



Corporate social responsibility, job creation, innovation and economic growth: Evidence from Tunisian firms

Soumaya Jemmali¹

Tarek Sadraoui²

Mohamed Ali Azouzi³



(✉ Corresponding Author)

¹Faculty of Management Sfax-Tunisia, University of Sfax, Tunisia.

¹Email: soumaya_mahdia@hotmail.com

²Department of Economics, College of Business University of Imam Mouhamed Ibn Saoud, Saudi Arabia.

²Email: tsadrawi@imamu.edu.sa

³Institute of Higher Commercial Studies of Sfax, University of Sfax Sidi Mansour-Sfax- 3061, Tunisia.

³Email: mohamed_azouzi@yahoo.fr

Abstract

The aim of this article is to show, theoretically and empirically, the importance of the social responsibility of national companies in the creation of wealth. The aim is to explain the indirect relationship between economic growth and social responsibility. This relationship shows the effect of socially responsible investment on creativity, job creation, the innovation effort of companies and, subsequently, on economic growth. Analysis of the data collected revealed the importance of corporate social responsibility in explaining the positive variation in sectoral GDP. Empirical analysis of the relationship between corporate social responsibility and economic growth shows the role of socially responsible investment in explaining the wealth of nations. The social performance of companies has a positive impact on their levels of competitiveness, profitability, job creation and innovation. But it is negatively associated with value added. The analysis of economic growth through the integration of social responsibility is consistent with that of endogenous growth theory, which shows the importance of organisational learning (Through practice) as a factor in economic growth. From this point of view, the contribution of this study is to encourage Tunisian companies to invest in socially responsible projects and actions that create wealth.

Keywords: Added value, Bayesian networks, Creativity, Innovation, Job creation, Productivity, Social responsibility.

JEL Classification: M12; O4; O31; J21; L52.

Citation | Jemmali, S., Sadraoui, T., & Azouzi, M. A. (2026). Corporate social responsibility, job creation, innovation and economic growth: Evidence from Tunisian firms. *Asian Journal of Economics and Empirical Research*, 13(2), 1–17. 10.20448/ajeer.v13i2.8908

History:

Received: 15 May 2026

Revised: 19 June 2026

Accepted: 25 June 2026

Published: 3 July 2026

Licensed: This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/)

Publisher: Asian Online Journal Publishing Group

Funding: This work was supported and funded by the Deanship of Scientific Research at Imam Mohammad Ibn Saud Islamic University (IMSIU) (grant number IMSIU-DDRSP2604).

Institutional Review Board Statement: The study involved minimal risk and followed ethical guidelines for social science fieldwork. Formal approval from an Institutional Review Board was not required under the policies of the Institute for Research Ethics Committee of the [University of Sfax, Tunisia]. Informed verbal consent was obtained from all participants, and all data were anonymized to protect participant confidentiality.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

Contents

1. Introduction	2
2. Literature Review and Hypothesis	2
3. Methodology	8
4. Data Analysis Methods	11
5. Analysis and Interpretation of Results	11
6. Conclusion	14
References	15

Contribution of this paper to the literature

The theoretical analysis presented highlights the positive effect of corporate social responsibility on companies' overall performance and their contribution to the economic growth of their nations. Indeed, a company's social responsibility implies the simultaneous fulfilment of its economic, legal, and ethical responsibilities.

1. Introduction

In recent years, several researchers have focused on corporate social responsibility (CSR) practices associated with the business world and have considered CSR to be a useful area of research for explaining the divergence in levels of business performance. The perception of CSR has developed over the past 30 years to reside in positive and significant dynamic features, including firm-specific characteristics (Famiyeh, 2017). Moir (2001) found that socially responsible investments signal the commitment and contribution of national firms to economic growth. These investments are intended to improve the quality of life of employees and their families in general. The author adds that social responsibility indicates how organisations and companies connect with customers, suppliers, retailers, and other stakeholders. It is about creating wealth (added value) for the firm's various partners. Environmental analysis shows how business activities emphasise the economic and social role of national companies. Branco and Rodrigues (2006) state that the social responsibility of companies means their contributions to economic growth through respect for the well-being of employees (job stability, job satisfaction), managers, and other stakeholders (creation and equitable distribution of wealth). Researchers have classified CSR practices into three categories on the basis of firms' obligations: external, internal, and environmental. Firstly, companies' internal obligations take into account responsible practices in favour of employees, including working conditions, job security, and general well-being in order to improve their quality of life. Practices include training programmes, participation in decision-making, an appropriate workplace environment, work-life balance, corporate governance practices, and independent audits (Ditlev-Simonsen, 2010). Secondly, the external obligations of companies refer to assistance to businesses and local communities. Finally, corporate environmental responsibility includes waste reduction, energy and water use efficiency, recycling, monitoring, and reuse of by-products (Baughn, Bodie, & McIntosh, 2007). Previous studies in developing countries have indicated how corporate social responsibility initiatives and practices have contributed to solving many problems, such as improving labour rights, combating child labour, solving unemployment problems, and successfully reducing environmental pollution (Abbas, Raza, Nurunnabi, Minai, & Bano, 2019; Dobers & Halme, 2009; Hodges, 2015; Parveen, Rao, & Malik, 2016). In other words, corporate social responsibility practices reflect their contributions to the wealth creation of their nations. Carroll (1979) defined CSR using four dimensions that encompass the range of responsibilities that companies have to society. These include the economic, legal, ethical, and discretionary responsibilities of corporate performance. Economic responsibilities relate to the underlying objective of the business to earn a profit. Legal responsibilities relate to compliance with the law in relation to business activities. Economic and legal responsibilities must also be accompanied by ethical responsibilities. Carroll (2000) stated that "ethical responsibilities encompass Emotional Intelligence, Social Responsibility, Tunisian Business Innovation Effort and Economic Growth activities, practices, policies or behaviours that are expected or prohibited by members of society (are not codified in laws)". Discretionary responsibility refers to voluntary activities. Corporate social responsibility involves the simultaneous fulfilment of all four of the above responsibilities. It is a commitment to third parties by the management of a company (Jones, 1995; Longo, Mura, & Bonoli, 2005; Williamson, Lynch-Wood, & Ramsay, 2006). Companies become more attractive to employees, customers, suppliers, communities, and investors (Cowe, 2003). These studies have confirmed the positive effect of social responsibility practices on the competitiveness and productivity of companies. They affirm the indirect effect of the level of social responsibility of national companies on the economic growth of their countries. Companies engage in socially responsible investment to signal their performance and wealth creation. They use their decision-making levers to improve their reputations and levels of competitiveness (Demirbag, Wood, Makhmadshoev, & Rymkevich, 2017; Laufer, 2003; Yoon, Gürhan-Canli, & Schwarz, 2006). Companies have a social responsibility to return and share their values with society. By satisfying the needs of stakeholders, national firms can gain wealth-creating competitive advantages (Xie, Jia, Meng, & Li, 2017). Managers who are aware of changes in their environment must devise new techniques that will enable them to win the competitive war, especially on an international scale. Involvement in socially responsible activities is part of managers' innovation drive. This innovation effort enables an economy to be covered against unfavourable developments and reassures it of the continuity of its growth. Based on this observation, the aim of this study is to integrate the social responsibility of national companies into the analysis of the determinants of our country's economic growth: our aim is to show the effect of the dimensions of social responsibility (economic, legal and ethical) in guiding the investment choices (innovations and job creation) of companies and improving the competitiveness of the national economy.

2. Literature Review and Hypothesis

2.1. Corporate Social Responsibility (CSR)

Corporate social responsibility (CSR) is often seen as a novelty of the last ten years. Votaw and Sethi (1973) defined social responsibility as "a shiny term, which means something, but not always the same thing to everyone". In its 2001 Green Paper, the European Commission defined CSR as "the integration by enterprises of social, environmental and economic concerns in their business operations and in their relations with their stakeholders on a voluntary basis". In 2011, it redefined CSR as "the responsibility of companies for the effects they have on society". Bowen (1953) for his part, defined CSR as "Corporate social responsibility refers to the obligation of businessmen to implement policies, make decisions and follow courses of action that meet the objectives and values considered desirable by our society". According to Epstein (1987) "corporate social responsibility consists in obtaining results from organisational decisions concerning specific problems that have beneficial rather than adverse effects on the company's stakeholders". In other words, corporate social responsibility refers to the consideration by companies on a voluntary basis of social and environmental concerns in their investment activities

and their interactions with other actors called "stakeholders" Cowton and Sandberg (2012) defined these investments as follows "Socially responsible investing (SRI) - sometimes called "ethical investing" - refers to the practice of integrating social, environmental or ethical criteria into financial investment decisions. In short, corporate social responsibility (CSR) is a specific form of investment that focuses primarily on social, environmental, ethical and corporate governance criteria. It involves integrating extra-financial factors into corporate strategies. According to Capron and Quairel (2009), there are three main concepts of CSR.

- An ethical approach inherited from nineteenth-century corporate paternalism: this is manifested exclusively on a voluntary basis, mainly through philanthropic and sponsorship actions, which correct and repair the damage caused by the system and economic activity.
- A utilitarian strategic approach also emerged in the USA in the 1970s and reached its full bloom in the 1980s and 1990s. Initially, this approach sought to establish a supposedly positive link between the company's social performance and its economic performance, so that the company had to take care of its brand image in order to satisfy the expectations of its stakeholders (customers, employees, suppliers, media, owners, etc.). In fact, this is a very widespread concept in Europe.
- A political conception in the 1990s, particularly in Western European countries, which focuses on the company's integration into society and its important contribution to the common good, such as the integration of social and environmental objectives into the company's core business and management, which generates a high level of involvement from the entire organisation; actions are aimed more at anticipation and prevention than at repair; voluntary approaches are framed by substantial, universally recognised standards.

