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Does the intellectual capital affect family businesses' strategic performance?

Journal of Family Business Management

AQ: 4
AQ: 5
AQ: 6

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Abstract

Purpose – Family businesses cannot continue if they fail to enhance their strategic performance by creating sufficient value for their shareholders. This study explores how value-added intellectual capital (VAICTM) can enhance strategic performance (SP) by enhancing shareholder value added (SVA) of family businesses.

Design/methodology/approach – The study depended on secondary data collected from (32) family firms listed on Amman Stock Exchange (ASE) for the period 2018–2023. Strategic financial performance was measured by shareholder value added (SVA). VAICTM was measured using Public's (1998) model. The fixed effect model was used to estimate the study models.

Findings – The ability to create value for family business shareholders is greatly influenced by intellectual capital (IC). The analysis results indicated that the added value of intellectual capital VAICTM with all its components contributes to enhancing strategic performance through the impact on the SVA.

Practical implications – The outturns of this study can participate in directing the efforts of the ASE management to raise the level of intellectual capital value-added (VAICTM) of family businesses, to support the growth and development of these companies and improve their SP and sustainability. It also draws the attention of the family businesses' management to enhance its ability to rely on measures that reflect SP.

Originality/value – The impact of VAICTM on the SVA has not been studied in studies that have investigated the relationship between intellectual capital and family businesses performance. Previous studies focused on traditional financial performance measures, so this study focuses on VAICTM and its impact on SP represented by SVA.

Keywords Family business, Intellectual capital, Shareholder value added (SVA), Strategic performance, Value-added intellectual capital, Socioemotional wealth (SEW)

Paper type Research paper

AQ: 7
Introduction

AQ: 8
Strategic performance (SP) is both an important and sensitive topic for any organization, thus it must be carefully and continuously controlled and managed, to benefit from its outputs in determining the organization's financial position, discovering and treating risks and making various financial decisions (Atoum *et al.*, 2024; Hussien *et al.*, 2025). As for family businesses, for companies to be able to evaluate their SP, they must rely on performance measures that stem from the company's strategy and are consistent with its unique characteristics, to ensure its survival and continuity by adapting to emerging variables to maximize shareholders' wealth (Vlasic, 2023). According to the socioemotional wealth (SEW) theory, family business owners

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are highly motivated to continue their business (Gomez-Mejía *et al.*, 2007). This does not mean they abandon their selfish behavior that focuses on planning succession to preserve SEW (Saleem and Graves, 2025). However, succession planning is linked to enhancing SP (Laffranchini *et al.*, 2020). Therefore, family businesses should use available resources that enhance SP and ensure the inheritance of a company with a strong financial position for subsequent generations of the family (Mazzi, 2011). To maximize the wealth of future generations of the family, strategy, measurement and operational processes must be linked to shareholder value creation (Martínez-Romero *et al.*, 2020). Iazzolino *et al.* (2014) indicated that SP is linked to value maximization, which can be measured via value added from the perspective of all concerned parties or stakeholders in the company. SVA is considered a financial indicator capable of measuring the real economic profitability generated for shareholders (Zhang and Aboud, 2019). Since SVA takes operating profits, tax rates, cost of capital and capital employed into account, the relationship between these components indicates that when a company achieves profitability that exceeds the cost of invested capital, the owner's wealth increases (Alsamhi *et al.*, 2023).

Knauer *et al.* (2018) argue that companies cannot continue to exist if they fail to enhance their strategic performance by creating sufficient value for their shareholders. Since family businesses seek to sustain the family identity (McAdam *et al.*, 2024) and build a positive reputation (Sageder *et al.*, 2018), therefore, family businesses must make fundamental changes in dealing with performance measures, as they must move from traditional financial performance measures (Sun *et al.*, 2019). The importance of SP measures for performance evaluation is highlighted by their reliance on the company's intensive use of assets and encouraging behavior consistent with the strategy (Kurmi and Rakshit, 2017). These SP measures therefore motivate managers to manage the current asset base, by initiating or canceling investment decisions based on the impact of these investments on the owners' wealth in the long term. Its importance is also derived from the fact that it takes into account the strategic importance of managing the cost of capital intensively, and the manager's influence on capital costs (Nowotny *et al.*, 2022). The literature on strategic performance measures assumes that a company's performance measurement policy should be consistent with its strategy and value drivers (Blume, 2016).

IC is considered to be the basic foundation that contributes to enhancing innovation and change in companies (Bettinelli *et al.*, 2023). Thus, it is referred to as real capital, as companies that possess effective IC can transform knowledge into value, which gives them superiority over their competitors (Buallay *et al.*, 2019). In this context, the importance of IC for family businesses emerges as one of the most important intangible assets that participate in the process of maximizing family wealth because it consists of the total skills and competencies of employees that contribute to maximizing wealth (Claver-Cortés *et al.*, 2013; Han and Li, 2015). Creating a competitive advantage for family businesses depends on continuously producing innovations (Xu and Liu, 2020). SP is strongly influenced by the company's level of knowledge investment, which improves the company's organizational performance, whether in the social, technological, political or economic context (Asadi, 2013). Innovative corporate performance requires knowledge management and IC, especially in knowledge-intensive companies. IC is the key factor for this creative performance, which is considered one of the most important strategic values that family businesses can have (Ginesti and Ossorio, 2021). IC helps family businesses gain knowledge and renew their knowledge stock to enhance their strategic performance and get rid of the classical concepts prevalent in the company (Zamboni *et al.*, 2024). IC also enhances the creative capabilities possessed by family businesses, which helps in managing crises and developing unique methods to improve performance (Grimaldi *et al.*, 2016).

In this study, we explore how VAIC™ can enhance strategic financial performance by improving SVA of family businesses. To explain the nexus of IC on the strategic financial performance of family businesses, we integrate the SEW concept with the resource-based view, knowledge and dynamic capabilities theory. Theoretically, for companies to benefit from their IC in enhancing their SP, corporate management must direct their intangible assets (in our study, IC) towards an integrated dynamic perspective based on the resources they possess (Battagello *et al.*, 2015). The resource-based view assumes that firms can enhance their SP when possessing unique, inimitable resources (Varadarajan, 2023). However, companies' possession of resources requires knowledge that enables the company to employ these resources in a way that ensures the achievement of its goals (Ma *et al.*, 2025). Xu and Liu (2020) believe that the superior performance of companies can be explained by the company's ability to use knowledge to manage its resources. In this context, the dynamic capabilities theory emphasizes that enhancing SP and maximizing value requires the ability to manage interactions between different resources through an organizational learning process that is specific and accumulates over time (Ali *et al.*, 2021; Singh and Rao, 2016). Concerning family firms, Gomez-Mejía *et al.* (2007) introduced the concept of SEW, which is linked to behavioral agency theory. Several studies (Gallizo *et al.*, 2017; Gavana *et al.*, 2021; Gomez-Mejía *et al.*, 2007; Hernández-Perlines *et al.*, 2020; Laffranchini *et al.*, 2020; Martínez-Romero *et al.*, 2020) have confirmed that SEW is a unique feature of family businesses. SEW preservation is associated with the desire of family business owners to prioritize family wealth preservation over achieving financial goals (Hernández-Perlines *et al.*, 2020). Thus, the desire to maintain SEW will influence decisions to manage interactions between the various firm resources. Laffranchini *et al.* (2020) argue that maintaining SEW and achieving financial goals are not incompatible and that knowledge management decisions enable a balance between financial goals and building SEW. We hypothesize that preserving SEW will drive family firms to make strategic decisions to reconfigure organizational skills, resources and competencies to meet the demands of the changing environment. Therefore, family business management will work to direct IC towards a dynamic, integrated, resource-based perspective to enhance SP and ensure the preservation of SEW.

This study aims to fill a significant knowledge gap in the literature on family businesses. First, by examining the intersection of SEW with the resource-based and knowledge-based perspectives and dynamic capabilities theory, we attempt to explain how employing IC in family firms can maximize owners' wealth. Second, although the impact of IC on the performance of many types of firms has been studied, family firms have been addressed in a limited number of studies (Bataineh *et al.*, 2022). Therefore, this study contributes to current theory in the field of IC in family firms because it represents one of the first attempts to provide a comprehensive view of family firms and their unique characteristics as a dynamic capability in its own right that enhances the efficiency of IC in a way different from that of non-family firms. Although the family business literature has indicated that the primary goal of family businesses is to preserve SEW (Gomez-Mejía *et al.*, 2007), we argue that the unique characteristics of family businesses are a starting point for maximizing strategic financial performance without compromising SEW, as the deployment of resources and capabilities related to family involvement creates a multidimensional structure characterized by a structural, cognitive and relational dimension (Vlasic, 2023).

Third, the limited studies that have addressed IC in family firms have examined the impact of family-related factors on the performance and efficiency of IC (Ginesti and Ossorio, 2021; Ramírez *et al.*, 2021), measuring the elements IC in family firms (Claver-Cortés *et al.*, 2015), the characteristics of IC from the perspective of managers in family firms (Grimaldi *et al.*, 2016) and the role of family management in the relationship between IC and innovation (Manzaneque *et al.*, 2017). However, our study is considered one of the first study that focuses on the impact of VAIC^{TM} on SVA in family firms. Fourth, the antecedents of shareholder value creation have been of interest to many researchers (Alsamhi *et al.*, 2023; Zhang and Aboud, 2019), but they have focused only on non-family firms (Martínez-Romero *et al.*, 2020). Previous studies have indicated that the priority of shareholders in family firms is to preserve SEW (Hernández-Perlines *et al.*, 2020). However, several studies have indicated that family ownership contributes to value creation in the family firm through the use of the family's unique resources (Hamberg *et al.*, 2013; Kammerlander *et al.*, 2015; Pukthuanthong *et al.*, 2013). Martínez-Romero *et al.* (2020) also emphasized that preserving SEW does not conflict with family firms' use of their unique resources to create value. This study fills a research gap by exploring how IC, as one of family firms' most unique resources, influences value creation for family firm owners.

