

How Does Internationalization Affect The Performance Of Indonesian Family Firms With CEOs' Demographics As Moderators?

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Abstract

This article examines how internationalization affects Indonesian family firm performance, with CEO demographics as moderators. We use least-squares regression using 1,097 observations of family firms listed in Indonesia from all industries except the financial sector from 2015 to 2021. The results indicate a positive relationship between internationalization and long-term firm performance, as measured by Tobin's Q. We also demonstrate that demographic characteristics of CEOs, such as education level, tenure, age, and international experience, can weaken the relationship between internationalization and firm performance. This study provides a novel moderation of characteristics of demographic CEO between internationalization and firm performance. These findings will interest politicians and firms when recruiting CEOs because demographics affect internationalization decisions that affect firm performance. The study has been limited to using only one measure of internationalization and six CEO demographic characteristics.

Keywords: Internationalization, Firm Performance, CEO Demographic Characteristics, Family Firm, Tobin's Q.

JEL Classifications: F23; G32; J10

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1. Introduction

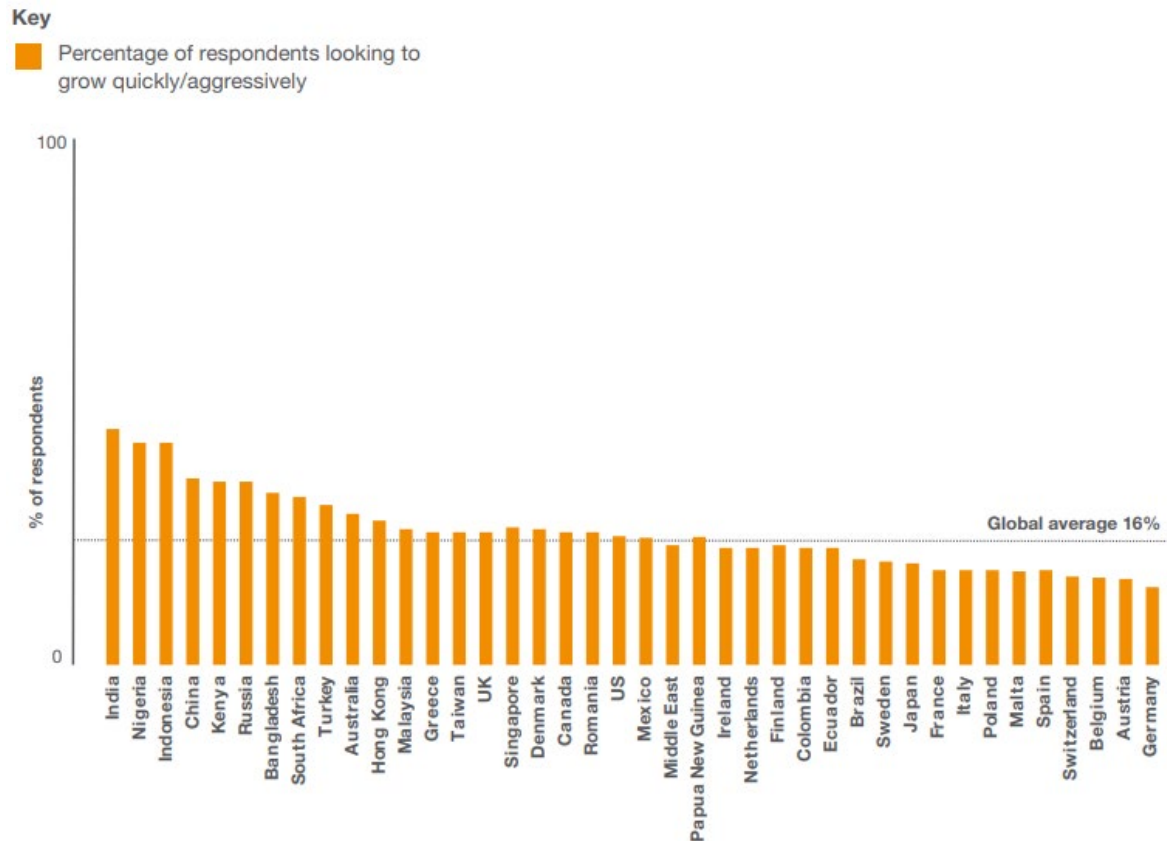
In the era of globalization, internationalization is an activity that businesses should consider for economic development and industrial competitiveness. By entering international markets, the company will reach a larger audience and have the opportunity to increase sales. Companies involved in internationalization can benefit from economies of scale due to higher factor specialization and increased production. Apart from that, the company will also experience greater cost efficiency due to the larger business volume. Not only that, the learning opportunities obtained are greater while meeting various customer needs and responding to competitors in the international market. Access to key resources is advantageous for globally diversified firms, as they can access more varied resources. In addition, internationalization activities will generate high costs, complexity, and uncertainty (George et al., 2005).

