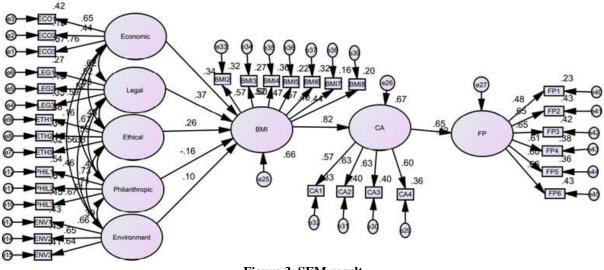


Figure 3. SEM result Source: Research data.

V. DISCUSSION

The objective of this study is to examine the influence of several elements of CSR on BMI, as well as the influence of BMI on CA and, finally, on FP. The framework and outcomes of this have the potential to contribute to the existing body of literature and provide valuable insights for managers across various organizations in formulating their CSR policies. The conclusions of this research provide valuable insights for managers, particularly those overseeing SMEs in Iran, in enhancing their comprehension of CSR. This study examines the components of CSR that have a more pronounced influence on BMI and, subsequently, on a company's CA.

The findings indicate that there is a direct and substantial impact of economic CSR on BMI and CA. It is evident that as organizations prioritize their profitability, they will increasingly devote greater attention to their business models and BMI. The findings presented in this study align with the research achieved by Hu et al. (2020), which shows a significant and direct relationship between CSR and BMI.

Findings suggest that the implementation of legal CSR has a direct and significant impact on BMI and CA. This phenomenon may arise because corporations that comply with societal regulations can garner support from various stakeholders, including the general public, government entities, and even their own employees. Such support can exert a substantial influence on the BMI. However, according to McWilliams and Siegel (2000), directing focus towards CSR matters leads to increased engagement of corporations in research and development activities. This matter has the potential to impact variables such as BMI.

The results confirm that ethical CSR directly and significantly affects BMI. This result is consistent with Halkos and Skouloudis (2018) demonstrating that the commitment of companies to CSR practices has a positive impact on the promotion of innovation.

The findings suggest that implementing philanthropic CSR initiatives does not yield statistically significant and beneficial impacts on BMI. One possible explanation for this phenomenon could be the limited comprehension of charitable obligations within Iranian society, resulting in a distorted perception of CSR in this particular domain. Moreover, it is not uncommon for firms to occasionally err in distinguishing between ethical CSR and charitable CSR. However, it is important to note that the economic conditions in Iran are not conducive to corporations allocating significant resources towards philanthropic CSR initiatives. This lack of financial capacity hinders the understanding and appreciation of the potential benefits that can be derived from adhering to such practices.

The results reveal that environmental CSR does not have positive and significant effects on BMI. The results also show that BMI has positive and significant effects on CA. The primary objective and underlying principle of business is to provide value for many stakeholders, including customers, employees, the business itself, and its financial gains. The adoption of a new business model facilitates the creation of additional value for customers, hence enhancing the competitive standing of the firm. BMI also offers valuable insights into the strategic conduct of corporations and aids in efficiently allocating resources to enhance overall performance.

The results also confirm that BMI directly and significantly affects FP. This result is consistent with research showing that BMI has a direct effect on SMEs' performance (Anwar, 2018; Carayannis et al., 2017; Futterer et al., 2018).

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

The existing research provides evidence for the association between many duties, including economic, legal, and ethical obligations, and BMI. Furthermore, this study provides evidence for the correlation between BMI and CA and FP. Furthermore, the results of this study give empirical evidence that supports the existence of a correlation between CSR dimensions and FP, with this link being mediated by both BMI and CA. These findings contribute to the existing body of literature on the influence of CSR on FP, offering additional insights into this area of research. Moreover, this study examines the influence of individual dimensions of CSR on BMI. Unlike prior studies that have approached CSR as a unified construct when examining its effects on these matters, this study focuses on analyzing the specific dimensions of CSR. Hence, the findings of this study provide a clear understanding of the specific features of CSR that can influence BMI, CA, and FP. Furthermore, despite the extensive body of research on CSR, there is a dearth of empirical studies that have investigated the effects of CSR on BMI, CA, and FP specifically within the context of SMEs, particularly in developing countries. Furthermore, past scholarly investigations examining the correlation between various dimensions of CSR BMI, CA, and FP have consistently incorporated CSR dimensions such as economic, legal, ethical, and philanthropic. Notably, the environmental component has been encompassed within the ethical CSR dimension and has been subject to much discussion. This study acknowledges environmental CSR as the fifth dimension within the broader framework of CSR. In summary, this research distinguishes itself from prior studies on CSR by conducting a survey to examine the correlation between CSR dimensions, BMI, CA, and FP. Furthermore, there is a dearth of studies about the impact of CSR on SMEs. This knowledge gap presents an opportunity for Iranian scholars and other nations facing comparable circumstances to gain a deeper understanding of this matter.