2.2. Hypothesis

2.2.1. Corporate Social Responsibility, Creativity, and Job Creation

Most economists agree that creativity is the driving force behind innovation. Amabile, Barsade, Mueller, and Staw (2005) defined creativity as an intra-individual cognitive process favouring the production of new and useful ideas. The literature on organisational behaviour notes that creativity emerges through the link between individual efforts and environmental factors. Research into the individual traits of creativity has so far associated a number of personality characteristics with the creative potential of individuals. These range from human and intellectual capital to relational and social capital (Kale, Singh, & Perlmutter, 2000; Nahapiet & Ghoshal, 1998). The importance of creativity as a potential source of wealth and job creation requires economic agents to be aware of its explanatory factors. This means looking for explanatory variables (from human and intellectual capital to relational and social capital) for differences in the level of creativity between companies or regions, including the informational continuum of corporate social responsibility practices. Sen, Bhattacharya, and Korschun (2006) studied the role of corporate social responsibility in creating value for stakeholders. This study confirms that stakeholders who are aware of a company's real humanitarian activity have positive attitudes towards the company, namely: making more brand purchases and deciding to invest more in the company (human and financial capital). Consequently, companies' efforts to improve working conditions by increasing the involvement of human resources in decision-making ensure growth in employee productivity and creativity. Employee satisfaction encourages them to be more creative and involved in achieving the objectives set by their superiors. This involvement is conducive to the implementation of innovative projects that create jobs and value. Ali, Rehman, Yilmaz, Nazir, and Ali (2010) found that corporate social responsibility practices have a positive impact on the level of organisational commitment. Increasing the level of employee commitment improves the level of performance and creativity of national firms. Organisations engaging in social activities such as employee well-being (atmosphere, trust, fairness, delegation of decision-making powers) in order to stimulate their creativity. The creativity of employees positively affects the performance of their firms and guarantees the creation of wealth. It means setting up new projects that create jobs and wealth. In other words, the informational continuum of social responsibility practices ensures the attractiveness of qualified, creative employees capable of realising growth opportunities for national companies. These practices are key success factors for firms and nations. Moorthy, Seetharaman, Mohamed, Gopalan, and San (2017) have demonstrated the positive effect of corporate social responsibility on a company's ability to create new jobs. The responsibility to provide benefits such as a quality working environment, job security, and training programmes helps companies to attract skilled employees. This recruitment capacity is conducive to the implementation of innovative strategies that create value for the various partners. It also facilitates the implementation of innovative projects. These types of investments ensure the competitiveness of national firms and signal their contributions to economic growth. Razali, Shafie, and Mohd-Sanusi (2018) postulated that investment in socially responsible projects creates wealth for all stakeholders. Adherence to the principles of responsibility will have beneficial outcomes for businesses, namely: reducing complaints, operational risks, access to existing and new markets, and skills acquisition. New skills are at the root of employee creativity and productivity. They help employees to succeed in projects that create wealth. In addition, the 124 Emotional Intelligence, Social Responsibility, Tunisian Business Innovation and Economic Growth training programmes minimise the feeling of reluctance to change among (potential or existing) employees. They make talent more attractive on the labour market. These talents are aware of the economic and social role of their organisations. They are encouraged to work in the interests of all stakeholders. This awareness is essential for the creation of added value. Crane, Matten, Glozer, and Spence (2019) stated that a company that strives to improve the quality of social life benefits from the results of its actions. The direct benefits of corporate social responsibility include value creation, improved access to external resources, a motivated workforce, stakeholder trust, and enhanced public image. These benefits reflect the contribution of domestic firms to economic growth. Ease of access to external finance helps companies to find the right workforce for innovative investment projects. These risky projects can generate value as long as the right employee profile is found. Hence, social responsibility practices are important determinants of the growth of companies and nations.

H: Social responsibility practices are important determinants of the growth of companies and nations (creation of new jobs).

2.2.2. Corporate Social Responsibility, Added Value, and Job Creation

The creation of economic value by a company is dependent on its social positioning and the development of its capital (Husted, Jamali, & Saffar, 2015). The shared value model has encouraged companies to consider social needs to discover new market opportunities (Ghasemi, Shafeiepour, Aslani, & Barvayeh, 2014; Porter & Kramer, 2011). Kramer and Pfitzer (2016) have argued that a company's value creation is conditioned by its capacity for innovation, collaboration, and its social capital (reputation). In this context, social responsibility practices are seen as key factors in creating value for the firm's various stakeholders (including the creation of new jobs). Naqvi, Shah, and Azam (2013) have highlighted the positive impact of corporate social responsibility on brand image. They found that social responsibility practices are positively correlated with consumer perception. Creating value for consumers positively affects the growth prospects of national firms. Companies that are aware of their social roles seek to satisfy their customers by offering a range of innovative products. By diversifying and innovating their product range, companies can increase their market share and improve their financial performance. Financial performance (creation of value for the investor) improves the financial capacity of national firms. The availability of low-cost financing helps them to seize opportunities for external growth. Development and growth opportunities have a positive impact on job creation. This implies an indirect relationship between the social responsibility of national firms and the economic growth of countries. Baines and Shi (2015) have shown that shared value is the key to fuelling the growth of companies and countries. The notion of shared value encourages companies to play their social roles (Dunphy, Griffiths, & Benn, 2007; Galbreath, 2009). They are obliged to signal their social performance through compliance with standards, employee satisfaction, and the creation of new products. A positive signal is useful for winning the competitiveness war in the various markets (goods and services, labour, and financial). The creation of new jobs is affected by the firm's productive capacity (added value) and its reputation on the labour market. Companies' compliance with the principles of social responsibility facilitates their access to existing markets. Better access to markets facilitates the acquisition of production factors (technology, innovation, human capital). The availability of key success factors helps companies to create added value. It becomes capable of participating in economic growth through the creation of new jobs. Lins, Servaes, and Tamayo (2017) found that companies with strong social responsibility achieved higher commercial profitability (growth and sales per employee). They suggest that strengthening the trust between the company, investors and stakeholders positively affects its ability to create wealth. In other words, the trust established through social responsibility practices enables national companies to attract the best talent on the labour market. Potential employees who are aware of the social role played by companies are more motivated to become partners. They have an interest in investing their human capital in companies that meet their needs. Motivating these employees improves the feeling of belonging, productivity, and ensures the creation of value. The commitment and motivation of competent employees ensure the productivity and competitiveness of national firms. This implies that compliance with social standards helps companies to participate in the economic growth of their countries. Kim, Hur, and Yeo (2019) have shown that a company's social performance has a positive impact on its financial performance. The authors attest that social performance is a fundamental variable in assessing the value of firms. Social responsibility practices are seen as guarantees that companies will generate and share future profits. This assurance motivates investors to participate in the financing of these types of companies. It improves their financial capacity and reduces the costs of external financing. Easy access to finance enables companies to invest in innovative, value-creating projects. These investment projects ensure the competitiveness of national firms. This competitiveness guarantees the creation of new jobs and the contribution to the wealth of nations. Su, Peng, Tan, and Cheung (2020) studied the effect of firms' levels of social responsibility on their financial performance. The results showed that social responsibility practices positively affect financial performance. Firms gain more by investing in both commercial and financial stakeholders. The information content of socially responsible investments attracts investors (human and financial capital), improves competitive positioning, and creates value. Sharing this value equitably minimises conflicts of interest between the various stakeholders. Minimising conflicts reduces the costs of distributing value (agency and transaction costs). This cost saving is useful for national companies in their external growth operations. The success of an external growth operation is positively correlated with the creation of new jobs. Job creation is a positive sign of the contribution made by national firms to the economic growth of their countries. This is an indirect relationship between the social responsibility of national firms and the economic growth of their countries. In light of this theoretical framework, we put forward the following hypothesis.

H₁: Socially responsible investments create added value (creation of new jobs).

2.2.3. Corporate Social Responsibility, Competitive Advantage, and Job Creation

Corporate social responsibility must be linked to a company's regular activities in order to improve its image and reputation. A better reputation is conditioned by the level of satisfaction of the firm's customers and other partners (including employees). Integrating the principles of social responsibility into corporate strategies helps to improve relations with customers, local communities, and partners (Chih, Chih, & Chen, 2010). These principles add value to the activities of a given firm and distinguish it from its competitors (Gupta, Das, & Dutta, 2013). Indeed, social performance facilitates access to capital, reduces the costs of cooperation with partners, improves the potential to attract the best workers, reduces business risks, and increases stability and development. Consequently, companies try to contribute to economic growth through their social commitments in order to build a positive reputation. Torugsa, O'Donohue, and Hecker (2012) added that a company's social commitment is a major determinant of a positive reputation and an advantage in distinguishing itself from its competitors. In other words, social performance is a source of competitive advantage. It helps companies to position themselves better in different markets (including the labour market). Easy access to the labour market implies the availability of productive and creative human capital. This creativity is positively correlated with national firms' efforts to innovate and create jobs. Innovative projects drive micro and macro-economic growth. They guarantee competitiveness and the creation of added value for any economy. Maráková, Wolak-Tuzimek, and Gúčík (2021) have argued that social responsibility actions humanise the company and move it away from a focus on profit towards the objective of creating value for all stakeholders. In this respect, it can serve as an emotional bonding factor for employees towards their companies (Zulfiqar, Sadaf, Popp, Vveinhardt, & Máté, 2019). This sense of

belonging improves employees' level of commitment, productivity, and motivation. They are insured against job instability and work in the interests of their organisations. They seek out new ideas, methods, and products capable of improving the competitiveness of their firms. This competitiveness, based on the principles of social responsibility, helps national companies to contribute to the creation of wealth in their nations. Gangi, Mustilli, Varrone, and Daniele (2018) have postulated that corporate social responsibility is a practice of accumulating knowledge and experience. Thus, knowledge of social responsibility principles by internal stakeholders positively affects the implementation of effective practices for external stakeholders. The choice of social responsibility practices depends on the target population (employees and/or potential investors) and the organisation's growth needs. In other words, social responsibility is a decision-making lever that makes it possible to signal the company's positive image in order to procure factors of production (capital and/or labour). A set of organisational decisions enabling the development of a competitive advantage. This competitive advantage helps companies to contribute to the creation of added value for the various stakeholders (including job creation). Zhang, Oo, and Lim (2020) showed the positive effect of disclosing social actions on a company's reputation. The authors demonstrated that companies can signal their image via extra-financial information (social actions). The evidence shows that a consistent corporate social responsibility approach mitigates reputational damage and plays an insurance-like or value-protecting role. Companies opt for socially responsible investment to protect partnership value. Protecting the value created is a competitive advantage that encourages potential partners to participate in new investment opportunities. These investment projects create jobs and wealth for all partners. This implies an indirect link between the social responsibility of national companies and economic growth. Amoako and Dartey-Baah (2020) found that involvement in social actions enables companies to understand society. Understanding customer requirements improves the competitiveness of national firms by offering an appropriate range of innovative products. This competitiveness is a determining factor in growth. It facilitates access to key resources and skills. Access to skilled human capital is a competitive advantage that helps companies to undertake new wealth-creating projects. The aim of job creation is to realise growth opportunities for companies and to signal their contribution to the economic growth of their countries. Karyawati, Ibrahim, and Kartini (2020) have pointed out that the social performance of firms positively affects the valuation of the firm by investors on the financial market. The overvaluation of companies is linked to the information content of social responsibility practices. A positive reputation is favourable to the growth and development of firms. It provides easy access to external financing. These low-cost methods of financing have a positive effect on the creative and productive potential of national firms. They are more motivated to make specific investment choices (innovations) that improve their competitiveness. However, these investment choices require the acquisition of specific knowledge and skills. A good reputation, through respect for employees' needs, facilitates the accumulation of key skills. This is why corporate social responsibility practices have a positive impact on firms' competitiveness. They are seen as a competitive advantage that signals the contribution of national firms to the economic growth of their countries. These studies show that corporate social responsibility has a positive influence on the competitiveness and employability of national firms. Hence, the following hypothesis.