Researchers are still debating whether the phenomenon of internationalization demonstrates that the benefits of internationalization outweigh the costs, thereby improving the performance of businesses, or whether the opposite is true. Several empirical studies have determined that a high level of internationalization significantly enhances business performance (Zahra et al., 2000). Several studies, however, have discovered a negative correlation between internationalization and business performance (Michel & Shaked, 1986). On the other hand, several studies have found evidence that there are non-linear relationships, such as U-shaped (Contractor et al., 2007; Lu & Beamish, 2001), inverted U-shaped (Hitt et al., 1997), and S-shaped (Contractor et al., 2003; Lu & Beamish, 2004), M-curve (Almodóvar & Rugman, 2014), and W-shaped (Fernández-Olmos et al., 2016). This relationship has neither exclusively positive nor exclusively negative outcomes (Chung et al., 2013).

Some researchers contend that neglecting moderating variables is the primary cause of contradictory findings regarding the direction and magnitude of the relationship between internationalization and performance (Bausch & Krist, 2007; Tallman & Li, 1996). In this study, the authors present moderating variables in the form of CEO characteristics, including education, international experience, tenure, age, and gender. As is common knowledge, the CEO plays a crucial role in determining whether or not the company will engage in internationalization activities. Based on the upper-echelon theory proposed by Hambrick & Mason (1984), the background characteristics of managers shape their cognitive perspective and knowledge base. This cognitive influence influences all aspects of the strategic decision-making process, including problem identification (Dutton & Duncan, 1987), information search and processing (Cyert & March, 1963), and the specification and selection of alternative courses of action. In other words, their beliefs, assumptions, and values determine executives' decisions and actions.

This study utilizes samples from developing nations, specifically Indonesia, where most listed companies are family businesses. According to PricewaterhouseCoopers (2014), 60 percent of listed firms in Southeast Asia are family firms, while 95 percent of family firms in Indonesia contribute more than 25 percent of the country's GDP (Suprianto et al., 2019). This indicates that most public companies in Indonesia have ownership structures dominated by the family side. According to an international survey undertaken by PWC (2018), encompassing 2,800 family businesses across 40 countries in Europe, Africa, Canada, and Asia Pacific, it was found that family firms in the Asia Pacific region exhibit a sense of urgency. This is evident, as 21% of family companies in this region are seeing the highest rates of growth and displaying the most aggressive business strategies. The growth rate is depicted in Figure 1.

Figure 1: Family Business Growth Ambitions by Territory



Source: PwC Global Family Business Survey 2018

According to the data presented in Figure 1, it is evident that family-owned businesses in Indonesia have achieved remarkable success by securing the top three positions within a pool of 40 countries. These countries are characterized by family-owned enterprises that exhibit exceptional growth rates, surpassing the global average of 16%. Lu et al. (2015) stated that achieving growth by expanding into international markets may be more important for family firms from developing countries because many developing countries, such as China, have fragmented their domestic markets, making it difficult for family firms to expand at home due to the high costs of entering markets protected by local governments. The losses substantially impeded the family business's expansion.