This study is important because it examined the influence of VAIC^{TM} on the SP as measured by the SVA in family businesses. The lump of previous studies that investigated the financial performance of family businesses focused on traditional financial performance measures (Bettinelli *et al.*, 2023), so this study came to focus on studying IC and its impact on SP represented by SVA. The study derives its practical value from the role of IC in improving the family businesses' SP and its capability to create value. The outturns of this study can participate in directing the efforts of the management to raise the level of IC of family businesses, to support the growth and development of these companies and to improve their SP and sustainability. It also draws the attention of the company's management to enhance its ability to rely on measures that reflect SP. Consequently, this study came to recognize the influence of VAIC^{TM} on the SVA of family businesses.

Literature review and hypothesis development

The term IC appeared for the first time when it was introduced by Galbraith (1969) who showed that IC is not just an asset owned by companies, but also a set of activities that a company undertakes to obtain its objectives. Sardo *et al.* (2018) argue that IC allows the transformation of knowledge into value and increases the ability to clarify the dissimilarity between book and market values of property rights. At the beginning of the emergence of IC, it was linked to human resources accounting, where theories were developed to explain the essence and value that individuals provide to companies (Buallay *et al.*, 2019). As stated by Roos and Roos (1997), IC has been theorized according to two main approaches. The first is the strategic approach, which describes creativity in IC and how to manage it and use it effectively, and the second is the measurement approach, which focuses on measures of IC and how to determine its value. From a strategic view, IC, especially knowledge, works to manage intangible assets and increase the company's SP, as intangible assets, including IC, are considered enabling elements because they transform productive resources into value-added assets (Kadim *et al.*, 2020).

According to Roslender and Fincham (2001), IC should mostly be aligned toward the organization's dynamic, integrated, resource-based perspective. Differences in performance can only emerge when effective entities possess valuable resources that other firms do not possess, where SP enhancement is the result of resource acquisition and utilization actions within the company (Sardo *et al.*, 2018). In this context, SEW points out that the values the family provides to family businesses, such as family experiences and culture, are considered resources that family businesses possess that are unique and difficult to imitate (De Massis *et al.*, 2016; Gallizo *et al.*, 2017). However, the resource-based sight in itself is not sufficient enough to explain the linkage between IC and SP in family businesses, as enhancing SP requires success in exploiting opportunities and employing the knowledge that the family possesses to enhance productivity (Ginesti and Ossorio, 2021). Hence, the knowledge-based sight should work in tandem accompanied by the resource-based view to explain the contribution of IC to enhancing family businesses SP (Xu and Liu, 2020). The linkage between IC and SP can be clarified by the resource-based sight of the company, the knowledge-based sight of the firm and the dynamic capabilities theory (Ozkan *et al.*, 2017). AQ: 9

The resource-based view assumes that the family can improve the performance of its company and achieve its goals through the effective exploitation of its resources, as the distinction of family companies lies in the unique resources they possess (Beech *et al.*, 2020). Since the organization's IC is classified among these resources, it is used in making decisions that lead to superior strategic performance (Bataineh *et al.*, 2022). The resource-based view links superior performance to the impact of the family firms' internal activities, as it assumes that good implementation of strategies, effective response to opportunities and appropriate handling of risks lead to improved performance (Claver-Cortés *et al.*, 2013). Therefore, family businesses must have sufficient awareness of the resources they have, which can be considered an advantage for them and distinguish them from other companies to achieve the goals associated with improving their performance (Ginesti and Ossorio, 2021). Maintaining SEW requires family firms to build new capabilities based on knowledge management mechanisms and collective learning (Su and Daspit, 2022). Because the family is socially and emotionally involved in the company's operations, it creates unique mechanisms for transferring knowledge and learning from past experiences to leverage its resources to create value (Cabrera-Suárez *et al.*, 2018). In this context, some elements of IC are consistent with the resource-based sight's description of the organization's superiority due to family firms' IC being an intangible resource which makes it almost inimitable and not replaceable (Ginesti and Ossorio, 2021). IC is also linked to SP because its components contribute to the value creation by interrelating with each other and with other resources in the company, which contributes to enhancing performance (Montequín *et al.*, 2006). Wernerfelt (1984) believes that strategy expresses a balance between the use of assets at hand and the enlargement of new probable resources. IC is considered a resource capable of enhancing strategic performance by creating rare value compared to competitors that is inimitable and cannot be replaced. According to Obeidat *et al.* (2021), the only resource that meets the above criteria is the IC owned by the firm.

The knowledge-based sight emphasizes institutional learning as a key source for achieving added value for companies (Han and Li, 2015). Enhancing corporate performance is further understood through the knowledge-based sight of the company (Kengatharan, 2019). The knowledge-based view takes a stand on the value creation process. It attempts to explain it, asserting that tacit and explicit knowledge represent competitive advantage and, thus, creating added value through improved SP (Kianto *et al.*, 2020). In contrast to the resource-based view, the knowledge-based view recognizes that changes in the internal structure of the firm may occur, and thus can explain changes in the structure and value of IC (Alshaketheep *et al.*, 2024; Kengatharan, 2019). IC contributes to transforming the individual knowledge of individuals within the family firm into organizational knowledge by organizing and managing the interactions between individuals within the company (Duarte and Kok, 2021). Since IC contains an element of knowledge, the creation of value can be explained through knowledge-based theory. However, IC cannot be described as representing knowledge, as IC can be viewed as an organizational resource that contributes to creating organizational knowledge within the company (Konno and Schillaci, 2021).

To control the weakness of the resource and knowledge-based sight, the theory of dynamic capabilities was developed (Ali *et al.*, 2021). Dynamic capability is recognized as the capability to enhance SP by enhancing the company's capability to adapt to changes occurring in its external environment by developing its organizational structures and improving its internal operations by exploiting the resources it possesses (Ali *et al.*, 2021; Diefenbach, 2006). Dynamic capabilities theory emphasizes that the companies' possession of superior organizational capabilities contributes to enhancing their ability to create value (Singh and Rao, 2016). More specifically, dynamic capabilities theory holds that enhancing a company's SP is achieved through the flow of information and knowledge, so organizational knowledge according to dynamic capabilities theory enables the company to create value and improve performance like knowledge-based theory (Ali *et al.*, 2021; Konno and Schillaci, 2021). Here, dynamic capabilities are considered a mediator between IC and SP (Singh and Rao, 2016). IC is considered the criterion that serves organizational learning, and from this perspective, it is considered difficult to separate IC from the stream of knowledge and organizational learning, as the stream of knowledge (decision-making) cannot be separated from the stock of knowledge (IC). The process of enhancing strategic performance is considered a complex process emanating from interactivity between different assets, it requires unbroken feedback between the flow of knowledge (decision-making) and the stock of knowledge (IC) (Aljuboori *et al.*, 2021). However, the disengagement between knowledge stock and its flux has led to different classifications of IC such as human capital (HC), social capital (SC) or relational capital (RC) (Rehman *et al.*, 2021). In this context, when we carefully look at the components of IC, we find that they define and support each other, are closely related to each other and are practically inseparable, which leads us to interpret IC as a stock of knowledge and a zestful perception that includes knowledge fluxes, which ultimately leads to enhanced performance (Roos and Roos, 1997). Concerning family businesses, the family, through its involvement in the company's activities, is considered a dynamic capability that contributes to the management of the unique resources of family businesses by transferring knowledge across generations and managing it in a way that contributes to value creation (Chirico and Salvato, 2016).

Mondal and Ghosh (2012) concluded that there is a link between the performance of IC components and an organization's financial performance. Murti *et al.* (2023) found that IC enhances financial performance. Similarly, Joshi *et al.* (2013) indicated that financial performance is linked to the efficiency of IC. Ozkan *et al.* (2017) found that IC efficiency is linked to enhancing the performance of Turkish banks. Ahmed (2023) concluded that their correlation between investment in IC and profitability. Weqar *et al.* (2021) found that the VAIC™ is not significantly related to profitability, while there was no effect of SC on performance, and that HC efficiency improves financial performance. Ali and Anwar (2021) found that investing in IC creates value by enhancing SP. Waseem *et al.* (2018) indicated that elements of IC contribute to enhancing organizational performance through innovation capacity.

Human capital and shareholder value added of family businesses

Many studies have indicated that IC comprises HC, SC and RC. Each of the elements of IC can have an impact on SP. Campos-Valenzuela *et al.* (2025) define HC as a group of dexterities, experiences and proficiencies that individuals have, that give them innovative and creative capabilities and are influential in terms of their presence in the organization. The HC theory is based on the fact that the employees in the organization are the ones who possess the experience, skills and knowledge that the company can harness to maximize shareholder wealth and that these skills and abilities are the basis for achieving high-performance business achievements (Marginson, 2019). HC includes all the attributes possessed by the company's human resources, including the information experiences possessed by individuals, accumulated experiences, creative and innovative skills and capabilities (Rehman *et al.*, 2021). HC is considered a substantial pillar for companies to reach their strategic objectives and sustainability, as possessing superior HC is linked to improving companies' operations and activities and contributes to their excellence and improved performance (Dahash and Al-Dirawib, 2018). Rehman *et al.* (2022) concluded that investing in HC components improves companies' performance, in addition to the efficiency of SC and RC work to create value and improve performance.