H₃: Social responsibility practices explain the competitive advantage of firms (creation of new jobs).

2.2.4. Corporate Social Responsibility, Product Innovation, and Economic Growth

Companies' high level of social responsibility has a positive influence on their innovation efforts and strengthens their relationships with stakeholders (Avetisyan & Ferrary, 2013). These types of organisation listen to the demands of their stakeholders. They are able to put in place innovative products that are in line with society's current challenges. In return, stakeholders are involved in the organisation's projects. This involvement has a positive impact on their creativity. From this point of view, we believe that the more organisations open up their strategy to their stakeholders, the more they contribute to the economic growth of their countries. This contribution is materialised by the creation of innovative, competitive, and value-creating products. Product innovation conditional on compliance with social standards ensures economic growth. Lu, Ren, Lin, and He (2016) found that investments based on environmental impact enable product differentiation and improve internationalisation opportunities for national firms. The creation of new green products that comply with ecological standards improves firms' commercial performance. Green consumers are more active, improving firms' performance and reputation. Product innovation based on ecological standards ensures wealth creation for the company and its partners. It signals the participation of the national firm in the sustainable growth of its country. Marin, Ruiz, and Rubio (2009) have argued that whenever organisations increase their social responsibility activities by focusing on the needs of their customers, they succeed in building customer loyalty. The creation of new products or services is part of the innovation effort of national firms. This innovation effort, demanded by social responsibility, creates value for the national company and its nation. It enables them to win the competitive war and contribute to their country's economic growth. Malik (2015) have shown that a high concentration on high technology and excessive consumption does not create wealth. It implies a huge amount of waste and a high demand for energy. The combined effects of technology and energy consumption have a negative impact on the environment. Irresponsible environmental behaviour by companies can be disastrous for their financial and commercial operations. In order to achieve long-term business development, companies must comply with environmental standards. They need to design methods and products that comply with ecological standards. This innovation effort ensures the creation of wealth and the economic growth of countries. Li, Zhao, and Zhang (2020) have indicated that companies with a strong culture are more engaged with their communities and are more protected against the economic and financial consequences of the COVID-19 pandemic. Social responsibility is a duty of companies not to harm society. In other words, the company must take care of the environment and the well-being of its stakeholders in its innovation operations. It must find products that are adapted to the needs of its stakeholders. Designing products to meet customer needs depends on how the company interacts with its environment. It is a response to environmental requirements. Consumer acceptance of new products has a positive impact on the growth prospects of national firms and their countries. Hong, Yang, and Rim (2020) argued that state-owned enterprises and large corporations make responsible efforts to comply with rules, laws and regulations in order to preserve the economic growth of nations. Active cooperation between government authorities and

business representatives is necessary to achieve sustainable development goals. In other words, companies influenced by environmental regulations are encouraged to create environmentally friendly products that create wealth. The aim of these environmental regulations is to encourage eco-innovation by businesses. This ecological innovation guarantees the economic growth of companies and nations. Padilla-Lozano and Collazzo (2021) have demonstrated that the implementation of socially responsible practices, through the creation of innovative ecological products, are innovation efforts that enable national companies to be competitive and successful. These practices are an investment that ensures the company's long-term future. They are ethical and responsible organisational behaviour that maximises wealth for stakeholders as a whole. These investments signal the national firm's contribution to the creation of wealth and economic growth in its country. Simsek and Ozturk (2021) have pointed out that companies are increasingly aware of their social role. Environmental risks can only be ignored through innovative products that meet the needs of stakeholders. Compliance with ecological standards and better allocation of resources help companies in their risk management processes. Offering an innovative product of good quality at a lower cost reduces the risk of loss of value. Integrating the social dimension into research and development programmes facilitates the creation of new competitive products. These social products enable the company to improve its brand image. They are seen as an assurance of wealth creation. They signal the contribution of firms to the sustainable development and economic growth of their nations. This theoretical development proves the existence of a positive relationship between corporate social responsibility, product innovation and the economic growth of their countries. Hence the following hypothesis.

H₁: Social responsibility encourages national companies to participate in growth through the creation of new products.

2.2.5. Corporate Social Responsibility, Process Innovation and Economic Growth

Process innovations are the implementation of new production processes, new distribution methods and promotional activities for the goods and/or services offered by a company (Carboni & Russu, 2018; OECD, 2005). The aim of these new working methods is to ensure the creation of value for the firm's partners. This value creation reflects the company's social responsibility. Thus, Social Responsibility is a firm's commitment to maximising long-term economic, societal and environmental good through business practices, policies and resources (Currás-Pérez, Dolz-Dolz, Miquel-Romero, & Sánchez-García, 2018). In this sense of the idea, awareness of the social role drives national firms to renew their production and distribution processes. The creation of new working methods (including knowledge management) forms part of the practices of socially responsible companies (Hernández, Martínez, & Rodríguez, 2019). These practices ensure a better allocation of resources (human capital), improve productivity and wealth creation. They signal the contribution of national firms to the creation of social welfare and economic growth. Blok, Hoffmans, and Wubben (2015) have affirmed the positive effect of integrating responsibility into companies' innovation processes on their values. Designing new methods in line with the needs of partners helps to improve the reputation of national firms. This reputation facilitates access to different competitive markets. In fact, easy access to financial markets improves firms' financial capacity. This ability to acquire resources at low cost implies the creation of value. A fair distribution of this value improves social performance. It indicates the level of contribution of the national firm to the economic growth of its country. Economic growth is therefore explained by the level of responsible innovation (including better working conditions and methods). Severo, De Guimarães, and Dorion (2017) pointed out that corporate social responsibility affects firms' strategic choices. It forces them to change the way they think about products, technologies, processes and business models. The key to making progress in this direction is innovation. In this sense, the concept of sustainable innovation has acquired particular importance in relation to the protection of the environment and social groups, which focuses on the efficient and cyclical use of resources. Better use of resources involves renewing working methods, establishing good working conditions and effective knowledge management. These innovations guarantee the minimisation of conflicts of interest (cognitive conflicts) between the participants in the creation of value. They reflect the contribution of the national company to the creation of national wealth. Dangelico, Pujari, and Pontrandolfo (2017) studied the relationship between innovation, social responsibility and wealth creation. They showed that the combination of internal and external factors modifies the ordinary capacities of organisations to maximise partnership value. It is simply a matter of taking account of the firm's social role. Integrating social responsibility practices into the innovation process makes it possible to create innovative methods and products. These methods and products are key success factors for any organisation. They help the national company to create wealth for its partners. Lister (2018) emphasised that a company's environmental performance is positively associated with its objective of creating value. Indeed, environmental responsibility encourages companies to reduce energy and resource costs through new production processes and new business operations. These new processes and methods, which comply with environmental legislation, ensure that costs are reduced and value is created. Cost savings are dependent on a company's environmental performance. This implies that social responsibility practices (environmental responsibility) are the basis for the creation of wealth-creating working methods. Corporate social responsibility is a driver of creativity and innovation for the national firm. It provides the impetus to find innovative processes that signal its competitiveness and value creation. Chowdhury, Hossain, and Inoue (2018) have shown that wealth creation by companies is affected by their tendency to improve their work processes. Corporate social responsibility practices are seen as a decision-making lever for promoting positive, engaged and creative employees. This creativity ensures the introduction of new working methods and procedures that have a positive impact on the growth of companies. The extent to which employees innovate depends on their level of corporate social responsibility. Establishing a climate of trust between the organisation and its employees facilitates the success of innovation processes. Involving employees in strategic decision-making reduces the problems associated with resistance to change. These employees are more motivated to use the new methods created. These innovative working methods ensure growth, competitiveness and wealth creation for the national company. They ensure its contribution to the economic growth of their countries. Afridi, Jan, and Iqbal (2020) have shown that employees' positive perception of corporate social responsibility is linked to innovative working behaviour. Respecting employees' expectations encourages them to undertake new methods. It ensures that employees are creative and innovative. Employee creativity is a key factor in the success of organisations. It improves the innovation effort and the commercial performance of the national company. This commercial

performance signals the national firm's contribution to wealth creation. Pan, Chen, Zhang, and Xu (2020) have indicated that practices aimed at protecting the environment are classed as innovations in production processes. These activities are preferred by socially conscious employees. They are motivated by the success of these investments. This motivation has positive repercussions on the productivity, competitiveness and performance of national firms. It encourages employees to make a greater effort to ensure the development and sustainability of their firms. The sustainability of socially responsible national firms is a guarantee of wealth creation for all nations. Valdez and Castillo (2021) have shown that eco-innovation (also known as environmental, sustainable or green innovation) is a relevant approach to effectively controlling pollution and the use of resources. It involves implementing new methods of managing and allocating resources. These practices are integrated into the innovation of production processes. They enable companies to achieve their objectives at the lowest possible cost. Minimising production costs through new methods ensures the creation of value for the various stakeholders in the national firm. This involves assessing its contribution to the nation's economic growth. These studies attest to the positive effect of corporate social responsibility on innovation and economic growth in their countries. Hence the following hypothesis.

H₂: Corporate social responsibility encourages the design of new working methods.