Family businesses are characterized by extensive communication between their members, making comprehending the company's mission simpler. This shared understanding facilitates the sharing of experience and knowledge, thereby fostering trust, reducing risk, and encouraging investment in long-term value-creation activities related to Internationalization (James, 1999). Internationalization offers promising opportunities to ensure a business's survival by increasing the number of firms it accepts, the scale of the business, and the family's future wealth (Claver et al., 2007). However, family companies face obstacles that limit the internationalization process, as they do not want to lose control of the company. One of the goals of family businesses is to pass on their wealth to the next generation (Miller and Le Breton-Miller, 2005). Thirty-eight percent of family businesses listed on the IDX in 2021 are still engaged in internationalization activities, according to data collected by the author.

Casillas et al. (2010) suggest that families must contend with two opposing forces in running their business: supporting their growth needs and entering new markets where they must take risks, or seeking stability and developing low-risk projects in their

traditional markets to boost company performance. Faced with this conflicting power, CEOs play a crucial role because their characteristics significantly impact a company's capacity to process information related to internationalization (Roth, 1995). Previous research has investigated the role of exogenous (culture and institutions) and endogenous (product diversification, size, and firm-specific assets) factors in influencing the relationship between internationalization and performance (Altaf & Shah, 2015; Hitt et al., 2006; Li, 2007); however, executive demographic factors have not received a great deal of attention. This study aims to cover a gap in the literature by examining the relationship between internationalization and performance in Indonesian family firms and elucidating the moderating effect of demographic CEO characteristics on this relationship.

Therefore, this study will contribute valuable knowledge to the existing body of international business literature in subsequent ways. Initially, we present further data to advance the cognitive information processing paradigm further. Using his cognitive abilities, the family business's chief executive officer, who is responsible for making decisions, can determine whether or not internationalization is feasible. In contrast to prior studies that primarily examine samples from developed nations, this study explicitly investigates companies in the emerging market of Indonesia, with a particular emphasis on dominant family-owned businesses. Consequently, it aims to assess the applicability of the three stages of internationalization theory within the context of emerging market enterprises. This study aims to build upon prior research findings by examining the correlation between internationalization and performance. To the best of our current understanding, this research work represents the inaugural endeavor to explore the extended duration of the performance specifically. We propose that the utilization of long-term performance as a metric is a more precise and reliable approach compared to the measures employed in prior studies. Two key justifications support this assertion. Long-term performance more comprehensively assesses the implications of rapid internationalization compared to accounting measures, which tend to focus on short-term outcomes. Furthermore, it can be argued that they serve as more accurate indicators of future growth potential compared to survival metrics, as they do not discriminate between investments that generate profits.

From 2015 to 2021, we conducted experiments using data on family businesses on the Indonesia Stock Exchange. This research included 1,097 observations. The decision was made to conduct an initial examination of the linear association between internationalization and company performance in order to assess the degree of alignment between the curve and the existing dataset. Ordinary least squares analysis was utilized to answer the research queries. The study's findings indicate that internationalization increases the long-term performance of family businesses. In addition, CEO characteristics such as education level, tenure, age, and international experience diminish the relationship between internationalization and firm performance.

Additionally, the gender of the CEO strengthens the connection between internationalization and company performance, and this occurs because family businesses are emblematic of long-term-oriented businesses. Internationalization is an option for family-owned businesses to achieve their long-term objectives. In addition, we find that the relationship weakens when a company's chief executive officer has a high level of education, a lengthy tenure, an advanced age, and international experience. We also employ robustness analysis by separating the dependent and independent variables by three years. This analysis continues to demonstrate a positive relationship between internationalization and long-term performance. Additional research indicates that internationalization is positively associated with the short-term performance of family-owned businesses.

These findings suggest that implementing internationalization can increase short- and long-term company performance, particularly for family businesses. However, the characteristics of the CEO moderate the relationship between internationalization and firm performance. When appointing the company's chief executive officer, shareholders can also consider these results. Thus, this study expands our understanding of the relationship between internationalization and firm performance.

The remaining sections of this paper are structured as follows. The following section describes the pertinent research and develops hypotheses. The report's third section describes the sample, variables, and empirical models. In Section 4, the empirical analysis and results are presented. Section 5 discusses the study's conclusions and implications.