Furthermore, the results of this study offer significant insights for managers in Iran. The present study demonstrated a clear and statistically significant correlation between economic CSR and BMI. This highlights the importance for organizations to allocate a substantial portion of their attention towards maximizing profitability and exploring innovative strategies to generate revenue that differentiates them from their competitors within the market. Furthermore, the findings of this study indicate that CSR initiatives within the legal framework have a noteworthy and favorable impact on BMI. Consequently, it is imperative for corporate managers to prioritize adherence to the legal regulations established by the communities in which they conduct their operations. The findings of this study indicate that it is imperative for company managers to possess knowledge of the legal frameworks governing the countries in which they conduct business, and to adhere to these regulations accordingly. It is important to acknowledge that failure to adhere to the legal regulations of host countries can result in discontent among both the general populace and governmental entities, potentially leading to adverse repercussions for the enterprise. Furthermore, this study examines the impact of ethical CSR on BMI and CA. It is imperative for company managers to adhere to the exploring to demonstrate for company managers and organizations within each culture are more likely to demonstrate increased support for the enterprise.

The principal objective of this study was to explore the correlation between the engagement of Iranian SMEs in CSR initiatives, their BMI, and their CA, with the goal of assessing the impact on the overall performance of these companies. The conclusions of this study indicate that the various elements of CSR (except for philanthropic and environmental aspects) have an impact on BMI. Hence, Iranian SMEs exhibit a notable impact of CSR on BMI. Consequently, based on the findings of this study, it is advisable for SMEs operating in emerging economies such as Iran to prioritize CSR and the interests of their shareholders.

This study is not devoid of drawbacks. The scope of this research is restricted to SMEs, thus requiring cautious interpretation. Extrapolating these findings to larger corporations warrants considerable deliberation. Consequently, there is potential for further investigation into the operations of prominent corporations, particularly inside emerging economies. Furthermore, the present study was carried out in the country of Iran. To enhance the generalizability of the findings, the study review may be undertaken across multiple countries. Iran is classified as an emerging economy, and future investigations could focus on developed economies to do comparative analyses.

Furthermore, this study intended to examine the influence of CSR characteristics on BMI and CA. Hence, it is recommended that future studies investigate these characteristics in relation to other facets of organizational effectiveness. Furthermore, the data for this study was obtained by the administration of a questionnaire. Despite the widespread use of this approach by numerous scholars in the respective domain, using questionnaires has the potential to introduce measurement bias. Consequently, future investigations may endeavor to mitigate potential biases arising from alternative data-gathering methods, such as the acquisition of objective data from independent sources, to effectively overcome this constraint.

VI.