2.2.6. Corporate Social Responsibility, Marketing Innovation and Economic Growth

The implementation of social responsibility practices as an integral part of business activities is considered beneficial for business performance (Colovic & Henneron, 2018; Lamb, Butler, & Roundy, 2017; Malesios, Skouloudis, Dey, & Evangelinos, 2018; Rittenhofer, 2015). Indeed, responsible actions can change the company's behaviour, affect the organisational culture and offer opportunities for growth in order to be competitive on different (national and/or) international markets. Customers are increasingly attracted to socially responsible companies through the creation of new methods of product promotion and distribution. Social awareness encourages companies to renew their marketing strategies. This innovative effort has a positive impact on market share and enhances value creation. Lefebvre (2012) has argued that firms' social responsibility practices are integrated into their marketing innovations. The ability to focus on long-term value creation through a strategy based on economics and social values signals firms' innovation efforts. It enhances the cognitive flexibility and creativity of employees. This creativity ensures the creation of new methods of promoting products. It helps the company to increase its market share and commercial performance. The improvement in the commercial performance of the national firm indicates its contribution to economic growth. This commercial performance is explained by marketing innovation based on the social role of firms. Stephen (2016) argued that the choice of digital marketing as an innovation is justified by the social role of firms. Organisations have responded to changes in consumer behaviour by making digital and social media an essential and integral part of their marketing plans. This innovation is explained by the social conscience of companies. This trust is linked to good interaction with customers. This is a social innovation that enables companies to improve their positioning in different markets. Improving brand image, by satisfying customer needs, has a positive impact on the productive capacity and wealth creation of national companies. Hence, marketing innovation ensures economic growth provided that it is socially accepted. Bocquet, Le Bas, Mothe, and Poussing (2017) have argued that active and dynamic interaction with multiple stakeholder groups has led to the development of value-creating innovations (including marketing innovation). Companies that have a good relationship with their customers are better informed about their satisfaction levels. They are better able to detect and design new solutions to satisfy them. The creation of new products, new methods of distribution and promotion enables companies to participate in wealth creation. Competitions on social networks and live demonstrations of the benefits of a product are designed to attract as many customers as possible. These marketing innovations, which highlight the company's social role, ensure its growth and longevity. Corporate social responsibility has a positive impact on marketing innovation and guarantees the creation of national wealth (economic growth). Kucukusta, Perelygina, and Lam (2019) studied the positive effect of disclosing social responsibility practices via social media on the commitment of the firm's various partners. Thus, information on product qualities (including the use of eco-friendly packaging) positively affects consumer preferences. These customers have a need for these types of innovation (Marketing information system). Satisfying customer needs is positively correlated with sales performance. This performance, valued through social activities, guarantees the growth of the national firm and its country. Åberg and Mattsson (2020) have shown that electronic marketing plays an important role in the value creation process of modern companies. It is seen as a marketing innovation that stimulates consumer behaviour. It is a decision that signals respect for customer expectations. It reflects the social role of national companies. Companies aware of their social role have used network analysis to improve their advertising promotions. Improved product promotion is positively correlated with increased market share. Growth in market share implies the competitiveness of the national firm. It shows its ability to create wealth. Lu, Zhao, and Zhang (2020) found that companies in developing economies practice social responsibility standards as a marketing innovation. This decision offers short-term benefits. The study highlighted the effect of social responsibility on consumers' purchasing behaviour and firms' business performance. The interaction between socially responsible activities and the products dispensed positively affects performance. These companies use the information content of societal disclosures. They take advantage of the positive signal that enhances the value of their products on the market. This enhancement implies the creation of value. The growth of national firms is justified by their ability to exploit their societal disclosures. Okafor, Adeleye, and Adusei (2021) have shown that socially responsible investments have a positive impact on the growth of companies and countries. Thus, national companies are opting for socially responsible activities (which include social marketing) in order to diversify away from competitors. The application of innovative marketing strategies based on the social role of companies has a positive impact on growth prospects. Digitalisation of the distribution process facilitates access to information and to company products. It raises customer awareness and promotes the usefulness of the products supplied. This marketing innovation satisfies customer needs by minimising transport costs. This satisfaction ensures the maximisation of wealth for the company and other partners. It also signals the social role of the national firm. This implies an indirect relationship between the social responsibility of national firms and the economic growth of their countries. Troise and Camilleri (2021) have argued that the use of social networks for

advertising, marketing products and disclosing social responsibility practices reduces problems of information asymmetry with stakeholders. These marketing innovations give a positive signal to a company's brand image. They enable national companies to contribute to the creation of wealth in their countries. In the light of this theoretical framework, we put forward the following hypothesis.

H₆: Socially responsible investment encourages national companies to participate in growth through the design of new business methods.

3. Methodology

3.1. Research Instrument

Our empirical study is based on quantitative research, using a questionnaire as the data collection method. Our questionnaire consists of two main parts, based on the axes dealt with in the theory.

- The first part aims to identify the company (Size, business sector, ownership structure, types of investment, jobs created, competitiveness).
- The second part looks at the level of corporate social responsibility.

The questionnaire was sent to the managers of large private Tunisian companies. The sample selected is made up of 100 managers of Tunisian industrial and commercial companies listed on the Tunis Stock Exchange in 2021 (53 companies) and other unlisted companies (47 companies). Our choice of listed companies is justified by the fact that these companies are assumed to be the best performers and meet several conditions necessary for the reliability of our study: they are public limited companies that are generally widely held, which increases the importance of the role played by the board of directors and the ownership structure and consequently increases the relevance of the hypotheses. In addition, these listed companies are obliged to publish their financial statements and other information, which in most cases, reflect their reality. They can therefore serve as a database for estimating the model. We decided to exclude financial companies: banks, insurance and investment companies, development and portfolio management companies, etc.; in fact, these companies do not have the same characteristics as non-financial companies, and to avoid sector-specific correlation effects. In order to have a representative sample of the Tunisian economy, we have added other unlisted companies. Table 1 presents the sample selected, which is made up of 100 managers of Tunisian industrial and commercial companies listed on the Tunis Stock Exchange in 2021 (53 companies) and other unlisted companies (47 companies).

Table 1. Initial sample and constitution of the final sample.

Population of companies listed on the BVMT at 31/12/2021	80
Exclusion of listed financial companies	(27)
Listed companies selected	53
Population of unlisted companies visited	100
Exclusion for refusal to reply	(40)
Exclusions for missing data	(13)
Unlisted companies included in the sample	47
Total companies included in the final sample	100

3.2. Measurement of Variables

In this context, it is necessary to separate the endogenous variables from the exogenous ones.

3.2.1. Endogenous Variables: Economic Growth

The aim of this chapter is to show the effect of managers' emotional intelligence on companies' investment choices (innovation and job creation) and on improving the competitiveness of the national economy (economic growth). Economic growth is measured by gross domestic product (GDP). Gross domestic product (GDP) is defined as the total market value of all final goods and services produced in the economy over a given period. There are three methods of measuring GDP: the expenditure approach, the income approach and the "value added" production approach.

- The expenditure approach measures GDP as the sum of all expenditure involved in taking this total output off the market.
- The income approach measures GDP as the sum of income derived or created from GDP production (wages, salaries and supplements, gross operating surplus, gross mixed income and indirect taxes less subsidies) (Jackson & McIver, 2001).
- The "value added" approach to production differs from the other two methods in that it estimates GDP by taking into account the contribution of each economic unit (value added) by estimating the value of the production of goods and services after the value of the inputs used in its production has been subtracted. Therefore, to calculate GDP using this approach, the gross value added of output is added to the taxes associated with the product minus the subsidies on the product (UK Office for National Statistics, 2011).

The most common method of measuring GDP is the expenditure approach in which GDP is calculated by adding together consumer purchases of goods and services, gross investment, government purchases of goods and services and net exports, i.e.

$$GDP_t = C_t + I_t + G_t + (X_{(t)} - M_t) \quad (1)$$

Where

- GDP_t = Value of gross domestic product at time t.
- C_t = Value of private household consumption at time t.
- I_t = Value of private investment at time t.
- G_t = Value of public spending at time t.
- X_t = Value of exports at time t.
- M_t = Value of imports at time t.

Our measure of GDP is expressed in constant local currency units and is taken from World Bank data. We used the growth rate of GDP structures calculated by the Tunisian Institute of Competitiveness and Quantitative Studies (ITCEQ) in July 2022.

NB Economic growth takes the following 2 forms.

- 1 if the company belongs to a sector with a positive change in its contribution to GDP.
- 0 if not.

3.2.2. Exogenous Variables

3.2.2.1. Social Responsibility

The second part of our questionnaire aims to measure corporate social responsibility. There are many theoretical measures of CSR, based on different tools such as analysis of the content of the annual report, the use of pollution indices or reputation indicators.

Validation of the 10 items of corporate social responsibility.

Principal Component Analysis suggests a single factor structure representing 60.673% of the total variance. Thus, the Kaiser-Mayer-Olkin (KMO) index, which reflects the adequacy of the factorial solution, is of the order of 0.892. For the sake of simplicity, we present the factorial solution in the following Table 2.

Table 2. Main component analysis of social responsibility.

	Components CSR: 60.673% of total variance explained
1. Do you know anything about the principle of CSR (Corporate Social Responsibility)?	0.753
2. What do you think of CSR?	0.779
3. Does your company adopt CSR approaches?	0.828
4. Does your company publish a communication or declaration of extra-financial performance?	0.854
5. Does your company have an international certification standard?	0.751
6. Do you think CSR should be involved in the company's management mechanism?	0.774
7. On which theme(s) has your company taken action?	0.723
8. How often is your company involved in CSR activities?	0.734
9. Does the committee responsible for social organise training sessions to improve understanding of CSR?	0.744
10. Has your company adopted an official policy on ethical business practices?	0.843

3.2.2.2. Job Creation

Job creation at company level is generally measured using the method developed by Davis and Haltiwanger (1992) and Davis, Haltiwanger, and Schuh (1996). Following their approach, gross job creation C_{it} , in firm i between year $t - 5$ and t is defined as:

$$C_{it} = \text{Max} (X_{it} - X_{i,t-5}, 0) \quad (2)$$

Where: X_{it} is the employment of company i in year t . The variable C_{it} is therefore equal to the increase in the number of employees in the event of an increase. If the number of employees has fallen, the variable is equal to zero.

In our study, we will compare the number of employees in company i between year t and $t-1$ (instead of $t-5$). To show the contribution of companies to economic growth, we can use the variation in job creation. A positive variation indicates job creation.

$$\text{Change in jobs in year } t = X_{it} - X_{(it-1)} / X_{it-1} \quad (3)$$

3.2.2.3. Investment in Innovation: Intangible Investment

In our study we will use the degree of intangibility of assets as a proxy for investment in innovation. The degree of intangibility of productive assets can be assessed on several levels. The Banque de France and the Ministry of Industry have often used the ratio of intangible assets to tangible assets in studies on the development of intangible investment in France. In Tunisia, as in France, the intangible assets recorded in the accounts result from the capitalisation of this type of expenditure. However, the unavailability of information makes it legitimate to use the amount of intangible assets shown on the balance sheet, even though this amount is generally surrounded by doubt since it is the result of discretionary choices made by management. Similar to the French context, the measurement of intangible capital in the Tunisian context presents the same problems, which leads us to adopt accounting measures.

On the basis of this discussion and depending on the availability of data from Tunisian companies, we propose the following indicator of the degree of activation of intangible expenditure.

$$\text{The rate of intangible assets} = \frac{\text{Net intangible assets}}{\text{Assets}}$$

This measure is used by Cazavan-Jeny (2004), Moussu and Thibierge (1997), and Thibierge (2001).

3.2.2.4. Company Competitiveness

According to Doyle (1992), a company's competitiveness depends on its ability to take advantage of the market. It must use its key resources and skills to increase its market share (Breene & Nunes, 2005; Porter, 1998). Market share growth is one of the indicators that signal a company's commercial performance and competitiveness.