Concerning family businesses, HC includes the knowledge and skills of family members (Dawson, 2012). Barros-Contreras *et al.* (2024) argue that the knowledge and skills of family members cannot be imitated because they have a shared history of formal (business) and informal (family) relationships that make them unique. Thus, family HC is likely to enhance the SP of family firms and maximize owners' wealth. Individual motivations and the desire to satisfy psychological needs of family managers may be crucial issues in aligning the desire to maintain SEW with performance enhancement goals (Dawson, 2012). The emotional commitment of family managers will drive them to inspire and motivate employees to enhance their performance (Heider *et al.*, 2022). On the other hand, Åberg *et al.* (2024) argue that family firms may hire employees who are not sufficiently qualified, given that important jobs are limited to family members or family firms may face difficulty in attracting competent employees from outside the family due to their perceptions of career advancement opportunities and bias towards family members. Therefore, we hypotheses:

H1. There is no effect of HC on SP as measured by SVA of family businesses.

Structural capital and shareholder value added of family businesses

SC includes the organization's learning and knowledge sharing in its daily practices and guarantees that the knowledge stored in the company cannot be lost when individuals are laid off (Nourani *et al.*, 2018). This means that there will be no negative effects on employees leaving the company (Alipour *et al.*, 2024), SC reflects all the various physical storage facilities in the company, that is, its culture, operations, database, procedures and psychological assets, as they not only generating value but also add to the financial value of the firm (Beltramino *et al.*, 2020). Managers in family firms have relationships that go beyond the usual working relationships in non-family firms, thus producing structural relationships that contribute to the transfer and sharing of expertise on a wide scale (Chirico, 2008; Su and Daspit, 2022). Harris and Raviv (1991) argue that SC refers to the company's knowledge accumulation independently of its accumulation by individuals within the company, meaning that SC is considered one of the assets that the company maintains when employees leave their jobs, such as databases, customer information, work procedures and, organizational structure (Hooshangi *et al.*, 2016). In family businesses, family members involved in management adopt clear mechanisms for exchanging knowledge and transferring it to future generations to strengthen the family essence, which will increase the accumulation of knowledge (Barros-Contreras *et al.*, 2024).

SC results from structures that a company has built up over time and will continue to exist with them when employees leave, so companies with distinct SC will be characterized by a culture that permits employees to seek fresh things, acquire and utilize them (Singh *et al.*, 2011). The informal relationships that arise between family members contribute to removing structural barriers, allowing actors within the company to generate knowledge that is difficult for competitors to imitate (Barros-Contreras *et al.*, 2022). SC represents stores of knowledge in companies, including organizational structures, procedures workflow guides, strategies that are developed to achieve long-term goals and anything whose intangible worth is greater than its physical worth (Bontis *et al.*, 2000). Ramírez *et al*. (2021) indicated that SC comprises the enabling structures that help the family businesses employ its IC, and the structures include both tangible elements that the company possesses, like patents, and intangible elements like organizational culture, and relationships between individuals within the company. Manzaneque *et al*. (2017) found that structural capital plays an important role in the ability of family firms to innovate, thus improving strategic performance. Therefore, we hypotheses:

H2. There is no effect of SC on SP as measured by SVA of family businesses.

Relational capital and shareholder value added of family businesses

RC consists of a company's relationships with extrinsic stakeholders and how they understand the firm's products and services. This is extremely substantial for any company because it creates comprehension and value in the minds of stakeholders (Dahash and Al-Dirawib, 2018). Given the importance of SEW, family businesses constantly seek to maintain their image and relationship with stakeholders (Dayan *et al.*, 2019). Family business relationships have unique characteristics that enable them to form and leverage relational capital to maximize owners' wealth (Debicki *et al.*, 2020). Basco (2017) argues that the relational capital that family firms seek to build with stakeholders is geared toward maximizing value for future generations of the family. As a result of RC, companies are in a superior position to understand customers' present requirements and anticipate their demands that are not identified by competitors (De Leaniz and Del Bosque, 2013). In this context, Mani and Lakhal (2015) found that family business RC is associated with superior firm performance. Family firms derive their relational capital from family relationships, thus, outperforming non-family firms in leveraging external knowledge (Andersén, 2015).

Customers are the motive of the development and extension of companies, so companies must interact with customers and develop RC. Customer capital is formed as a result of establishing long-term relationships with customers as it represents the most successful priority all over the world (Mende *et al.*, 2013). In family businesses, customers view the company's values as an extension of the family's values (Cucculelli *et al.*, 2019), which increases customers' trust in the products and services provided by family businesses (Herrero, 2018). The information and knowledge acquired from clients have a significant impact on all details of an organization's activities (Cegarra-Navarro and Sánchez-Polo, 2008). Family businesses can foster innovation as a result of acquiring knowledge through their overlapping relationships with customers (Beliaeva *et al.*, 2022). Gómez-Valenzuela (2022) finds that RC plays a paramount function in determining firm performance. Rodriguez-Aceves *et al.* (2023) argue that relational capital, which consists of mutual trust and the strength of formal and informal ties in family firms, contributes to knowledge sharing and performance enhancement. Therefore, we hypotheses:

H3. There is no effect of RC on SP as measured by SVA of family businesses.

Research design

Data and sample

The data necessary to calculate both *SVA* and the *VAIC*^{TM} was extracted manually from the annual reports. Securities Depository Center statistics were relied upon to obtain the data that was used in calculating the control variables. The study's initial population includes all companies listed on the ASE for a period of 5 years (2018–2023), which amounted to 225 companies. Companies in the banking and insurance sectors were excluded to produce homogeneous interpretations. The study sample was only limited to companies in the industrial and service sectors. Given the lack of consensus on the definition of family businesses (Cano-Rubio *et al.*, 2017), Chua *et al.*'s (1999) definition of family businesses was relied upon. Gavana *et al.* (2021) pointed out that family firms cannot be considered to behave in the same way, but rather the behavior of firms depends on the level of family involvement in the firm's activities. In the same context, Huybrechts *et al.* (2013) argue that SEW preservation behavior is more evident when the CEO is a family member, as the focus of the non-family CEO is on activities that enhance financial performance without paying sufficient attention to SEW preservation. Similarly, Mariani *et al.* (2023) argue that the perception of how SEW is maintained depends largely on the representation of family members on the board of directors. Therefore, we included in the study sample all companies whose CEO and chairman belong to the same family (Calabrò *et al.*, 2021), as well as ownership concentration in one family or a small number of families (Bataineh *et al.*, 2022), were included in the study sample. Thus, the final number of the study sample comprised 32 family companies.

Variables measurement

Strategic financial performance

SP was measured by shareholder value added (SVA), a financial metric that measures a company's capability to create value for shareholders. This was measured through the data available in the annual reports, and it was measured according to the following model (Maditinos *et al.*, 2009):

$$SVA = NOPAT \times (1 - WACC).$$

Where: *NOPAT*: "Net operating profit after taxes". *WACC*: "weighted average cost of capital". To calculate *SVA* Initially, *NOPAT* and *WACC* are calculated. According to Eng and Vichitsarawong (2022), $NOPAT$ = operating profit × (1– tax rate). According to Vartiainen *et al.* (2020), $WACC = (E/V \times R_e) + (D/V \times R_d \times (1 - Tc)$.

Where: E: Shareholders' equity market value. D: Debt Market value. V: Total financing structure market value. R_e: Cost of equity. R_d: cost of debt. T_c: tax rate.

Intellectual capital

VAIC^{TM} was measured following the method proposed by Pulic (1998) who measured the IC value-added coefficient (VAIC^{TM}). The VAIC^{TM} measurement is based on the added-value provided by IC (Pulic, 1998; Kamath, 2014). From the point of view of stakeholder theory, any economic unit, in addition to shareholders, has parties that influence and are affected by the company's activities (Freeman and Reed, 1983). Therefore, value added is considered a broader measure than accounting profit, as accounting profit measures the return to shareholders, while value-added refers to maximizing wealth as a result of using the company's resources (Kamath, 2014). Value added is considered a measure of the return for all stakeholders (Rehman *et al.*, 2022). Since IC is considered one of the company's intangible resources, VAIC^{TM} is considered an appropriate measure to determine its efficiency (Meles *et al.*, 2016).

Pulic's (1998) model has been widely used in the accounting and management literature to measure IC efficiency. For example (Xu and Liu, 2020; Mondal and Ghosh, 2012; Ozkan *et al.*, 2017; Rehman *et al.*, 2021), VAIC^{TM} is measured according to a of a several phases: First phase, the value-added of employed capital (VA) is calculated. $VA = OUT - IN$. Where output OUT is the total revenue generated from operational activities. Input (IN) is the sum of operating expenses excluding employee expenses, where employee expenses are viewed as an investment in the $VAIC^{TM}$ model. The second phase: HC efficiency (HCE) is estimated, which refers to the marginal contribution of each unit of investment in employees (employee expenses) to VA. $HCE = VA/HC$. Where HC is total expenses related to employees. The third phase: SC Efficiency (SCE) is estimated, first SC is calculated. $SC = VA - HC$. Where: SC Structural capital. Then SCE is estimated by calculating the contribution of each unit invested in SC to VA. $SCE = SC/VA$. In the fourth phase: RC efficiency (RCE) is estimated by calculating the contribution of each unit invested in RC to VA. $RCE = VA/RC$. Where: RC is all marketing expenses.