REFERENCES

- Abdulalem, M., & Basri, R. (2018). A conceptual model of corporate social responsibility dimensions, brand image, and customer satisfaction in Malaysian hotel industry. Kasetsart Journal of Social Sciences, 358–364. https://doi.org/10.1016/j.kjss.2018.04.001
- [2]. Abeysekara, N., Wang, H., & Kuruppuarachchi, D. (2019). Effect of supply-chain resilience on firm performance and competitive advantage: A study of the Sri Lankan apparel industry. Business Process Management Journal, 25, 1673–1695. https://doi.org/10.1108/BPMJ-09-2018-0241
- [3]. Ahmadu, A., Harashid, H., & Azlan, A. (2018). Critical factors towards philanthropic dimension of CSR in the Nigerian financial sector: The mediating effects of cultural influence. International Journal of Business and Innovation, 27–48.
- [4]. Anwar, M. (2018). Business model innovation and SMEs performance- Does competitive advantage mediate? International Journal of Innovation Management, 22, 1850057. https://doi.org/10.1142/S1363919618500573
- [5]. Armstrong, J., & Green, K. (2013). Effects of corporate social responsibility and irresponsibility policies. Journal of Business Research, 66, 1922–1927. https://doi.org/10.1016/j.jbusres.2013.02.014
- [6]. Asongu, J. (2007). The history of corporate social responsibility. Journal of Business and Public Policy, 1, 1–21.
- [7]. Babiak, K., & Trendafilova, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. Corporate Social Responsibility and Environmental Management, 11–24. https://doi.org/10.1002/csr.229
- [8]. Bahta, D., Yun, J., Islam, M., & Bikanyi, K. (2021). How does CSR enhance the financial performance of SMEs? The mediating role of firm reputation. Economic Research-Ekonomska Istraživanja, 34, 1428–1451. https://doi.org/10.1080/1331677X.2020.1828130
- [9]. Bapat, D., & Mazumdar, D. (2015). Assessment of business strategy: Implication for Indian banks. Journal of Strategy and Management, 8(4), 306-325. https://doi.org/10.1108/JSMA-06-2014-0047
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. https://doi.org/10.1177/0149206391017001
- Batista, P., Lisboa, J., Augusto, M., & Almeida, F. (2016). Effectiveness of business strategies in Brazilian textile industry. *Revista de Administração (São Paulo)*, 51(2), 225– 239. https://doi.org/10.5700/rausp1236
- [12]. Buhmann, K. (2006). Corporate Social Responsibility What role for law? Some legal aspects of CSR. *The International Journal of Business in Society*, 6(2), 188–202. https://doi.org/10.1108/14720700610655187
- [13]. Carayannis, E., Grigoroudis, E., Sindakis, S., & Walter, C. (2014). Business model innovation as antecedent of sustainable enterprise excellence and resilience. *Journal of the Knowledge Economy*, 5(3), 440–463. https://doi.org/10.1007/s13132-014-0206-7
- [14]. Carayannis, E., Grigoroudis, E., & Stamati, D. (2017). Re-visiting BMI as an enabler of strategic intent and organizational resilience, robustness, and remunerativeness. *Journal of the Knowledge Economy*, 8(2), 407–436. https://doi.org/10.1007/s13132-017-0471-3
- [15]. Carroll, A. (1999). Corporate social responsibility: Evolution of a definitional construct. Business & Society, 38(3), 268–295. https://doi.org/10.1177/000765039903800303
- [16]. Carroll, A. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. https://doi.org/10.1016/0007-6813(91)90005-G
- [17]. Chen, C. (2022). The mediating effect of corporate culture on the relationship between business model innovation and corporate social responsibility: A perspective from small and medium-sized enterprises. *Asia Pacific Management Review*, 27(4), 312–319. https://doi.org/10.1016/j.apmrv.2022.01.001
- [18]. Chin, W. (1998). The partial least squares approach for structural equation modeling., in: Modern Methods for Business Research., Methodology for Business and Management. Lawrence Erlbaum Associates Publishers, Mahwah, NJ, US, 295–336.
- [19]. Cho, H., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555–575. https://doi.org/10.1002/smj.461
- [20]. Clauss, T. (2017). Measuring business model innovation: conceptualization, scale development, and proof of performance. *R&D Management*, 47(3), 385–403. https://doi.org/10.1111/radm.12186
- [21]. Cosenz, F., & Noto, G. (2018). A dynamic business modelling approach to design and experiment new business venture strategies. *Long Range Planning*, 51(1), 127–140. 10.1016/j.lrp.2017.07.001
- [22]. Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334. https://doi.org/10.1007/BF02310555