In our research, we used the growth in market share as an indicator of the level of competitiveness of Tunisian companies:

$$\text{Overall market share} = \frac{\text{Turnover of the company}}{\text{turnover of the sector as a whole.}}$$

3.2.2.5. Employee Productivity

The survival of organisations depends on their performance, in particular, financial performance, while performance depends on productivity, which is measured in terms of output. Output is most often measured in terms of value. Production in terms of value can be measured either in terms of real sales or in terms of real added value. In any case, turnover does not provide an accurate measure of productivity because it incorporates a good deal of double-counting due to the value added by purchased inputs (Mahmood, 2003). Productivity is therefore measured using value added. Value added can be defined as sales less the cost of raw materials and services outside the company (Muellbauer, 1991). Value added can be calculated by subtracting the costs of purchased materials, services and utilities from the firm's total income. We will use the ratio between value added and the number of employees as a measure of productivity (Mahmood, 2003; Pilat & Schreyer, 2003).

$$\text{Productivity} = \text{Value added} / \text{Number of employees.}$$

3.2.2.6. Value Added

Value added is the wealth created by a company through its activity (Industrial or commercial). It is measured by the difference between the company's output and its intermediate consumption of goods and services (Lähtinen & Toppinen, 2008; Lantz, 2003). This wealth is distributed between the various stakeholders: employees through remuneration for work, creditors through interest, and the State through taxes. It indicates the creation of value and measures each company's contribution to GDP.

Value added is calculated using the profit and loss account as follows:

Gross value added = Sales margin + Production for the year - Consumption from third parties (purchases and external charges).

Net value added = Gross value added + depreciation and provisions.

With:

- Sales margin = Turnover (Excluding VAT) - Purchase cost of goods sold.
- Production for the year = Production sold +/- Inventory production (Change in inventory).
- Inventory production (Change in inventory) = closing inventory - opening inventory.

3.3. Control Variables

3.3.1. Economic Profitability

Several studies have shown the role of profitability in explaining a company's investment choice, its performance and its contribution to economic growth (Baines & Shi, 2015; Callén & Fernández, 2019; Fama & French, 2002; Molay, 2006).

We will use the return on assets (ROA) ratio to measure this variable.

$$\text{ROA} = \text{net profit} / \text{total assets}$$

3.3.2. Firm Size

The size of the firm affects its financial policies (Dufour & Molay, 2010; Hovakimian, Opler, & Titman, 2001; Rajan & Zingales, 1995). Large firms are judged to perform well (Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001), to be more diversified (Rajan & Zingales, 1995), and to have a lower risk of bankruptcy () than small firms. They use external sources of finance to fund their investment projects without incurring additional costs compared with smaller firms. They are protected against the inefficiency of their investment decisions (innovative and risky). They are able to contribute to the economic growth of their countries.

This variable can be measured in different ways. The most commonly used measures are: log total assets, headcount, turnover, etc. Most studies use total assets or turnover as a measure of firm size (Bujaki & Richardson, 1997).

We will use the following simple formula.

$$\text{TAI} = \text{Ln}(\text{total assets}).$$

For the sake of simplicity, we summarise the measure of each of the variables in the model, its name and its expected influence on economic growth in the following Table 3.

Table 3. Description of study variables.

Category	Phenomenon	Measure	Variable	Prediction
Variable to be explained:				
Economic Growth	Positive change in the production of goods and services in an economy over a given period.	Economic growth is measured by gross domestic product (GDP). $GDP_t = C_t + I_t + G_t + (X_{(t)} - M_t)$	GDP	
Explanatory variables:				
Social responsibility	Value creation for the various stakeholders	Score calculated on the basis of the 10	CSR	+
Job creation	Competitiveness of the company on the labour market	In our study, we will compare the number of employees in company i between year t and t-1. Change in jobs in year t = $X_{it} - X_{(it-1)}/X_{it-1}$ A positive percentage change indicates job creation	JC	+
Intangible investment	The company's innovation effort	We propose the following indicator of the degree of activation of intangible expenditure:	EIN	+

Category	Phenomenon	Measure	Variable	Prediction
		The rate of intangible assets = Net intangible assets / assets Accounting		
Competitiveness of the company	Competitiveness of the company in the goods and services market	We used the growth in market share as an indicator of the level of competitiveness of Tunisian companies, i.e.: Overall market share = Turnover of the company/turnover sector as a whole A positive variation in market share indicates a company's competitiveness.	C	+
Employee productivity	Productive capacity of employees	We will use the ratio between added value and the number of employees as a measure of productivity: Productivity = Value added/ Number of employees	PE	+
Value added	The creation of wealth by the company	Value added is calculated using the profit and loss account as follows: Gross added value = Sales margin + Production for the year - Consumption from third parties (purchases and external charges)	VA	+
Control variables:				
Profitability	Indicates the company's economic performance	ROA= net profit / total assets	ROA	+
Size	Indicates the company's reputation and growth	Ln (total assets)	FSIZE	+

4. Data Analysis Methods

The methodology consists of presenting the various correlations between economic growth and the above variables using a probabilistic graphical model known as a Bayesian network. Bayesian networks are an explanatory artificial intelligence method. This method is used in this chapter to quantitatively describe the effect of a manager's emotional intelligence on innovation effort, job creation and economic growth. In what follows, we describe in detail the different tests that are carried out.

5. Analysis and Interpretation of Results

5.1. Model Construction and Parameterisation

The objective of this chapter is to show the effect of the social responsibility of Tunisian companies on their contribution to economic growth. Thus, theoretically, we have to show that the contribution of Tunisian companies to economic growth depends on:

- Corporate social responsibility.
- Companies' level of competitiveness.
- Level of investment in innovation.
- Job creation.
- Employee productivity.
- Creation of added value.
- Company profitability.
- Company size.

Once the variables have been listed, it is necessary to identify their characteristics.

5.2. Identifying the Variables and Their Characteristics

The first step in building an expert Bayesian network is to list the variables recursively, starting with the target variable and working down to the causes. It is in this order that we present the variables in the following Table 4.

Table 4. Description of the variable modalities in the study.

Variable	Type of variable
Variation in GDP by structure (VGDPs)	Discrete: Yes / No
Corporate Social Responsibility (CSR)	Discrete: Yes/No
Job Creation (JC)	Discrete: Yes/No
Innovation Effort (EIN)	Discrete: Yes/No
Employee Productivity (EP)	Discrete: Yes/No
Competitiveness (C)	Discrete: Yes/No
Value Added (VA)	Discrete: Yes/No
Profitability (ROA)	Discrete: Yes/No
Firm Size (FSIZE)	Discrete [1 ; 2]

5.3. Graphical Model

The second stage in the construction of a Bayesian network consists of expressing the relationships between the variables. The BayesiaLab software can be used to train the Bayesian network by taking the discretised database as the input to the process, without sampling the data. The Bayesian network constructed is the result obtained for the total database.

Based on the data collected, we were able to establish the following graph of relationships (Figure 1).

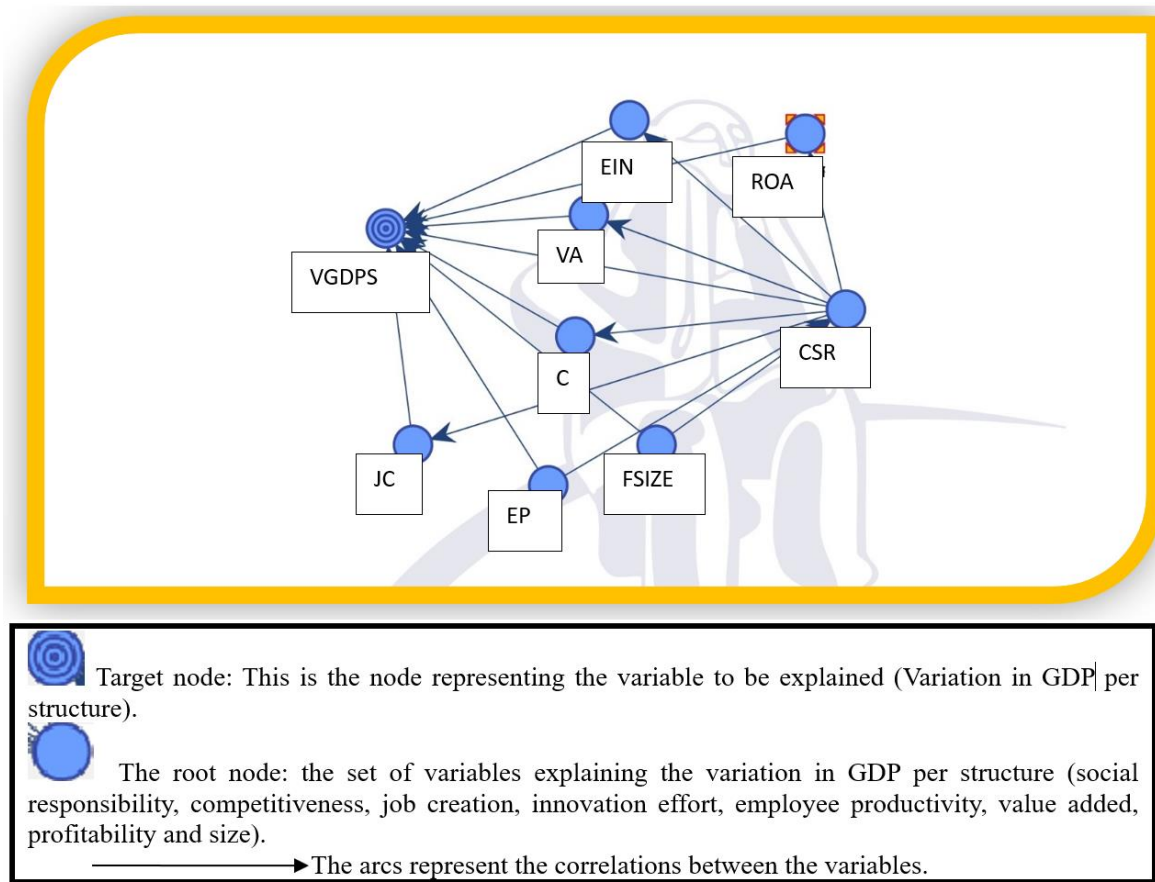


Figure 1. Bayesian network the effect of corporate social responsibility on economic growth.

The graphical model above (Figure 1) explains the variation in GDP by structure. This variation is affected by the contribution of national companies (innovation effort, job creation, productivity, competitiveness, added value and profitability) to economic growth. This contribution stems from the social responsibility of Tunisian companies.

In what follows, we describe in detail the different correlations between these variables and their effect on the target variable (variation in GDP by structure).

5.4. Analysis and Interpretation of the Model

Various methods of analysing the results from the network obtained are possible in the BayesiaLab software.