Control variables

The literature indicated that there is a group of variables that may have an impact on performance. To seclude the influence of other variables that could contribute to predicting SVA, control variables were used. Hussien *et al.* (2024) indicated that leverage (LEV) is considered one of the variables that affect performance. LEV is calculated as the debt-to-equity ratio (Zraqat *et al.*, 2021). Alhawamdeh *et al.* (2024) indicated that company size ($SIZE$) may improve performance because it influences the firm's activity and the level of compliance with instructions. $SIZE$ was calculated as logarithm of lagged total assets. Return on assets (ROA) is considered one of the performance measures. Maditinos *et al.* (2009) indicated that ROA affects SVA. ROA was measured as the ratio of operating income to total assets (Alrawashedh *et al.*, 2025).

Model specification

$$\mathrm{SVA_{it}} = \mathrm{a_0} + \mathrm{a_1} * \mathrm{HCE_{it}} + \mathrm{a_2} * \mathrm{SCE_{it}} + \mathrm{a_3} * \mathrm{RCE_{it}} + \mathrm{a_4} * \mathrm{LEV_{it}} + \mathrm{a_5} * \mathrm{SIZE_{it}} + \mathrm{a_6} * \mathrm{ROA_{it}} + \mathrm{e_i}$$

Results

We employ the "econometric analysis using panel data", before estimating our model, we should test multicollinearity, in addition to "Breusch-pagan LM" and "Hausman tests", which indicates whether a “fixed- or random-effects model” is best suited for analyzing panel data (Bell *et al.*, 2019). In this test, we compare the coefficients estimated using the “fixed-effect model” with those estimated using the “random-effect model” to determine whether the differences between them are significant. The results are shown in Table 1. T1

The results of (VIF) show that there is no “multicollinearity problem” for study variables. Moreover, “Berush-Pagan LM” and “Hausman tests” show the *p*-value is less than 0.05. Since the *p*-value is less than 0.05, we reject the null hypothesis that the “random-effect model” is appropriate at a 5% significance level (Gunasekara *et al.*, 2014). This suggests that the “fixed-effect model” is suitable for determining the relationship between IC and SP as measured by SVA of family businesses.

Table 2 presents the results of “fixed effect” regression on the relationship between HC and SVA (H1), SC and SVA (H2) and RC and SVA (H3). As shown in Table 2. HC, SC and RC positively and significantly influence the SVA of family businesses. Table 2 Indicates the importance of IC in enhancing SVA to family businesses. This may be because IC works to manage intangible assets, including knowledge accumulation. Intangible assets, including IC, enable elements because they transform productive resources into value-added assets (Kadim *et al.*, 2020). IC contributes to transforming knowledge into value and increases the ability to clarify the variance between book and market values of property rights (Sardo *et al.*, 2018). From the point of sight of resource theory, IC is considered a resource capable of enhancing SVA by creating rare value compared to competitors. This is because the resources possessed by family firms are unique and difficult to imitate (De Massis *et al.*, 2016). Our results can also be interpreted in light of the knowledge-based point of view that emphasizes organizational T2

Table 1. “Breusch-pagan LM” and “Hausman tests” AQ: 11

Variables	VIF	Hypothesis	Berush-pagan LM test	Hausman test
HC	1.332	H1	χ^2 = 740.722	χ^2 = 26.231
SC	1.061		*p*-value = 0.000	*p*-value = 0.000
RC	1.186	H2	χ^2 = 727.627	χ^2 = 18.480
LEV	1.016		*p*-value = 0.000	*p*-value = 0.001
SIZE	1.364	H3	χ^2 = 706.836	χ^2 = 20.833
ROA	1.137		*p*-value = 0.000	*p*-value = 0.000

Note(s): *significant level at 0.05
Source(s): Authors’ own creation

Table 2. Hypotheses test AQ: 12

	H1	H2	H3
HC	0.056**	–	–
SC	–	0.117**	–
RC	–	–	0.034**
LEV	0.008	−2.325	−1.417
SIZE	1.015**	0.775**	1.177**
ROA	0.170**	0.101**	0.076**
R-squared	*0.382*	*0.224*	*0.357*
Adj *R*-squared	*0.369*	*0.208*	*0.343*
F-value	*28.778*	*13.460*	*25.795*
Sig. *F*	*0.000*	*0.000*	*0.000*

Note(s): *significant level at 0.05
Source(s): Authors’ own creation

learning as the main source for achieving added value for companies, as it confirms that tacit knowledge and explicit knowledge are a source of superiority for companies. Since IC contains the knowledge component, it creates value by improving the company's strategic performance.

Discussion

Our results indicate a nexus of VAIC^{TM} and SP measured by the SVA of family firms. The nexus of VAIC^{TM} and SP of family firms can be explained from the perspective of dynamic capabilities theory. The dynamic capabilities theory assumes that the SP of family firms can be enhanced by considering the family itself as a dynamic capability that contributes to employing its IC by acquiring and managing the unique, non-substitutable resources it possesses in a way that contributes to the sustainability of the company and the creation of value in the long term (Cabrera-Suárez *et al.*, 2018). Dynamic capabilities theory also assumes that the flow of information and knowledge occurs through a series of mutual relationships between resources and competencies possessed by the company, which are directed through the process of organizational learning to contribute to enhancing SP (Ali *et al.*, 2021). In family businesses, family members acquire deep levels of knowledge through learning and working in the business from an early age (Chirico and Nordqvist, 2010). Thus, family businesses can employ the knowledge acquired by family members in integrating and managing resources (including IC) in a way that contributes to enhancing SP. Since IC is considered the standard that serves organizational learning, it is difficult to separate IC from the flow of knowledge and organizational learning, as the flow of knowledge represented by decision-making cannot be separated from the stock of knowledge represented by IC. Since IC is considered a stock of knowledge and a dynamic perception that includes knowledge flows, it leads to enhancing the wealth of the of family firms, therefore considered an indicator of maximizing the shareholder's added value.

Our results demonstrate the significant impact of HC on SVA in family firms. HC in family firms combines the unique knowledge and skills of family members that have been formed through a series of formal and informal interactions (Dawson, 2012), and is therefore difficult to imitate by competitors, leading to the superior performance of family firms (Barros-Contreras *et al.*, 2024). Similarly, our results show that SC has a significant impact on SVA in family firms. Consistent with the SEW concept, this suggests that the structures built by family firms persist when employees leave because they are linked to the culture and essence of the family (Hooshangi *et al.*, 2016). Family managers' relationships go beyond the usual business relationships and contribute to the acquisition of knowledge from external sources (Su and Daspit, 2022), thus creating new ideas that are difficult for non-family competitors to access (Manzaneque *et al.*, 2017). Finally, our results indicate that there is an impact of relational capital on the added value of shareholders in family firms. Relational capital is associated with family firms' efforts to maintain their image and relationship with stakeholders (Dayan *et al.*, 2019). The goal of preserving SEW drives family businesses to pay attention to customer requirements and direct business to maximize the benefit of future generations of the family (Basco, 2017), which will be reflected in superior strategic performance. Our results may be an indication of the success of family firms in building superior relationships that contribute to knowledge acquisition and improved performance.

The study results are consistent with previous literature. For example, this result is consistent with the work of Dahash and Al-Dirawib (2018), who indicated that higher-ranking HC is connected to improving the organization's productivity, and superiority, and improving its SP. This result is also consistent with Ramírez *et al.* (2021) who argue that SC includes enabling structures that contribute to success and enhance performance. It is also consistent with the view of De Leaniz and Del Bosque (2013) who argue that as a result of RC, companies are in a better position to know clients' present needs and anticipate their demands that are not identified by competitors. The results of our study are also consistent with Mondal and Ghosh

(2012) who found a significant association between IC components and financial performance. Likewise (Murti *et al.*, 2023; Joshi *et al.*, 2013; Ozkan *et al.*, 2017; Gómez-Valenzuela, 2022; Ahmed, 2023), where the results of previous literature indicated the existence of an important relationship between IC components and corporate performance. The study results are also consistent with Rehman *et al.* (2022) who found that the SCE and RCE work to create value and improve performance. Our results are also consistent with the results of the Ali and Anwar (2021) study, which indicated that investing in IC works to create value by enhancing strategic performance.

Conclusions

This study aimed to identify the impact of VAIC™ on the SP of family firms. Data were collected from (32) family companies listed on the ASE for the period (2018-2023). SP was measured by SVA. We measured VAIC™ using Pulic's (1998) model. Many studies have addressed the impact of IC on companies' SP, but the importance of this study is that it dealt with SP measured by the value of SVA in family businesses. The impact of IC has not been widely studied in strategic financial performance in family firms, nor has shareholder value added been used to measure strategic performance in family firms. Thus, this study contributes to enriching the literature on IC and its relationship to strategic performance in family businesses. The majority of previous studies have focused on traditional financial performance measures.