2. Literature Review and Hypotheses

2.1 Family Firms

In contrast to publicly traded companies, family businesses are distinguished by the presence of owner-managers with aligned interests and their greater involvement in operations (Jensen, 1994; Sharma et al., 1997). Several previous researchers frequently explained the differences between family and non-family firms through the Socioemotional Wealth (SEW) lens, in which family firms maintain socio-emotional wealth not solely for economic reasons but also as a source of personal pride, self-identification, and contentment (Gomez-Mejia et al., 2011; Schulze et al., 2001) and frequently characterized the issue in terms of endowment loss aversion. This means that family enterprises' decision-making processes and outcomes reflect preserving and promoting socio-emotional wealth (Berrone et al., 2012), the primary driver of family business strategy. Ray et al. (2018) explained that the SEW perspective complements agency theory by focusing primarily on owners' economic interests, so both provide a comprehensive evaluation of the preferences of family owners concerning internationalization strategies.

According to the findings of Arregle et al. (2007), family enterprises exhibit distinct characteristics that are impacted by family social capital. This type of capital is defined by qualities such as dedication, benevolence, unity, and intimate social connections among family members. The presence of social capital within family enterprises has the potential to decrease the costs associated with monitoring, mitigate relational risks, and facilitate the establishment of efficient informal mechanisms (Arregle et al., 2021; Mustakallio et al., 2002), hence leading to a reduction in governance costs for these firms. Additionally, it promotes the exchange of knowledge, enhances the accumulation of relational capital at the firm level (Arregle et al., 2007, 2021; Dyer & Singh, 1998; Kano et al., 2021), expedites the decision-making process (Gallo & Pont, 1996), and facilitates family firms' acquisition of international knowledge and access to host country networks (Basly, 2007; Cheong et al., 2015). As a result, the exertion of a favorable impact has been seen to enhance their global reach.

2.2 Internationalisation and Firm Performance

Internationalization is a phenomenon that occurs when a company enters into a relationship with parties outside its home country, regardless of the relationship's form or scope, in which the company's local operations differ from its activities in foreign markets (Fonfara et al., 2009; Pierscioneck, 2003). According to a study by Johanson & Vahlne (1977), internationalization also refers to the process by which a company gradually increases its international involvement, mainly to build the necessary resources

and engage in global competition, which enables the company to achieve economies of scale and economies of scope (Caves, 1996), enhance their commercial dominance (Kogut, 1985), and decrease input costs (Dunning, 1988). Exports, foreign direct investment (FDI), and international mergers and acquisitions (M&A) are common strategies in international activities. According to the existing literature, Kogut & Chang (1996) viewed exports as the initial step in entering foreign markets, a platform for future international expansion. Exporting is a less capital-intensive route that provides firms with quick access to foreign markets and opportunities to acquire valuable international experience (Lu & Beamish, 2001).

When corporations decide to expand into international markets, they will assess the potential profitability and costs associated with such a venture. Hence, the examination of the correlation between internationalization and company performance has emerged as a fundamental concern within the field of international management, as evidenced by the works of Glaum & Oesterle (2007). However, internationalization involves significant risks, expenses, and uncertainties, requires a significant investment of resources and takes time to deliver meaningful returns (Contractor et al., 2007; Liu et al., 2011) because businesses must manage the challenges associated with foreign obligations (Hymer, 1976; Zaheer, 1995) and novelty (Stinchcombe, 1965). There is a comparison between the magnitude of benefits and costs in internationalization activities, making the relationship between internationalization and performance still a matter of debate among researchers. Various kinds of results have been found in the research process, ranging from positive linear (Daniels & Bracker, 1989; Grant, 1987; Kim et al., 1993; Qian, 1996; Zahra et al., 2000), negative linear (Kumar, 1984; Michel & Shaked, 1986; Siddharthan & Lall, 1982), non-linear with a U shape (Capar & Kotabe, 2003; Contractor et al., 2007; Lu & Beamish, 2001; Ruigrok & Wagner, 2003), non-linear with a U shape inverse (Daniels & Bracker, 1989; Hitt et al., 1997; Geringer et al., 1989), as well as an S-shaped relationship (Contractor et al., 2003; Li, 2005; Lu & Beamish, 2004; Thomas & Eden, 2004).