5.4.1. Analysis of the Relationships Discovered

The relationships between the variables in the database are oriented from the parent node to the child node. Each relationship is composed of three different measures: the Kullback-Leibler distance, the relative weight and the Pearson correlation. Kullback-Leibler distance and relative weight are two measures of the strength of relationships. The relative weight scale is from 0 to 1. The following table (Table 5) presents the analysis of the relationships between the variables in the network.

Table 5. Analysis of relationships.

Parent node	Child node	Divergence of divergence	Weight	Pearson correlation
CSR	VGDPS	0.1911	1.0000	0.2463
EIN	VGDPS	0.1463	0.7655	0.1114*
ROA	VGDPS	0.1463	0.7655	0.1114*
JC	VGDPS	0.1463	0.7655	0.1114*
EP	CSR	0.0427	0.2233	0.2166
VA	VGDPS	0.0418	0.2189	-0.0027***
C	VGDPS	0.0262	0.1369	0.0120***
FSIZE	VGDPS	0.0256	0.1339	0.0276***
EP	VGDPS	0.0207	0.1083	0.0409**
CSR	VA	0.0134	0.0703	-0.1314*
FSIZE	CSR	0.0110	0.0578	0.0576**
RSE	C	0.0033	0.0175	0.0691*
CSR	ROA	0.0014	0.0075	0.0450**
CSR	JC	0.0014	0.0075	0.0450**
CSR	EIN	0.0014	0.0075	0.0450**

Note: Kullback-Leibler close to 1: strong correlation between variables
 Relative weight: converges towards 1: strong correlation between variables
 Pearson correlation coefficient: direction of correlation between variables: *, **, *** respectively significance at 10%, 5% and 1%.

Table 5 analyzes the relationship (Strength and type of correlation) between the network variables.

The results show the presence of a strong (Kullback-Leibler = 0.1911/ relative weight = 1) and positive relationship ($\beta = 0.2463$) between corporate social responsibility and the variation in sectoral GDP. This result confirms our theoretical predictions (H1, H2, H3, H4, H5 and H6) and shows the positive effect of corporate social responsibility on companies' contribution to their countries' economic growth. Thus, the societal performance of firms positively affects their levels of competitiveness ($\beta = 0.0691$), their levels of profitability ($\beta = 0.0450$), their job creation ($\beta = 0.0450$) and their innovation efforts ($\beta = 0.0450$). However, it is negatively associated with value added ($\beta = -0.1314$). The use of social and environmental aspects helps companies to create new working methods, new products, services, processes and new market positions. Companies can integrate and disseminate knowledge to promote well-being and attract, motivate and retain their human capital (Cabrita & Bontis, 2008).

The innovation effort is positively ($\beta = 0.1114$) and strongly (Kullback-Leibler = 0.1463/relative weight = 0.7655) correlated with the contribution of national companies to economic growth. This result confirms the presence of a correlation between economic growth and innovation effort (H4, H5, H6).

The relationship analysis highlights the presence of a strong (Kullback-Leibler = 0.1463/relative weight = 0.7655) and positive ($\beta = 0.1114$) relationship between company profitability and the variation in sectoral GDP.

The relationship analysis test shows that job creation by the company explains the positive variation in sectoral GDP. Thus, job creation positively affects the level of sectoral GDP ($\beta=0.1114$). This result is consistent with our theoretical study (H1, H2, H3).

The value added of firms is negatively ($\beta = -0.0027$) and weakly (Kullback-Leibler = 0.0418/relative weight= 0.2189) correlated with their contributions to economic growth. We also find that the variation in sectoral GDP is positively correlated with firm size ($\beta = 0.0276$), competitiveness ($\beta = 0.0120$) and employee productivity ($\beta = 0.0409$).

Finally, the results also show a positive correlation between company size and societal performance ($\beta=0.0576$). The growth and development of companies are linked to their levels of societal performance.

5.4.2. Analysis of Economic Growth or Variation in GDP by Structure (Target Variable)

To analyse economic growth, we need to choose the variable variation in GDP by structure (VGDPS) as the target variable in the Bayesian network. We can then use the function that generates the target analysis report. In this report, the relationships of the variable variation in GDP by structure with the other variables are measured by the binary mutual information and the binary relative importance.

In probability theory and information theory, mutual information is the information provided by several sources of information simultaneously. Its existence is linked to the following question: given an event, how does it modify the amount of information provided by another event? The mutual information of two random variables is a quantity that measures the statistical dependence of these variables. It is measured in bits.

Table 6 shows the importance of the variables in our study in terms of providing information on the value of variation in GDP by structure.

Table 6. Importance of the nodes in terms of information contribution on the knowledge of variation of GDP by structure (VGDPS).

VGDPS =Yes (60%)				
Node	Binary mutual information	Binary relative importance	Modal value	
CSR	0.0431	1.0000	Yes	85.03%
ROA	0.0089	0.2060	Yes	73.18%
JC	0.0089	0.2060	Yes	73.18%
EIN	0.0089	0.2060	Yes	73.18%
EP	0.0012	0.0280	Yes	55.66%
FSIZE	0.0005	0.0128	Big	48.12%
C	0.0001	0.0024	Yes	75.38%
VA	0.0000	0.0001	No	23.03%
VGDPS = No (40%)				
Node	Binary mutual information	Binary relative importance	Modal value	
CSR	0.0431	1.0000	No	36.27%
ROA	0.0089	0.2060	No	37.33%
JC	0.0089	0.2060	No	37.33%
EIN	0.0089	0.2060	No	37.33%
EP	0.0012	0.0280	No	48.49%
FSIZE	0.0005	0.0128	Small-medium	54.68%
C	0.0001	0.0024	No	25.67%
VA	0.0000	0.0001	Yes	77.20%

- Mutual information: This is the amount of information provided by a variable concerning the value of the target.
- Relative importance: This is the importance of the variable in relation to the value of the target.
- Modal value: The average value of the explanatory variable for each target value.

Analysis of the variation in sectoral GDP shows that 60% of Tunisian companies contribute to a positive variation in sectoral GDP and 40% do not.

Table 6 highlights that in the case where the company contributes to a positive variation in sectoral GDP, the most important node is its level of social responsibility (relative importance =1). The other explanatory variables are profitability (relative importance =0.2060), innovation effort (relative importance =0.2060), job creation (relative importance =0.2060), employee productivity (relative importance =0.0280), size (relative importance =0.0128), competitiveness (relative importance =0.0024) and value added (relative importance =0.0001). The results show that 85.03% of societal performance, 73.18% of economic profitability, an innovation effort with a

probability of 73.18%, job creation with a probability of 73.18%, 55.66% of employee productivity, large size with a probability of 48.12%, competitiveness with a probability of 75.38% and low added value with a probability of 23.03% imply a contribution by the company to the positive variation in sectoral GDP with a probability of 60%.

If the company does not contribute to a positive variation in sectoral GDP, the most important node is its level of social responsibility (relative importance = 1). The other explanatory variables are profitability (relative importance =0.2060), innovation effort (relative importance =0.2060), job creation (relative importance =0.2060), employee productivity (relative importance =0.0280), size (relative importance =0.0128), competitiveness (relative importance =0.0024) and value added (relative importance =0.0001). The results show that a reduction of 36.27% in societal performance, a negative variation in economic profitability of 37.33%, a low innovation effort with a probability of 37.33%, job destruction with a probability of 37.33%, a reduction in employee productivity of 48.49%, small or medium size with a probability of 54.68%, low competitiveness with a probability of 25.67% and low added value with a probability of 77.20% imply a zero contribution from the company to the positive variation in sectoral GDP with a probability of 41.44%.

5.4.3. Maximisation of the Target Mean (VGDPS)

After presenting the set of explanatory variables for each modality of the target variable, it is necessary to present the variables maximising each modality of the target variable. In this way, the Dynamic Profile of the target function can be used to query the software about a posteriori maximisation of the mean of the target variable variation in GDP by structure. This test presents the scenarios for maximising the value of the target variable. In other words, it looks for the modality or modalities of the variables that need to be modified (increased or decreased) in order to maximise the modality or modalities of the target variable. Table 7 shows the dynamic profile of the change in GDP by structure (VGDPS).

Table 7. Dynamic profile of the target variation in GDP by structure.

VGDPS = Yes			
Node	Optimal modality	Probability	Joint probability
A priori		100%	60%
CSR	Yes	76.51%	66.68%
EIN	Yes	53.65%	72.30%
JC	Yes	37.63%	81.80%
ROA	Yes	26.39%	95.35%
VA	Yes	19.53%	100%
VGDPS = No			
Node	Optimal modality	Probability	Joint probability
A priori		100%	40%
CSR	No	23.48%	61.77%
EIN	Yes	15.31%	66.61%
JC	Yes	6.98%	75.47%
ROA	Yes	6.51%	89.06%
C	Yes	4.53%	94.50%
VA	Yes	3.94%	100%

- Optimal mode: This is the mode that maximises the value of the target.
- Probability: The a priori probability of each variable.
- Joint probability: The probability that the target variable takes the value n knowing that the explanatory variable takes the value p.

The dynamic profile analysis (Table 7) of the variation in GDP by structure (VPIBS) reveals the following findings.

The increase in corporate social responsibility in the order of 76.51%, a positive variation in the innovation effort with a probability of 53.65%, positive growth in the number of employees in the order of 67.63%, an increase in the profitability of assets of 26.39% and a creation of added value with a probability of 19.53% ensure a positive variation in sectoral GDP in the order of 60%.

The decrease in corporate social responsibility in the order of 23.48%, a positive variation in the innovation effort with a probability of 15.31%, positive growth in the number of employees in the order of 6.98%, an increase in the profitability of assets of 6.51%, an increase in competitiveness in the order of 4.53% and a creation of added value with a probability of 3.94% explain a negative variation in sectoral GDP in the order of 40%.

6. Conclusion

The aim of this article is to show, theoretically and empirically, the importance of the social responsibility of national companies in the creation of wealth. The aim is to explain the indirect relationship between economic growth and social responsibility. This relationship shows the effect of socially responsible investment on creativity, job creation, the innovation effort of companies and, subsequently, on economic growth.

The theoretical analysis presented highlights the positive effect of corporate social responsibility on companies' overall performance and their contribution to the economic growth of their nations. Indeed, a company's social responsibility implies the simultaneous fulfilment of its economic, legal and ethical responsibilities. It is a commitment to third parties by the management of a company (Jones, 1995; Longo et al., 2005; Williamson et al., 2006). Companies become more attractive to employees, customers, suppliers, communities and investors (Cowe, 2003). These studies have confirmed the positive effect of social responsibility practices on the competitiveness and productivity of companies. They affirm the indirect effect of the level of social responsibility of national companies on the economic growth of their countries. Companies engage in socially responsible investment to signal their performance and wealth creation. They use their decision-making levers to improve their reputations, their levels

of competitiveness and to signal their contributions to the economic growth of their nations (Demirbag et al., 2017; Laufer, 2003; Yoon et al., 2006).