The study found that components of IC have an impact on enhancing the SP of family businesses. IC enhances the SP of companies by increasing the effectiveness of managing intangible assets, as intangible assets, including IC, are considered enabling elements because they transform productive resources into value-added assets. In addition, IC contributes to transforming knowledge into value, as IC is considered a resource capable of enhancing strategic performance by creating rare value compared to competitors. IC contributes to enhancing SP by creating organizational skills, resources and competencies to suit the requirements of the changing environment. These results may be because IC is considered the standard that serves organizational learning, and therefore it is difficult to separate IC from the flow of knowledge and organizational learning, as the flow of knowledge represented by decision-making cannot be separated from the stock of knowledge represented by IC. Since IC is considered a stock of knowledge and a dynamic perception that includes knowledge flows, it leads to enhancing the wealth of the owners and thus is considered an indicator of maximizing the added value of shareholders. The study results are consistent with previous literature (Murti *et al.*, 2023; Joshi *et al.*, 2013; Ozkan *et al.*, 2017; Gómez-Valenzuela, 2022; Ahmed, 2023; Dahash and Al-Dirawib, 2018; Ramírez *et al.*, 2021; Rehman *et al.*, 2022; Ali and Anwar, 2021), as the results of previous literature indicated that there is an important relationship between the components of IC and corporate performance.

Research implications

Family firms face the dual challenge of achieving superior SP while maintaining the SEW that distinguishes them from non-family firms (Cabrera-Suárez *et al.*, 2018). The results of this study have important implications for managers and decision-makers in family businesses. The results confirm that improved use of IC in family firms contributes to improved strategic financial performance without compromising SEW. Therefore, those involved in managing family businesses must develop HC by investing in developing the skills of new generations of family members through training and leadership programs that contribute to enhancing the culture of continuous learning and innovation to ensure the sustainability of the business across generations while taking into account the expertise of external consultants to compensate for any knowledge gaps. Family businesses should also focus on leveraging the family's unique SC. This can be achieved by documenting institutional knowledge and expertise through clear systems that ensure its transmission across generations, as well as adopting strong governance systems that help manage conflict and professionally make decisions.

Our results also indicate the importance of RC in the SP of family businesses. Therefore, family business management must work to build strong relationships with stakeholders (employees, customers, suppliers and the local community) to enhance loyalty and corporate reputation. As well as formulating an effective communication strategy that balances the family's identity and values with the demands of a competitive market, this is achieved by strengthening strategic partnerships and alliances to expand the scope of the business without losing family control. Finally, family businesses must strike a balance between economic performance and family values, by developing a clear strategic vision that reflects a balance between business objectives and preserving family ties. Adopting policies that promote transparency and fairness among family members to prevent disputes that could affect the company's continuity. As well as identifying decision-making mechanisms that take into account both emotional and economic considerations. Through these strategies, family businesses can achieve a sustainable competitive advantage and leverage IC to enhance SP without compromising family cohesion or core values.

Limitations and future research

When considering the results of this study, some limitations should be taken into account. The sample consisted of family firms in only one developing Middle Eastern country, which may indicate a potential bias in the results. Future studies could analyze the impact of VAIC™ on SP in other countries with different contextual characteristics, and diverse cultural, financial and legal considerations. Future studies could also analyze the mechanisms through which family firms interact with their IC to enhance financial performance, focusing on variations in the way family management is handled by the second or subsequent generation. For example, Memili *et al.* (2015) indicated that first-generation family business management outperforms second-generation management in terms of the ability to allocate resources and create value. This study relied on measuring the financial strategic performance of family firms without adequately addressing non-financial performance indicators. In addition to financial performance, family businesses often emphasize issues including family cohesion, legacy, sustainability (Oudah *et al.*, 2018) and ethical issues (Astrachan *et al.*, 2020). Incorporating a broader set of non-financial performance indicators, including qualitative elements such as employee satisfaction, customer loyalty and social impact concerning strategic performance, is an important issue that can be addressed in future studies. Finally, dealing with the contextual elements, and broadening the definition of performance measures, would help one to grasp the dynamics under action. Future research could provide deeper insights that not only reflect the complexity of family company environments but also help to address the practical consequences of family business management techniques meant to improve SP by combining these aspects.

References

Åberg, C., Calabrò, A., Valentino, A. and Torchia, M. (2024), "Socioemotional wealth and family firm performance: the moderating role of CEO tenure and millennial CEO", *British Journal of Management*, Vol. 35 No. 4, pp. 2103-2121, doi: 10.1111/1467-8551.12818.

Ahmed, I.E. (2023), "Valuation of intellectual capital: the performance contribution model", *Journal of the Knowledge Economy*, Vol. 14 No. 3, pp. 3353-3373, doi: 10.1007/s13132-022-00942-x.

Alhawamdeh, H., Abdel Muhsen Irsheid Alafeef, M., Abdel Mohsen Al-Afeef, M., Alkhawaldeh, B.Y., Nawasra, M., Al_Rawashdeh, H.A.A., Zraqat, O., Hussien, L.F. and Al-Eitan, G.N. (2024), "The relationship between marketing capabilities and financial performance: the moderating role of customer relationship management in Jordanian SMES", *Cogent Business and Management*, Vol. 11 No. 1, 2297458, doi: 10.1080/23311975.2023.2297458.

Ali, B.J. and Anwar, G. (2021), "Intellectual capital: a modern model to measure the value creation in a business", *International Journal of Engineering Business Management*, Vol. 5 No. 2, pp. 31-43, doi: 10.22161/ijebm.5.2.4.

Ali, M.A., Hussin, N., Haddad, H., Alkhodary, D. and Marei, A. (2021), "Dynamic capabilities and their impact on intellectual capital and innovation performance", *Sustainability*, Vol. 13 No. 18, 10028, doi: 10.3390/su131810028.

Alipour, K.K., Barber, D. III, Batchelor, J.H., Peake, W., Jones, S. and McIlveene, T. (2024), "Family business culture: a strategic resource and driver of firm performance", *Journal of Family Business Management*. doi: 10.1108/JFBM-03-2024-0064. AQ: 10

Aljuboori, Z.M., Singh, H., Haddad, H., Al-Ramahi, N.M. and Ali, M.A. (2021), "Intellectual capital and firm performance correlation: the mediation role of innovation capability in Malaysian manufacturing SMEs perspective", *Sustainability*, Vol. 14 No. 1, p. 154, doi: 10.3390/su14010154.

Alrawashedh, N.H., Zureigat, B.N., Rawashdeh, B.S., Zraqat, O. and Hussien, L.F. (2025), "Does corporate governance affect earnings management? Evidence from an emerging market", *Heritage and Sustainable Development*, Vol. 7 No. 1, pp. 167-178, doi: 10.37868/hsd.v7i1.1025.

Alsamhi, M.H., Al-Ofairi, F.A., Alahdal, W.M. and Farhan, N.H. (2023), "The impact of financial risk on economic value added: a comparative analysis of Islamic and commercial banks of Yemen", *International Journal of Business Excellence*, Vol. 29 No. 2, pp. 266-287, doi: 10.1504/IJBEX.2023.128655.

Alshaketheep, K., Mansour, A., Deek, A., Zraqat, O., Asfour, B. and Deeb, A. (2024), "Innovative digital marketing for promoting SDG 2030 knowledge in Jordanian universities in the Middle East", *Discover Sustainability*, Vol. 5 No. 1, p. 219, doi: 10.1007/s43621-024-00419-8.

Andersén, J. (2015), "The absorptive capacity of family firms: how familiness affects potential and realized absorptive capacity", *Journal of Family Business Management*, Vol. 5 No. 1, pp. 73-89, doi: 10.1108/JFBM-05-2014-0012.

Asadi, L. (2013), "The effect of intellectual capital on market value and financial performance of companies listed at Tehran stock Exchange", *Science Road Publishing Corporation*, Vol. 7 No. 1, pp. 48-58.

Astrachan, J.H., Binz Astrachan, C., Campopiano, G. and Baù, M. (2020), "Values, spirituality and religion: family business and the roots of sustainable ethical behavior", *Journal of Business Ethics*, Vol. 163 No. 4, pp. 637-645, doi: 10.1007/s10551-019-04392-5.

Atoum, Y.A., Alrawashedh, N., Almarashdah, M., Harahshehd, A., Zraqat, O., Hussien, L. and Alamad, T. (2024), "The impact of strategic leadership on strategic performance in higher education institutions: the mediating role of change management", *Periodicals of Engineering and Natural Sciences*, Vol. 12 No. 2, pp. 315-330, doi: 10.21533/pen.v12i2.4013.

Barros-Contreras, I., Basco, R., Martín-Cruz, N. and Hernangómez, J. (2022), "Strategic management in family business. The missing concept of the familiness learning mechanism", *Journal of Family Business Management*, Vol. 12 No. 1, pp. 67-89, doi: 10.1108/JFBM-10-2019-0066.

Barros-Contreras, I., Campopiano, G., Discua Cruz, A., Martin-Cruz, N. and Hernangómez, B.J. (2024), "Knowledge integration in family firms: understanding the nexus between familiness and organizational effectiveness", *European Management Review*, Vol. 21 No. 1, pp. 150-165, doi: 10.1111/emre.12572.

Basco, R. (2017), "'Where do you want to take your family firm?' A theoretical and empirical exploratory study of family business goals", *BRQ Business Research Quarterly*, Vol. 20 No. 1, pp. 28-44, doi: 10.1016/j.brq.2016.07.001.

Bataineh, H., Abbadi, S.S., Alabood, E. and Alkurdi, A. (2022), "The effect of intellectual capital on firm performance: the mediating role of family management", *Journal of Islamic Accounting and Business Research*, Vol. 13 No. 5, pp. 845-863, doi: 10.1108/JIABR-02-2022-0032.

Battagello, F.M., Grimaldi, M. and Cricelli, L. (2015), "A rational approach to identify and cluster intangible assets: a relational perspective of the strategic capital", *Journal of Intellectual Capital*, Vol. 16 No. 4, pp. 809-834, doi: 10.1108/JIC-06-2015-0050.