- [23]. Dentchev, N., Baumgartner, R., Dieleman, H., Jóhannsdóttir, L., Jonker, J., Nyberg, T., Rauter, R., Rosano, M., Snihur, Y., & Tang, X. (2016). Embracing the variety of sustainable business models: Social entrepreneurship, corporate intrapreneurship, creativity, innovation, and other approaches to sustainability challenges. *Journal of Cleaner Production*. 113(1).1-4. 10.1016/j.jclepro.2015.10.130
- [24]. Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E., & Barlow, C. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, 26(5), 597– 608. https://doi.org/10.1002/bse.1939
- [25]. Eyasu, A., & Arefayne, D. (2020). The effect of corporate social responsibility on banks' competitive advantage: Evidence from Ethiopian lion international bank S.C. *Cogent Business and Management*, 7. https://doi.org/10.1080/23311975.2020.1830473
- [26]. Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.1177/002224378101800104
- [27]. Foss, N., & Saebi, T. (2018). Business models and business model innovation: Between wicked and paradigmatic problems. *Long Range Planning*, 51(1), 9–21. https://doi.org/10.1016/j.lrp.2017.07.006
- [28]. Foss, N., & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, 43(1), 200–227. https://doi.org/10.1177/0149206316675
- [29]. Frooman, J. (1997). Socially irresponsible and illegal behavior and shareholder. Business and Society, 36(3), 221–250. https://doi.org/10.1177/0007650397036003
- [30]. Futterer, F., Schmidt, J., & Heidenreich, S. (2018). Effectuation or causation as the key to corporate venture success? Investigating effects of entrepreneurial behaviors on business model innovation and venture performance. *Long Range Planning*, 51(1), 64–81. 10.1016/j.lrp.2017.06.008
- [31]. Galbreath, J., & Shum, P. (2012). Do customer satisfaction and reputation mediate the CSR–FP link? Evidence from Australia. *Australian Journal of Management*, 37(2), 211–229. https://doi.org/10.1177/03128962114329
- [32]. García-Rosell, J., Moisander, J., & Mäkinen, J. (2023). Conceptual framework for understanding the ethical dimension of corporate social responsibility. In New Directions in Art, Fashion, and Wine: Sustainability, Digitalization, and Artification. Edited by Joy, Annamma. (pp.139-156). Chapter: 8. Lexington Books, Rowman & Littlefield.
- [33]. Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401–416. https://doi.org/10.1016/j.jclepro.2018.06.240
- [34]. Ghezzi, A., Cortimiglia, M.N., & Frank, A.G. (2015). Strategy and business model design in dynamic telecommunications industries: A study on Italian mobile network operators. *Technological Forecasting and Social Change*, 90, 346–354. 10.1016/j.techfore.2014.09.006
- [35]. Griffin, J., & Mahon, J. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society*, 36(1), 5–31. https://doi.org/10.1177/000765039703600102
- [36]. Guadagnoli, E., & Velicer, W.F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, *103*(2), 265–275. https://doi.org/10.1037/0033-2909.103.2.265
- [37]. Hair, J., Black, W., Babin, B., & Anderson, R. (2019). Multivariate data analysis, Eighth ed. Hampshire, UK.
- [38]. Hajjar, S. (2018). Statistical analysis: internal-consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods*, 6(1), 27–38.
- [39]. Halkos, G., & Skouloudis, A. (2018). Corporate social responsibility and innovative capacity: Intersection in a macro-level perspective. *Journal of Cleaner Production*, 182(1), 291–300. https://doi.org/10.1016/j.jclepro.2018.02.022
- [40]. Hamid, S., Riaz, Z., & Azeem, S. (2020). Carroll's dimensions and CSR disclosure: empirical evidence from Pakistan. Corporate Governance: *The International Journal of Business in Society*, 20, 365–381. https://doi.org/10.1108/CG-10-2018-0317
- [41]. Han, H., Yu, J., Lee, K., & Baek, H. (2020). Impact of corporate social responsibilities on customer responses and brand choices. *Journal of Travel and Tourism Marketing*. 37, 302–316. https://doi.org/10.1080/10548408.2020.1746731
- [42]. Handoko, B., Aryanto, R., & So, I. (2015). The impact of enterprise resources system and supply chain practices on competitive advantage and firm performance: Case of Indonesian companies. *Procedia Computer Science*, 72, 122–128. https://doi.org/10.1016/j.procs.2015.12.112