Analyses of the data collected revealed the importance of corporate social responsibility in explaining the positive variation in sectoral GDPs. Indeed, empirical analysis of the relationship between corporate social responsibility and economic growth shows the role of socially responsible investment in explaining the wealth of nations. The social performance of companies has a positive impact on their levels of competitiveness, profitability, job creation and innovation. However, it is negatively associated with value added. The use of social and environmental aspects helps companies to create new working methods, new products, services, processes and new market positions. Companies can integrate and disseminate knowledge to promote well-being, attract, motivate and retain their human capital (Cabrita & Bontis, 2008). Corporate social responsibility is a positive signal that enables companies to attract the right candidates to the labour market. It signals the job creation capacity of national firms. The attractiveness of socially responsible national companies improves their innovation efforts and ensures their contribution to the creation of national wealth. These firms have a wider range of skills (qualified personnel) on which to base new investments (including socially responsible investments). These innovative projects encourage the creation of new jobs. They signal the participation of national companies in social well-being and economic growth. The success of the organisation is explained by the protection of the moral and ethical rights of employees and other stakeholders (Perez & Bosque, 2013).

Finally, our initial objective is to show the impact of social responsibility on economic growth. Thus, the analysis of economic growth through the integration of social responsibility is consistent with that of endogenous growth theory, which shows the importance of organisational learning (through practice) as a factor in economic growth. From this point of view, the contribution of this chapter is to encourage Tunisian companies to invest in socially responsible projects and actions that create wealth.

References

- Abbas, J., Raza, S., Nurunnabi, M., Minai, M. S., & Bano, S. (2019). The impact of entrepreneurial business networks on firms' performance through a mediating role of dynamic capabilities. *Sustainability*, 11(11), 3006. <https://doi.org/10.3390/su11113006>
- Åberg, M., & Mattsson, F. (2020). *How CSR is marketed and optimized in the Swedish fashion industry: A qualitative study on digital marketing and web analytics when marketing CSR*. Degree project, 30 credits. Umeå School of Business, Economics and Statistics, Umeå University.
- Afridi, M. A., Jan, S., & Iqbal, S. (2020). The role of CSR in achieving sustainable development goals: Evidence from Pakistan. *Journal of Cleaner Production*, 253, 119927.
- Ali, I., Rehman, K. U., Yilmaz, A. K., Nazir, S., & Ali, J. F. (2010). Effects of corporate social responsibility on consumer retention in the cellular industry of Pakistan. *African Journal of Business Management*, 4(4), 475-485.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367-403. <https://doi.org/10.2189/asqu.2005.50.3.367>
- Amoako, G. K., & Dartey-Baah, K. (2020). Corporate social responsibility in Ghana: A case of multinational mining companies. *Social Responsibility Journal*, 16(2), 175-195.
- Avetisyan, E., & Ferrary, M. (2013). Dynamics of stakeholders' implications in the institutionalization of the CSR field in France and in the United States. *Journal of Business Ethics*, 115(1), 115-133. <https://doi.org/10.1007/s10551-012-1386-3>
- Baines, T., & Shi, V. G. (2015). A Delphi study to explore the adoption of servitization in UK companies. *Production Planning & Control*, 26(14-15), 1171-1187. <https://doi.org/10.1080/09537287.2015.1033490>
- Baughn, C. C., Bodie, N. L., & McIntosh, J. C. (2007). Corporate social and environmental responsibility in Asian countries and other geographical regions. *Corporate Social Responsibility and Environmental Management*, 14(4), 189-205. <https://doi.org/10.1002/csr.160>
- Blok, V., Hoffmans, L., & Wubben, E. F. M. (2015). Stakeholder engagement for responsible innovation in the private sector: Critical issues and management practices. *Journal on Chain and Network Science*, 15(2), 147-164. <https://doi.org/10.3920/JCNS2015.x003>
- Bocquet, R., Le Bas, C., Mothe, C., & Poussing, N. (2017). CSR, innovation, and firm performance in sluggish growth contexts: A firm-level empirical analysis. *Journal of Business Ethics*, 146(1), 241-254. <https://doi.org/10.1007/s10551-015-2959-8>
- Booth, L., Aivazian, V., Demircuc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *The Journal of Finance*, 56(1), 87-130. <https://doi.org/10.1111/0022-1082.00320>
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper & Brothers.
- Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, 69, 111-132. <https://doi.org/10.1007/s10551-006-9071-z>
- Breene, T. S., & Nunes, P. F. (2005). Coming to terms with complexity: Making sense of complexity in business. *Harvard Business Review*, 83(11), 100-109.
- Bujaki, M. L., & Richardson, A. J. (1997). A citation trail review of the uses of firm size in accounting research. *Journal of Accounting literature*, 16, 1-27.
- Cabrita, M. D. R., & Bontis, N. (2008). Intellectual capital and business performance in the Portuguese banking industry. *International Journal of Technology Management*, 43(1-3), 212-237. <https://doi.org/10.1504/IJTM.2008.019416>
- Callén, J. L., & Fernández, R. (2019). Information asymmetry and the value of analysts' recommendations. *European Accounting Review*, 28(4), 713-739.
- Capron, M., & Quairel, F. (2009). *Corporate social responsibility*. Paris: La Découverte.
- Carboni, O. A., & Russu, P. (2018). Complementarity in product, process, and organizational innovation decisions: Evidence from European firms. *R&D Management*, 48(2), 210-222. <https://doi.org/10.1111/radm.12284>
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497-505. <https://doi.org/10.5465/amr.1979.4498296>
- Carroll, A. B. (2000). Ethical challenges for business in the new millennium: Corporate social responsibility and models of management morality. *Business Ethics Quarterly*, 10(1), 33-42. <https://doi.org/10.2307/3857692>
- Cazavan-Jeny, A. (2004). The decision usefulness of earnings in a European context: The role of voluntary disclosure. *European Accounting Review*, 13(2), 307-336.
- Chih, H.-L., Chih, H.-H., & Chen, T.-Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93(1), 115-135. <https://doi.org/10.1007/s10551-009-0186-x>
- Chowdhury, R. H., Hossain, T., & Inoue, T. (2018). Does CSR enhance firm performance? Evidence from an emerging economy. *Sustainability*, 10(6), 1734.
- Colovic, A., & Henneron, S. (2018). Corporate social responsibility and SMEs: A European perspective. *European Business Review*, 30(3), 340-358.
- Cowe, R. (2003). *Handbook of corporate social responsibility*. London, UK: Palgrave Macmillan.
- Cowton, C. J., & Sandberg, J. (2012). *Socially responsible investment*. In A. Crane, D. Matten, & L. Spence (Eds.), *Corporate social responsibility: Readings and cases in a global context*. London, UK: Routledge.
- Crane, A., Matten, D., Glozer, S., & Spence, L. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization* (5th ed.). Oxford, UK: Oxford University Press.

- Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, 25(5), 733-747. <https://doi.org/10.1002/csr.1490>
- Dangelico, R. M., Pujari, D., & Pontrandolfo, P. (2017). Green product innovation in manufacturing firms: A sustainability-oriented dynamic capability perspective. *Business Strategy and the Environment*, 26(4), 490-506. <https://doi.org/10.1002/bse.1932>
- Davis, S. J., & Haltiwanger, J. (1992). Gross job creation, gross job destruction, and employment reallocation. *The Quarterly Journal of Economics*, 107(3), 819-863. <https://doi.org/10.2307/2118365>
- Davis, S. J., Haltiwanger, J., & Schuh, S. (1996). *Job creation and destruction*. Cambridge, MA: MIT Press.
- Demirbag, M., Wood, G., Makhmadshoev, D., & Rymkevich, O. (2017). Varieties of CSR: Institutions and socially responsible behaviour. *International Business Review*, 26(6), 1064-1074. <https://doi.org/10.1016/j.ibusrev.2017.03.011>
- Ditlev-Simonsen, C. D. (2010). From corporate social responsibility awareness to action? *Social Responsibility Journal*, 6(3), 452-468. <https://doi.org/10.1108/17471111011064807>
- Dobers, P., & Halme, M. (2009). Corporate social responsibility and developing countries. *Corporate Social Responsibility and Environmental Management*, 16(5), 237-249. <https://doi.org/10.1002/csr.212>
- Doyle, P. (1992). What are the excellent companies? *Journal of Marketing Management*, 8(2), 101-116. <https://doi.org/10.1080/0267257X.1992.9964183>
- Dufour, D., & Molay, E. (2010). Cross-country determinants of capital structure: Evidence from large European firms. *Finance*, 31(2), 43-78.
- Dunphy, D., Griffiths, A., & Benn, S. (2007). *Organizational change for corporate sustainability* (2nd ed.). London, UK: Routledge.
- Epstein, E. M. (1987). The corporate social policy process: Beyond business ethics, corporate social responsibility, and corporate social responsiveness. *California Management Review*, 29(3), 99-114. <https://doi.org/10.2307/41165254>
- Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies*, 15(1), 1-33. <https://doi.org/10.1093/rfs/15.1.1>
- Famiyeh, S. (2017). Corporate social responsibility and firm's performance: Empirical evidence. *Social Responsibility Journal*, 13(2), 390-406. <https://doi.org/10.1108/SRJ-04-2016-0049>
- Galbreath, J. (2009). Building corporate social responsibility into strategy. *European Business Review*, 21(2), 109-127. <https://doi.org/10.1108/09555340910940123>
- Gangi, F., Mustilli, M., Varrone, N., & Daniele, L. M. (2018). Corporate social responsibility and banks' financial performance. *International Business Research*, 11(10), 42-58. <https://doi.org/10.5539/ibr.v11n10p42>
- Ghasemi, M., Shafeiepour, V., Aslani, M., & Barvayeh, E. (2014). The impact of corporate social responsibility on firm financial performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 1-9.
- Gupta, A. D., Das, D., & Dutta, P. (2013). Corporate social responsibility and sustainability in emerging economies: A study of India. *Journal of Business and Economics*, 5(2), 242-258.
- Hernández, P., Martínez, M. C., & Rodríguez, L. (2019). Corporate social responsibility and knowledge management: Drivers of innovation and competitiveness. *Corporate Social Responsibility and Environmental Management*, 26(5), 1213-1224.
- Hodges, H. E. (2015). Public perceptions of corporate social responsibility in the United States. *Public Relations Review*, 41(5), 704-711.
- Hong, S., Yang, S. U., & Rim, H. (2020). The influence of corporate social responsibility and customer-company identification on publics' perceptions of organizations. *Journal of Business Research*, 120, 84-94.
- Hovakimian, A., Opler, T., & Titman, S. (2001). The debt-equity choice. *The Journal of Financial and Quantitative Analysis*, 36(1), 1-24. <https://doi.org/10.2307/2676195>
- Husted, B. W., Jamali, D., & Saffar, W. (2015). Corporate social responsibility and institutional theory: A North-South comparison. *Journal of Business Research*, 68(12), 2638-2645.
- Jackson, J. H., & McIver, J. (2001). CSR and sustainable development: Building competitive advantage. *Business Strategy and the Environment*, 10(3), 155-164.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *The Academy of Management Review*, 20(2), 404-437. <https://doi.org/10.5465/amr.1995.9507312924>
- Kale, P., Singh, H., & Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management Journal*, 21(3), 217-237.
- Karyawati, G., Ibrahim, S., & Kartini, D. (2020). CSR disclosure and financial performance: Evidence from Indonesian companies. *Journal of Asian Finance, Economics and Business*, 7(2), 267-276.
- Kim, H., Hur, W. M., & Yeo, J. (2019). Corporate social responsibility and employee outcomes: A moderated mediation model of organizational identification and moral identity. *Journal of Business Ethics*, 156(3), 759-774.
- Kramer, M. R., & Pfitzer, M. W. (2016). The ecosystem of shared value. *Harvard Business Review*, 94(10), 80-89.
- Kucukusta, D., Perelygina, M., & Lam, W. S. (2019). CSR communication strategies and stakeholder engagement of upscale hotels in social media. *International Journal of Contemporary Hospitality Management*, 31(5), 2129-2148. <https://doi.org/10.1108/ijchm-06-2018-0484>
- Lähtinen, K., & Toppinen, A. (2008). Financial performance in relation to corporate responsibility and forest certification in the forest industry. *Business Strategy and the Environment*, 17(5), 319-330.
- Lamb, N. H., Butler, F., & Roundy, P. (2017). Family firms and corporate social responsibility: Exploring "concerns". *Journal of Strategy and Management*, 10(4), 469-487. <https://doi.org/10.1108/jsma-02-2016-0010>
- Lantz, J. S. (2003). Business strategy and the environment: Measuring sustainability. *Journal of Environmental Planning and Management*, 46(5), 681-700.
- Laufer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43, 253-261. <https://doi.org/10.1023/A:1022962719299>
- Lefebvre, M. (2012). Corporate social responsibility and sustainability: The new business imperative. *International Journal of Sustainable Strategic Management*, 4(3), 199-214.
- Li, F., Zhao, X., & Zhang, X. (2020). CSR disclosure, media coverage, and firm value: Evidence from China. *Sustainability*, 12(3), 1120.
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance*, 72(4), 1785-1824.
- Lister, J. (2018). Corporate social responsibility and the state: International approaches to forest co-regulation. *Business and Politics*, 20(4), 604-633.
- Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: The case of Italian SMEs. *Corporate Governance: The International Journal of Business in Society*, 5(4), 28-42. <https://doi.org/10.1108/14720700510616578>
- Lu, J., Ren, L., Lin, W., & He, Y. (2016). Corporate social responsibility and firm performance in China: Evidence from a microeconomic perspective. *Sustainability*, 8(10), 910.
- Lu, J., Zhao, X., & Zhang, X. (2020). Does CSR matter to firm value? Evidence from listed companies in China. *Sustainability*, 12(2), 586.
- Mahmood, M. (2003). Corporate social responsibility: An international perspective. *Corporate Governance: The International Journal of Business in Society*, 3(3), 36-43.
- Malesios, C., Skouloudis, A., Dey, P. K., & Evangelinos, K. (2018). Corporate social responsibility and financial performance in the European banking sector. *Journal of Business Ethics*, 150(2), 579-596.
- Malik, M. (2015). Value-enhancing capabilities of CSR: A brief review of contemporary literature. *Journal of Business Ethics*, 127(2), 419-438. <https://doi.org/10.1007/s10551-014-2051-9>
- Maráková, V., Wolak-Tuzimek, A., & Gúčík, M. (2021). CSR in tourism and hospitality: A review of contemporary research. *Sustainability*, 13(2), 678.
- Marin, L., Ruiz, S., & Rubio, A. (2009). The role of identity salience in the effects of corporate social responsibility on consumer behavior. *Journal of Business Ethics*, 84(1), 65-78. <https://doi.org/10.1007/s10551-008-9673-8>

- Moir, L. (2001). What do we mean by corporate social responsibility? *Corporate Governance: The International Journal of Business in Society*, 1(2), 16-22. <https://doi.org/10.1108/EUM000000005486>
- Molay, E. (2006). The determinants of leverage: The French evidence. *Journal of Economic Surveys*, 20(1), 45-68.
- Moorthy, M., Seetharaman, A., Mohamed, A., Gopalan, R., & San, L. Y. (2017). The impact of corporate social responsibility on financial performance: Evidence from Malaysia. *International Journal of Business and Society*, 18(2), 251-268.
- Moussu, C., & Thibierge, C. (1997). The ownership structure of French firms: The stock market's role. *European Financial Management*, 3(3), 399-420.
- Muellbauer, J. (1991). Credit markets and the macroeconomy: The theoretical foundations. *Oxford Review of Economic Policy*, 7(1), 13-28.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*, 23(2), 242-266. <https://doi.org/10.5465/amr.1998.533225>
- Naqvi, S. W., Shah, S. Z. A., & Azam, K. (2013). Corporate social responsibility disclosure and its impact on firm performance: Evidence from Pakistan. *Journal of Basic and Applied Scientific Research*, 3(10), 63-69.
- OECD. (2005). *OECD guidelines for multinational enterprises*. Paris: OECD Publishing.
- Okafor, A., Adeleye, B., & Adusei, M. (2021). Corporate social responsibility and firm performance: Evidence from South Africa. *Journal of African Business*, 22(2), 1-18.
- Padilla-Lozano, C. P., & Collazzo, P. (2021). Corporate social responsibility and its impact on consumer behavior in Latin America. *Sustainability*, 13(3), 1234.
- Pan, X., Chen, X., Zhang, N., & Xu, J. (2020). Corporate social responsibility and firm value: Evidence from China. *Sustainability*, 12(2), 556.
- Parveen, S., Rao, M. K., & Malik, M. I. (2016). The effect of corporate social responsibility on organizational performance: Evidence from Pakistan. *International Journal of Business and Society*, 17(3), 449-466.
- Perez, A., & Bosque, I. R. (2013). Extending on the formation process of CSR image. *Corporate Social Responsibility and Environmental Management*, 20(4), 290-306.
- Pilat, D., & Schreyer, P. (2003). Measuring productivity. *OECD Economic Studies*, 2001(2), 127-170.
- Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review*, 76(6), 77-90.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62-77.
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The Journal of Finance*, 50(5), 1421-1460. <https://doi.org/10.1111/j.1540-6261.1995.tb05184.x>
- Razali, M. W. M., Shafie, R., & Mohd-Sanusi, Z. (2018). Corporate social responsibility and firm performance: Evidence from Malaysian companies. *Asian Journal of Business and Accounting*, 11(1), 1-29.
- Rittenhofer, I. (2015). Corporate social responsibility in Europe: Rhetoric and realities. *Journal of Business Ethics*, 131(2), 301-314.
- Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science*, 34(2), 158-166. <https://doi.org/10.1177/0092070305284978>
- Severo, E. A., De Guimarães, J. C. F., & Dorion, E. (2017). Cleaner production, environmental sustainability and organizational performance: An empirical study in the Brazilian context. *Journal of Cleaner Production*, 142, 2364-2374.
- Simsek, Z., & Ozturk, A. (2021). Corporate social responsibility and firm performance: A meta-analysis. *Business & Society*, 60(3), 1-37.
- Stephen, A. T. (2016). The role of digital and social media marketing in consumer behavior. *Current Opinion in Psychology*, 10, 17-21. <https://doi.org/10.1016/j.copsyc.2015.10.016>
- Su, W., Peng, M. W., Tan, W., & Cheung, Y. L. (2020). Corporate social responsibility, firm performance, and institutional ownership: Evidence from China. *Asia Pacific Journal of Management*, 37(2), 1-27.
- Thibierge, C. (2001). Corporate governance and ownership structure in France. *European Business Review*, 13(2), 83-95.
- Torugsa, N. A., O'Donohue, W., & Hecker, R. (2012). Capabilities, proactive CSR and financial performance in SMEs: Empirical evidence from an Australian manufacturing industry sector. *Journal of Business Ethics*, 109(4), 483-500. <https://doi.org/10.1007/s10551-011-1141-1>
- Troise, C., & Camilleri, M. A. (2021). The use of digital technologies for CSR communication and stakeholder engagement: A literature review. *Corporate Social Responsibility and Environmental Management*, 28(5), 1336-1349.
- UK Office for National Statistics. (2011). *Measuring the progress of the UK*. London, UK: Office for National Statistics.
- Valdez, A., & Castillo, J. (2021). Corporate social responsibility and consumer behavior: A systematic review. *Sustainability*, 13(9), 4825.
- Votaw, D., & Sethi, S. P. (1973). *The corporate dilemma: Traditional values versus contemporary problems*. Englewood Cliffs, NJ: Prentice-Hall.
- Williamson, D., Lynch-Wood, G., & Ramsay, J. (2006). Drivers of environmental behaviour in manufacturing SMEs and the implications for CSR. *Journal of Business Ethics*, 67(3), 317-330. <https://doi.org/10.1007/s10551-006-9187-1>
- Xie, X., Jia, Y., Meng, X., & Li, C. (2017). Corporate social responsibility, customer satisfaction, and financial performance: The moderating effect of the institutional environment in two transition economies. *Journal of Cleaner Production*, 150, 26-39. <https://doi.org/10.1016/j.jclepro.2017.02.192>
- Yoon, Y., Gürhan-Canli, Z., & Schwarz, N. (2006). The effect of corporate social responsibility (CSR) activities on companies with bad reputations. *Journal of Consumer Psychology*, 16(4), 377-390. https://doi.org/10.1207/s15327663jcp1604_9
- Zhang, Q., Oo, B. L., & Lim, B. T. H. (2020). Drivers, motivations, and barriers to the adoption of corporate social responsibility practices by construction firms in developing countries. *Journal of Cleaner Production*, 258, 120927.
- Zulfiqar, S., Sadaf, R., Popp, J., Vveinhardt, J., & Máté, D. (2019). An examination of corporate social responsibility and employee behavior: The case of Pakistan. *Sustainability*, 11(13), 3515. <https://doi.org/10.3390/su11133515>