Beech, N., Devins, D., Gold, J. and Beech, S. (2020), "In the family way: an exploration of family business resilience", *International Journal of Organizational Analysis*, Vol. 28 No. 1, pp. 160-182, doi: 10.1108/IJOA-02-2019-1674.

Beliaeva, T., Ferasso, M., Kraus, S. and Mahto, R.V. (2022), "Marketing and family firms: theoretical roots, research trajectories, and themes", *Journal of Business Research*, Vol. 144, pp. 66-79, doi: 10.1016/j.jbusres.2022.01.094.

Bell, A., Fairbrother, M. and Jones, K. (2019), "Fixed and random effects models: making an informed choice", *Quality and Quantity*, Vol. 53 No. 2, pp. 1051-1074, doi: 10.1007/s11135-018-0802-x.

Beltramino, N.S., García-Perez-de-Lema, D. and Valdez-Juárez, L.E. (2020), "The structural capital, the innovation and the performance of the industrial SMES", *Journal of Intellectual Capital*, Vol. 21 No. 6, pp. 913-945, doi: 10.1108/JIC-01-2019-0020.

Bettinelli, C., Del Bosco, B., Gentry, R.J. and Dibrell, C. (2023), "The influence of board social activity on firm performance", *Journal of Family Business Strategy*, Vol. 14 No. 2, 100552, doi: 10.1016/j.jfbs.2023.100552.

Blume, K.H. (2016), "Value-based management as a tailor-made management practice? A literature review", *Journal of Management and Governance*, Vol. 20 No. 3, pp. 553-590, doi: 10.1007/s10997-015-9315-3.

Bontis, N., Keow, W.C.C. and Richardson, S. (2000), "Intellectual capital and business performance in Malaysian industries", *Journal of Intellectual Capital*, Vol. 1 No. 1, pp. 85-100, doi: 10.1108/14691930010324188.

Buallay, A.M., Hamdan, A.M.M., Zureigat, Q. and Dhaen, E.S.A. (2019), "Does voluntary disclosures contributed to the intellectual capital efficiency?", *International Journal of Learning and Intellectual Capital*, Vol. 16 No. 2, pp. 145-179, doi: 10.1504/IJLIC.2019.098899.

Cabrera-Suárez, M.K., García-Almeida, D.J. and De Saá-Pérez, P. (2018), "A dynamic network model of the successor's knowledge construction from the resource-and knowledge-based view of the family firm", *Family Business Review*, Vol. 31 No. 2, pp. 178-197, doi: 10.1177/0894486518776867.

Calabrò, A., Torchia, M., Jimenez, D.G. and Kraus, S. (2021), "The role of human capital on family firm innovativeness: the strategic leadership role of family board members", *The International Entrepreneurship and Management Journal*, Vol. 17 No. 1, pp. 261-287, doi: 10.1007/s11365-020-00657-y.

Campos-Valenzuela, M., Diéguez-Soto, J. and Ruiz-Palomo, D. (2025), "Human capital investment and corporate social responsibility in SMEs: the moderating role of family business status", *Journal of Family Business Management*. doi: 10.1108/JFBM-10-2024-0240.

Cano-Rubio, M., Fuentes-Lombardo, G. and Vallejo-Martos, M.C. (2017), "Influence of the lack of a standard definition of 'family business' on research into their international strategies☆", *European Research on Management and Business Economics*, Vol. 23 No. 3, pp. 132-146, doi: 10.1016/j.iedeen.2016.10.002.

Cegarra-Navarro, J.G. and Sánchez-Polo, M.T. (2008), "Linking the individual forgetting context with customer capital from a seller's perspective", *Journal of the Operational Research Society*, Vol. 59 No. 12, pp. 1614-1623, doi: 10.1057/palgrave.jors.2602491.

Chirico, F. (2008), "Knowledge accumulation in family firms: evidence from four case studies", *International Small Business Journal*, Vol. 26 No. 4, pp. 433-462, doi: 10.1177/0266242608091173.

Chirico, F. and Nordqvist, M. (2010), "Dynamic capabilities and trans-generational value creation in family firms: the role of organizational culture", *International Small Business Journal*, Vol. 28 No. 5, pp. 487-504, doi: 10.1177/0266242610370402.

Chirico, F. and Salvato, C. (2016), "Knowledge internalization and product development in family firms: when relational and affective factors matter", *Entrepreneurship Theory and Practice*, Vol. 40 No. 1, pp. 201-229, doi: 10.1111/etap.12114.

Chua, J.H., Chrisman, J.J. and Sharma, P. (1999), "Defining the family business by behavior", *Entrepreneurship Theory and Practice*, Vol. 23 No. 4, pp. 19-39, doi: 10.1177/104225879902300402.

Claver-Cortés, E., Molina-Manchón, H. and Zaragoza-Sáez, P. (2013), "Intellectual capital model for family firms", *Knowledge Management Research and Practice*, Vol. 11 No. 2, pp. 184-195, doi: 10.1057/kmrp.2013.14.

Claver-Cortés, E., Zaragoza-Sáez, P.C., Molina-Manchón, H. and Úbeda-García, M. (2015), "Intellectual capital in family firms: human capital identification and measurement", *Journal of Intellectual Capital*, Vol. 16 No. 1, pp. 199-223, doi: 10.1108/JIC-04-2014-0046.

Cucculelli, M., Peruzzi, V. and Zazzaro, A. (2019), "Relational capital in lending relationships: evidence from European family firms", *Small Business Economics*, Vol. 52 No. 1, pp. 277-301, doi: 10.1007/s11187-018-0019-3.

Dahash, Q. and Al-Dirawi, A. (2018), "Investment in intellectual capital and achievement of the competitive advantage in hotel sector", *Management Science Letters*, Vol. 8 No. 7, pp. 795-804, doi: 10.5267/j.msl.2018.5.007.

Dawson, A. (2012), "Human capital in family businesses: focusing on the individual level", *Journal of Family Business Strategy*, Vol. 3 No. 1, pp. 3-11, doi: 10.1016/j.jfbs.2011.12.001.

Dayan, M., Ng, P.Y. and Ndubisi, N.O. (2019), "Mindfulness, socioemotional wealth, and environmental strategy of family businesses", *Business Strategy and the Environment*, Vol. 28 No. 3, pp. 466-481, doi: 10.1002/bse.2222.

De Leaniz, P.M.G. and Del Bosque, I.R. (2013), "Intellectual capital and relational capital: the role of sustainability in developing corporate reputation", *Intangible Capital*, Vol. 9 No. 1, pp. 262-280, doi: 10.3926/ic.378.

De Massis, A., Frattini, F., Kotlar, J., Petruzzelli, A.M. and Wright, M. (2016), "Innovation through tradition: lessons from innovative family businesses and directions for future research", *Academy of Management Perspectives*, Vol. 30 No. 1, pp. 93-116, doi: 10.5465/amp.2015.0017.

Debicki, B.J., Ramírez-Solís, E.R., Baños-Monroy, V.I. and Gutiérrez-Patrón, L.M. (2020), "The impact of strategic focus on relational capital: a comparative study of family and non-family firms", *Journal of Business Research*, Vol. 119, pp. 585-598, doi: 10.1016/j.jbusres.2020.07.016.

Diefenbach, T. (2006), "Intangible resources: a categorial system of knowledge and other intangible assets", *Journal of Intellectual Capital*, Vol. 7 No. 3, pp. 406-420, doi: 10.1108/14691930610681483.

Duarte, A.A. and Kok, S. (2021), "Knowledge and the family firm through generations: a knowledge-based approach in various geographic contexts", *Knowledge Management Research and Practice*, Vol. 19 No. 2, pp. 239-252, doi: 10.1080/14778238.2020.1762254.

Eng, L.L. and Vichitsarawong, T. (2022), "Comparing the usefulness of two profit subtotals: operating income and earnings before interest and taxes", *Finance Research Letters*, Vol. 47, 102529, doi: 10.1016/j.frl.2021.102529.

Freeman, R.E. and Reed, D.L. (1983), "Stockholders and stakeholders: a new perspective on corporate governance", *California Management Review*, Vol. 25 No. 3, pp. 88-106, doi: 10.2307/41165018.

Galbraith, J.K. (1969), "The consequences of technology", *Journal of Accountancy (pre-1986)*, Vol. 127 No. 000006, pp. 44-56.

Gallizo, J.L., Mar-Molinero, C., Moreno, J. and Salvador, M. (2017), "Family business and value-added distribution: a socioemotional wealth approach", *Academia Revista Latinoamericana de Administración*, Vol. 30 No. 1, pp. 2-22, doi: 10.1108/ARLA-05-2015-0099.

Gavana, G., Gottardo, P. and Moisello, A.M. (2021), "Family control and influence on JV investment–the moderating effect of JV type and IC components", *Journal of Intellectual Capital*, Vol. 22 No. 7, pp. 68-91, doi: 10.1108/JIC-12-2020-0376.

Ginesti, G. and Ossorio, M. (2021), "The influence of family-related factors on intellectual capital performance in family businesses", *Journal of Management and Governance*, Vol. 25 No. 2, pp. 535-560, doi: 10.1007/s10997-020-09510-4.

Gomez-Mejía, L.R., Haynes, K.T., Núnez-Nickel, ~ M., Jacobson, K.J.L. and MoyanoFuentes, J. (2007), "Socioemotional wealth and business risks in family-controlled firms: evidence from Spanish olive oil mills", *Administrative Science Quarterly*, Vol. 52 No. 1, pp. 106-137, doi: 10.2189/asqu.52.1.106.