- [43]. Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115– 135. https://doi.org/10.1007/s11747-014-0403-8
- [44]. Hu, B., Zhang, T., & Yan, S. (2020). How corporate social responsibility influences business model innovation: The mediating role of organizational legitimacy. *Sustainability*, 2020, 12(7), 2667; https://doi.org/10.3390/su12072667
- [45]. Jamali, D., & Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, 20, 32–61. https://doi.org/10.1111/ijmr.12112
- [46]. Jamali, D., & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics* 72, 243–262. https://doi.org/10.1007/s10551-006-9168-4
- [47]. Jr, J., Matthews, L., Matthews, R., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1, 107. https://doi.org/10.1504/IJMDA.2017.087624
- [48]. Kang, K., Lee, S., & Huh, C. (2010). Impacts of positive and negative corporate social responsibility activities on company performance in the hospitality industry. *International Journal of Hospitality Management*, 29(1):72-82. DOI:10.1016/j.ijhm.2009.05.006
- [49]. Key, S., & Popkin, S. (1998). Integrating ethics into the strategic management process: Doing well by doing good. *Management Decision*, 36(5–6), 331–338. DOI:10.1108/00251749810220531
- [50]. Kimani, E. (2015). Role of social media marketing on organisational performance in Kenya. *Journal of Business and Management*, 17(1), 101–105.
- [51]. Kline, R. (2015). Principles and practice of structural equation modeling. Guilford publications.
- [52]. Lambooy, T. (2014). Legal aspects of corporate social responsibility. *Utrecht Journal of International and European Law*, 30(78), 1-6. DOI:10.5334/ujiel.bz
- [53]. Le Thanh, T., Ngo, H., & Aureliano-Silva, L. (2021). Contribution of corporate social responsibility on SMEs' performance in an emerging market – The mediating roles of brand trust and brand loyalty. *International Journal of Emerging Markets*. https://doi.org/10.1108/IJOEM-12-2020-1516
- [54]. Lu, J., Ren, L., Zhang, C., Rong, D., Ahmed, R., & Streimikis, J. (2020). Modified Carroll's pyramid of corporate social responsibility to enhance organizational performance of SMEs industry. *Journal of Cleaner Production*, 271, 122456. https://doi.org/10.1016/j.jclepro.2020.122456
- [55]. Magretta, J. (2002). Why business models matter. Harvard Business Review. 80. 86-92.
- [56]. Martinez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of Cleaner Production*, 2374–2383. http://dx.doi.org/10.1016/j.jclepro.2016.11.038
- [57]. Mazurkiewicz, P. (2004). Corporate environmental responsibility: Is a common CSR framework possible. *World Bank*, 42183, 1–18.
- [58]. McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic Management Journal*, 21(5), 603–609. https://www.jstor.org/stable/3094143
- [59]. MO, S. (2019). Exploring the corporate social responsibility dimensions that affect customer satisfaction and loyalty. *KDI School of Public Policy and Management*. Masther thesis.
- [60]. Ngo, Q., & Le, T. (2023). Role of corporate social responsibility on firm performance in emerging economy: The mediating role of access to finance and business model innovation. *Cogent Business and Management*, 10(2). https://doi.org/10.1080/23311975.2023.2232585
- [61]. Nguyen, N., Nguyen, N., & Thanh Hoai, T. (2021). Ethical leadership, corporate social responsibility, firm reputation, and firm performance: A serial mediation model. Heliyon 7, e06809. https://doi.org/10.1016/j.heliyon.2021.e06809
- [62]. Nyuur, R., Ofori, D., & Amponsah, M. (2019). Corporate social responsibility and competitive advantage: A developing country perspective. *Thunderbird International Business Review*, 61, 551– 564. https://doi.org/10.1002/tie.22065
- [63]. Porter, M. (2012). Competitive strategy: Techniques for analyzing industries and competitors. *Revista Inteligência Competitiva*, 2(2). https://doi.org/10.24883/IberoamericanIC.v2i2.38
- [64]. Porter, M., & Kramer, M. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84 (12), 78–92.
- [65]. Rashid, N., Rahman, N., & Khalid, S. (2014). Environmental corporate social responsibility (ECSR) as a strategic marketing initiatives. Procedia - Social and Behavioral Sciences, 130, 499–508. 130. DOI:10.1016/j.sbspro.2014.04.058