Gómez-Valenzuela, V. (2022), "Intellectual capital factors at work in Dominican firms: understanding their influence", *Journal of Innovation and Entrepreneurship*, Vol. 11 No. 1, pp. 1-24, doi: 10.1186/s13731-022-00205-8.

Grimaldi, M., Cricelli, L. and Greco, M. (2016), "Perceived benefits and costs of intellectual capital in small family firms", *Journal of Intellectual Capital*, Vol. 17 No. 2, pp. 351-372, doi: 10.1108/JIC-06-2015-0055.

Gunasekara, F.I., Richardson, K., Carter, K. and Blakely, T. (2014), "Fixed effects analysis of repeated measures data", *International Journal of Epidemiology*, Vol. 43 No. 1, pp. 264-269, doi: 10.1093/ije/dyt221.

Hamberg, M., Andre Fagerland, E. and Kvamme Nilsen, K. (2013), "Founding-family firms and the creation of value: Swedish evidence", *Managerial Finance*, Vol. 39 No. 10, pp. 963-978, doi: 10.1108/MF-11-2012-0228.

Han, Y. and Li, D. (2015), "Effects of intellectual capital on innovative performance: the role of knowledge-based dynamic capability", *Management Decision*, Vol. 53 No. 1, pp. 40-56, doi: 10.1108/MD-08-2013-0411.

Harris, M. and Raviv, A. (1991), "The theory of capital structure", *The Journal of Finance*, Vol. 46 No. 1, pp. 297-355, doi: 10.1111/j.1540-6261.1991.tb03753.x.

Heider, A., Hülsbeck, M. and von Schlenk-Barnsdorf, L. (2022), "The role of family firm specific resources in innovation: an integrative literature review and framework", *Management Review Quarterly*, Vol. 72 No. 2, pp. 483-530, doi: 10.1007/s11301-021-00256-3.

Hernández-Perlines, F., Ariza-Montes, A. and Araya-Castillo, L. (2020), "Socioemotional wealth, entrepreneurial orientation and international performance of family firms", *Economic Research-Ekonomska istraživanja*, Vol. 33 No. 1, pp. 3125-3145, doi: 10.1080/1331677X.2019.1685398.

Herrero, I. (2018), "How familial is family social capital? Analyzing bonding social capital in family and nonfamily firms", *Family Business Review*, Vol. 31 No. 4, pp. 441-459, doi: 10.1177/0894486518784475.

Hooshangi, M., Fazli, S. and Mirhosseini, S.S. (2016), "The mediation role of buyer's satisfaction in relationship between structural capital with performance", *International Journal of Logistics Systems and Management*, Vol. 23 No. 3, pp. 329-342, doi: 10.1504/IJLSM.2016.074715.

Hussien, L., Zraqat, O., Zureigat, Q., Al-Rawashdeh, H.A., Alrawashedh, N., Almutairi, A. and Alrashidi, M. (2024), "The impact of audit quality on reducing earnings management practices in the Jordanian industrial companies", in *Harnessing AI, Machine Learning, and IoT for Intelligent Business*, Vol. 2, pp. 569-578, doi: 10.1007/978-3-031-66218-8_44.

Hussien, L.F., Alrawashedh, N.H., Deek, A., Alshaketheep, K., Zraqat, O., Al-Awamleh, H.K. and Zureigat, Q. (2025), "Corporate governance and energy sector sustainability performance disclosure", *International Journal of Energy Sector Management*, doi: 10.1108/IJESM-07-2024-0015.

Huybrechts, J., Voordeckers, W. and Lybaert, N. (2013), "Entrepreneurial risk taking of private family firms: the influence of a nonfamily CEO and the moderating effect of CEO tenure", *Family Business Review*, Vol. 26 No. 2, pp. 161-179, doi: 10.1177/0894486512469252.

Iazzolino, G., Laise, D. and Migliano, G. (2014), "Measuring value creation: VAIC and EVA", *Measuring Business Excellence*, Vol. 18 No. 1, pp. 8-21, doi: 10.1108/MBE-10-2013-0052.

Joshi, M., Cahill, D., Sidhu, J. and Kansal, M. (2013), "Intellectual capital and financial performance: an evaluation of the Australian financial sector", *Journal of Intellectual Capital*, Vol. 14 No. 2, pp. 264-285, doi: 10.1108/14691931311323887.

Kadim, A., Sunardi, N. and Husain, T. (2020), "The modeling firm's value based on financial ratios, intellectual capital and dividend policy", *Accounting*, Vol. 6 No. 5, pp. 859-870, doi: 10.5267/j.ac.2020.5.008.

Kamath, G.B. (2014), "A theoretical framework for intellectual capital disclosure", *Pacific Business Review International*, Vol. 6 No. 8, pp. 50-54.

Kammerlander, N., Sieger, P., Voordeckers, W. and Zellweger, T. (2015), "Value creation in family firms: a model of fit", *Journal of Family Business Strategy*, Vol. 6 No. 2, pp. 63-72, doi: 10.1016/j.jfbs.2015.04.001.

Kengatharan, N. (2019), “A knowledge-based theory of the firm: nexus of intellectual capital, productivity and firms’ performance”, *International Journal of Manpower*, Vol. 40 No. 6, pp. 1056-1074, doi: 10.1108/IJM-03-2018-0096.

Kianto, A., Ritala, P., Vanhala, M. and Hussinki, H. (2020), “Reflections on the criteria for the sound measurement of intellectual capital: a knowledge-based perspective”, *Critical Perspectives on Accounting*, Vol. 70, 102046, doi: 10.1016/j.cpa.2018.05.002.

Knauer, T., Silge, L. and Sommer, F. (2018), “The shareholder value effects of using value-based performance measures: evidence from acquisitions and divestments”, *Management Accounting Research*, Vol. 41, pp. 43-61, doi: 10.1016/j.mar.2018.02.001.

Konno, N. and Schillaci, C.E. (2021), “Intellectual capital in Society 5.0 by the lens of the knowledge creation theory”, *Journal of Intellectual Capital*, Vol. 22 No. 3, pp. 478-505, doi: 10.1108/JIC-02-2020-0060.

Kurmi, M.K. and Rakshit, D. (2017), “EVA and traditional accounting-based financial performance measures: which one is really informative in explicating variation in shareholders’ value added?”, *International Research Journal of Management and Commerce*, Vol. 4 No. 6, pp. 55-70.

Laffranchini, G., Hadjimarcou, J.S. and Kim, S.H. (2020), “The impact of socioemotional wealth on decline-stemming strategies of family firms”, *Entrepreneurship Theory and Practice*, Vol. 44 No. 2, pp. 185-210, doi: 10.1177/1042258718784755.

Ma, L., Ali, A., Shahzad, M. and Khan, A. (2025), “Factors of green innovation: the role of dynamic capabilities and knowledge sharing through green creativity”, *Kybernetes*, Vol. 54 No. 1, pp. 54-70, doi: 10.1108/K-06-2022-0911.

Maditinos, D.I., Šević, Ž. and Theriou, N.G. (2009), “Modelling traditional accounting and modern value-based performance measures to explain stock market returns in the Athens Stock Exchange (ASE)”, *Journal of Modelling in Management*, Vol. 4 No. 3, pp. 182-201, doi: 10.1108/17465660911006431.

Mani, Y. and Lakhal, L. (2015), “Exploring the family effect on firm performance: the impact of internal social capital dimensions on family firm performance”, *International Journal of Entrepreneurial Behavior and Research*, Vol. 21 No. 6, pp. 898-917, doi: 10.1108/IJEBR-06-2014-0100.

Manzaneque, M., Ramírez, Y. and Diéguez-Soto, J. (2017), “Intellectual capital efficiency, technological innovation and family management”, *Innovation*, Vol. 19 No. 2, pp. 167-188, doi: 10.1080/14479338.2016.1272828.

Marginson, S. (2019), “Limitations of human capital theory”, *Studies in Higher Education*, Vol. 44 No. 2, pp. 287-301, doi: 10.1080/03075079.2017.1359823.

Mariani, M.M., Al-Sultan, K. and De Massis, A. (2023), “Corporate social responsibility in family firms: a systematic literature review”, *Journal of Small Business Management*, Vol. 61 No. 3, pp. 1192-1246, doi: 10.1080/00472778.2021.1955122.

Martínez-Romero, M.J., Rojo-Ramírez, A.A. and Casado-Belmonte, M.D.P. (2020), “Value creation in privately held family businesses: the moderating role of socioemotional wealth”, *Canadian Journal of Administrative Sciences - Revue Canadienne des Sciences de l Administration*, Vol. 37 No. 3, pp. 283-299, doi: 10.1002/cjas.1540.

Mazzi, C. (2011), “Family business and financial performance: current state of knowledge and future research challenges”, *Journal of Family Business Strategy*, Vol. 2 No. 3, pp. 166-181, doi: 10.1016/j.jfbs.2011.07.001.

McAdam, M., Clinton, E., Gartner, W.B. and Hamilton, E. (2024), “How family business practices are created, maintained, and transformed across generations from a community of practice lens”, *Entrepreneurship and Regional Development*, pp. 1-22, doi: 10.1080/08985626.2024.2331149.

Meles, A., Porzio, C., Sampagnaro, G. and Verdoliva, V. (2016), “The impact of the intellectual capital efficiency on commercial banks performance: evidence from the US”, *Journal of Multinational Financial Management*, Vol. 36, pp. 64-74, doi: 10.1016/j.mulfin.2016.04.003.

Memili, E., Fang, H.C. and Welsh, D.H. (2015), "Value creation and value appropriation in innovation process in publicly-traded family firms", *Management Decision*, Vol. 53 No. 9, pp. 1921-1952, doi: 10.1108/MD-06-2014-0391.

Mende, M., Bolton, R.N. and Bitner, M.J. (2013), "Decoding customer–firm relationships: how attachment styles help explain customers' preferences for closeness, repurchase intentions, and changes in relationship breadth", *Journal of Marketing Research*, Vol. 50 No. 1, pp. 125-142, doi: 10.1509/jmr.10.0072.

Mondal, A. and Ghosh, S.K. (2012), "Intellectual capital and financial performance of Indian banks", *Journal of Intellectual Capital*, Vol. 13 No. 4, pp. 515-530, doi: 10.1108/14691931211276115.

Montequín, V.R., Fernández, F.O., Cabal, V.A. and Gutierrez, N.R. (2006), "An integrated framework for intellectual capital measurement and knowledge management implementation in small and medium-sized enterprises", *Journal of Information Science*, Vol. 32 No. 6, pp. 525-538, doi: 10.1177/0165551506067127.

Murti, G.T., Saraswati, R.S. and Yorianti, Y.M. (2023), "Does intellectual capital and board characteristics affect financial performance?", *Jurnal Akuntansi Manado (JAIM)*, pp. 304-319, doi: 10.53682/jaim.vi.7225.

Nourani, M., Chandran, V.G.R., Kweh, Q.L. and Lu, W.M. (2018), "Measuring human, physical and structural capital efficiency performance of insurance companies", *Social Indicators Research*, Vol. 137 No. 1, pp. 281-315, doi: 10.1007/s11205-017-1584-6.

Nowotny, S., Hirsch, B. and Nitzl, C. (2022), "The influence of organizational structure on value-based management sophistication", *Management Accounting Research*, Vol. 56, 100797, doi: 10.1016/j.mar.2022.100797.

Obeidat, U., Obeidat, B., Alrowwad, A., Alshurideh, M., Masadeh, R. and Abuhashesh, M. (2021), "The effect of intellectual capital on competitive advantage: the mediating role of innovation", *Management Science Letters*, Vol. 11 No. 4, pp. 1331-1344, doi: 10.5267/j.msl.2020.11.006.

Oudah, M., Jabeen, F. and Dixon, C. (2018), "Determinants linked to family business sustainability in the UAE: an AHP approach", *Sustainability*, Vol. 10 No. 1, p. 246, doi: 10.3390/su10010246.

Ozkan, N., Cakan, S. and Kayacan, M. (2017), "Intellectual capital and financial performance: a study of the Turkish Banking Sector", *Borsa Istanbul Review*, Vol. 17 No. 3, pp. 190-198, doi: 10.1016/j.bir.2016.03.001.

Pukthuanthong, K., Walker, T.J., Thiengtham, D.N. and Du, H. (2013), "Does family ownership create or destroy value? Evidence from Canada", *International Journal of Managerial Finance*, Vol. 9 No. 1, pp. 13-48, doi: 10.1108/17439131311298511.

Pulic, A. (1998), "Measuring the performance of intellectual potential in knowledge economy", *2nd McMaster Word Congress on Measuring and Managing Intellectual Capital by the Austrian Team for Intellectual Potential*, pp. 1-20.

Ramírez, Y., Dieguez-Soto, J. and Manzaneque, M. (2021), "How does intellectual capital efficiency affect firm performance? The moderating role of family management", *International Journal of Productivity and Performance Management*, Vol. 70 No. 2, pp. 297-324, doi: 10.1108/IJPPM-03-2019-0119.

Rehman, S.U., Elrehail, H., Alsaad, A. and Bhatti, A. (2021), "Intellectual capital and innovative performance: a mediation-moderation perspective", *Journal of Intellectual Capital*, Vol. 23 No. 5, pp. 998-1024, doi: 10.1108/JIC-04-2020-0109.

Rehman, A.U., Aslam, E. and Iqbal, A. (2022), "Intellectual capital efficiency and bank performance: evidence from Islamic Banks", *Borsa Istanbul Review*, Vol. 22 No. 1, pp. 113-121, doi: 10.1016/j.bir.2021.02.004.

Rodriguez-Aceves, L., Mojarro-Durán, B.I. and Rivera, A.E. (2023), "Enabling knowledge sharing through relational capital in a family business context", *Journal of the Knowledge Economy*, Vol. 14 No. 3, pp. 2156-2186, doi: 10.1007/s13132-022-00955-6.

Roos, G. and Roos, J. (1997), "Measuring your company's intellectual performance", *Long Range Planning*, Vol. 30 No. 3, pp. 413-426, doi: 10.1016/S0024-6301(97)90260-0.

Roslender, R. and Fincham, R. (2001), "Thinking critically about intellectual capital accounting", *Accounting, Auditing and Accountability Journal*, Vol. 14 No. 4, pp. 383-399, doi: 10.1108/09513570110403425.

Sageder, M., Mitter, C. and Feldbauer-Durstmüller, B. (2018), "Image and reputation of family firms: a systematic literature review of the state of research", *Review of Managerial Science*, Vol. 12 No. 1, pp. 335-377, doi: 10.1007/s11846-016-0216-x.

Saleem, A. and Graves, C. (2025), "Life satisfaction of family business members: the role of socioemotional wealth goals and psychological functioning", *Journal of Small Business Management*, Vol. 63 No. 1, pp. 1-36, doi: 10.1080/00472778.2024.2305950.

Sardo, F., Serrasqueiro, Z. and Alves, H. (2018), "On the relationship between intellectual capital and financial performance: a panel data analysis on SME hotels", *International Journal of Hospitality Management*, Vol. 75, pp. 67-74, doi: 10.1016/j.ijhm.2018.03.001.

Singh, B. and Rao, M.K. (2016), "Effect of intellectual capital on dynamic capabilities", *Journal of Organizational Change Management*, Vol. 29 No. 2, pp. 129-149, doi: 10.1108/JOCM-12-2014-0225.

Singh, P.V., Tan, Y. and Mookerjee, V. (2011), "Network effects: the influence of structural capital on open source project success", *MIS Quarterly*, Vol. 35 No. 4, pp. 813-829, doi: 10.2307/41409962.

Su, E. and Daspit, J. (2022), "Knowledge management in family firms: a systematic review, integrated insights and future research opportunities", *Journal of Knowledge Management*, Vol. 26 No. 2, pp. 291-325, doi: 10.1108/JKM-08-2020-0658.

Sun, X., Lee, S.H. and Phan, P.H. (2019), "Family firm R&D investments in the 2007-2009 great recession", *Journal of Family Business Strategy*, Vol. 10 No. 4, 100244, doi: 10.1016/j.jfbs.2018.02.004.

Varadarajan, R. (2023), "Resource advantage theory, resource based theory, and theory of multimarket competition: does multimarket rivalry restrain firms from leveraging resource advantages?", *Journal of Business Research*, Vol. 160, 113713, doi: 10.1016/j.jbusres.2023.113713.

Vartiainen, E., Masson, G., Breyer, C., Moser, D. and Román Medina, E. (2020), "Impact of weighted average cost of capital, capital expenditure, and other parameters on future utility-scale PV levelised cost of electricity", *Progress in Photovoltaics: Research and Applications*, Vol. 28 No. 6, pp. 439-453, doi: 10.1002/pip.3189.

Vlasic, G. (2023), "Comparative analysis of the role of strategic orientation, strategic performance metric focus and strategic audacity in driving firm performance: family businesses vs nonfamily businesses", *Journal of Family Business Management*, Vol. 13 No. 1, pp. 7-25, doi: 10.1108/JFBM-03-2022-0048.

Waseem, B., Loo-See, B., Adeel, A. and Riaz, A. (2018), "Impact of intellectual capital on innovation capability and organizational performance: an empirical investigation", *Serbian Journal of Management*, Vol. 13 No. 2, pp. 365-379, doi: 10.5937/sjm13-16997.

Weqar, F., Khan, A.M., Raushan, M.A. and Haque, S.I. (2021), "Measuring the impact of intellectual capital on the financial performance of the finance sector of India", *Journal of the Knowledge Economy*, Vol. 12 No. 3, pp. 1134-1151, doi: 10.1007/s13132-020-00654-0.

Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-180, doi: 10.1002/smj.4250050207.

Xu, J. and Liu, F. (2020), "The impact of intellectual capital on firm performance: a modified and extended VAIC model", *Journal of Competitiveness*, Vol. 12 No. 1, p. 161, doi: 10.7441/joc.2020.01.10.

Zamboni, F., Paoloni, P., Cavazza, A. and Dal Mas, F. (2024), "Virtual relational capital for business development: a case study", *VINE Journal of Information and Knowledge Management Systems*. doi: 10.1108/VJIKMS-06-2024-0226.

Zhang, J. and Aboud, A. (2019), "Determinants of economic value added (EVA) in Chinese listed banks", *Asian Review of Accounting*, Vol. 27 No. 4, pp. 595-613, doi: 10.1108/ARA-11-2018-0216.

Zraqat, O., Zureigat, Q., Al-Rawashdeh, H.A., Okour, S.M., Hussien, L.F. and Al-Bawab, A.A. (2021), "The effect of corporate social responsibility disclosure on market performance: evidence from Jordan", *The Journal of Asian Finance, Economics and Business*, Vol. 8 No. 8, pp. 453-463, doi: 10.13106/jafeb.2021.vol8.no8.0453.

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