- [66]. Remane, G., Hanelt, A., Tesch, J., & Kolbe, L. (2017). The business model pattern database A tool for systematic business model innovation. *International Journal of Innovation Management*, 21. https://doi.org/10.1142/S1363919617500049
- [67]. Rexhepi, G., Kurtishi, S., & Bexheti, G. (2013). Corporate social responsibility (CSR) and innovation -The drivers of business growth?, in: Social and Behavioral Sciences. Presented at the 2nd International Conference on Technology and Innovation Management.
- [68]. Rhou, Y., Singal, M., & Koh, Y. (2016). CSR and financial performance: The role of CSR awareness in the restaurant industry. *International Journal of Hospitality Management*, 57, 30–39. https://doi.org/10.1016/j.ijhm.2016.05.007
- [69]. Rodríguez, L., Montiel, I., & Ozuna, T. (2013). A conceptualization of how firms engage in corporate responsibility based on country risk. *Business & Society*, 53, 625–651. https://doi.org/10.1177/0007650312475123
- [70]. Roman, R., Hayibor, S., & Agle, B. (1999). The relationship between social performance and financial performance'. *Business and Society*, 38(1), 109–125. http://dx.doi.org/10.1177/000765039903800105
- [71]. Saebi, T., Lien, L., & Foss, N. (2017). What drives business model adaptation? The impact of opportunities, threats and strategic orientation. *Long Range Planning*, 50(5), 567–581. https://doi.org/10.1016/j.lrp.2016.06.006
- [72]. Saeidi, S., Sofian, S., Saeidi, P., Saeidi, S., & Saaeidi, S. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68, 341–350. https://doi.org/10.1016/j.jbusres.2014.06.024
- [73]. Schneider, S., & Spieth, P. (2013). Business model innovation: Towards an integrated future research agenda. *International Journal of Innovation Management*, 17(1), 1340001. DOI:10.1142/S136391961340001X
- [74]. Smirnova, Y. (2012). Perceptions of corporate social responsibility in Kazakhstan. Social Responsibility Journal, 8, 404–417. https://doi.org/10.1108/17471111211247974
- [75]. Songling, Y., Ishtiaq, M., & Anwar, M. (2018). Enterprise risk management practices and firm performance, the mediating role of competitive advantage and the moderating role of financial literacy. *Journal of Risk and Financial Management*, 11, 35. https://doi.org/10.3390/jrfm11030035
- [76]. Sun, J., Yao, M., Zhang, W., Chen, Y., & Liu, Y. (2016). Entrepreneurial environment, marketoriented strategy, and entrepreneurial performance: A study of Chinese automobile firms. *Internet Research*, 26(2):546-562. DOI:10.1108/IntR-05-2015-0138
- [77]. Uddin, M., Hassan, Md., & Tarique, K. (2008). Three dimensional aspects of corporate social responsibility. *Daffodil International University Journal of Business and Economics*, 199–212.
- [78]. Waddock, S., & Graves, S. (1997). The corporate social performance Financial performance link. Strategic Management Journal, 18(4), 303–320. https://doi.org/10.1002/(SICI)1097-0266(199704)18:43.0.CO;2-G
- [79]. Ye, N., Kueh, T., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. *Journal of Cleaner Production*, 272:122679. DOI:10.1016/j.jclepro.2020.122679
- [80]. Yılmazdogan, O., Secilmis, C., & Cicek, D. (2015). The effect of corporate social responsibility (CSR)
 Perception on tourism students' intention to work in sector. *Procedia Economics and Finance*, 23, 1340–1346. https://doi.org/10.1016/S2212-5671(15)00321-4
- [81]. Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building social business models: Lessons from the Grameen experience. *Long Range Planning*, 43(2-3), 308–325.
- [82]. Zhao, Z., Meng, F., He, Y., & Gu, Z. (2019). The influence of corporate social responsibility on competitive advantage with multiple mediations from social capital and dynamic capabilities. *Sustainability (Switzerland)*, 11. https://doi.org/10.3390/su11010218
- [83]. Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, *37*, 1019–1042. https://doi.org/10.1177/0149206311406265
- [84]. M Ozaki, Y. Adachi, Y. Iwahori, and N. Ishii, Application of fuzzy theory to writer recognition of Chinese characters, International Journal of Modelling and Simulation, 18(2), 1998, 112-116.

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