Entering international markets means creating new long-term value-creation opportunities. Consistent with the characteristics of a family business with a long-term focus, the proprietor wishes to maintain family ownership and control of the company and pass it on to future generations. According to Shyu (2011), the enduring character of family ownership results in family members exhibiting a longer investment horizon in comparison to other investors. In essence, it may be argued that family members show a greater propensity to engage in long-term investment strategies as opposed to other shareholders who prioritize short-term or immediate financial gains (James, 1999; Stein, 1989). Therefore, the internationalization of firms is an attractive option for family-owned businesses, as internationalization tends to generate long-term profits (Lu & Beamish, 2004). According to Casson (1999) and Chami (1998), family firms view their businesses not merely as components of their wealth but rather as assets for future generations. The survival of a company is a primary concern, indicating that family members are supporters of maximizing the long-term value of the company.

Through internationalization, family businesses will achieve economies of scale due to higher factor specialization resulting from increased production, which may result in cost savings. Internationalization also benefits learning and innovation since the diversity of global markets forces businesses to face various problems, thereby providing opportunities for businesses to increase their knowledge and develop new skills that can be applied to similar circumstances. In addition, internationalized companies will experience a reduction in risk because they can disperse their operations across multiple countries, from which they can counter their competitors' aggressive moves (Hamel & Prahalad, 1985; Kim & Mauborgne, 1988). Conducting business in heterogeneous global

markets enables enterprises to mitigate losses in a domestic market with profits from international markets. In addition, globalization mitigates the effects of adverse changes in a country's interest rates, wage rates, and commodity and raw material prices by facilitating the relocation of production and resources to more lucrative markets (Kogut, 1985; Porter & Spence, 1986).

H1: There is a positive relationship between internationalization and family firm performance.

2.3 Upper Echelons Theory

Hambrick & Mason (1984) explained through upper-echelon theory that the cognitive orientation of managers can influence the strategic decision-making process via selective perception, limiting their field of vision and filtering information. Consequently, the cognitive perspectives of managers will impact every aspect of the strategic decision-making process, including problem identification (Dutton & Duncan, 1987), information search, and information processing (Cyert & March, 1963), as well as the specification and selection of alternative solutions. In other words, the beliefs, assumptions, and values that executives bring to the organization dictate their decisions and actions.

Additionally, Hambrick & Mason (1984) contended that managers' background characteristics and experience influence their cognitive perspective and knowledge. Although psychological factors are central to the theory of the upper echelons, these phenomena are rarely investigated explicitly in studies of top executives (Kesner & Sebra, 1994). In contrast, psychological orientation is usually calculated from more observable characteristics, including the level of education (Herrmann & Datta, 2005; Tihanyi et al., 2000; Wiersema & Bantel, 1992), tenure (Barker & Mueller, 2002; Datta & Guthrie, 1994; Herrmann & Datta, 2005), age (Herrmann & Datta, 2005; Hsu et al., 2013; Tihanyi et al., 2000), background functional (Datta & Rajagopalan, 1998) international experience (Daily et al., 2000; Kirca et al., 2012; Sambharya, 1996), and duality (Roth, 1995; Sanders & Carpenter, 1998).

2.4 Cognitive Information Processing Theory

The Cognitive Information Processing (CIP) theory can be defined as the utilization of cognitive information processing theory in the context of career problem-solving and decision-making, as stated by Peterson et al. (1991). The selection of cognitive information processing theory as a theoretical framework is justified by its central focus on information processing, which plays a crucial role in human learning. The theory posits that knowledge plays an essential role in the cultivation of self-awareness and the enhancement of decision-making capabilities, especially in relation to choices pertaining to employment, education, and training. Consequently, this theory offers a robust framework for comprehending these intricate mechanisms. The CIP-based career interventions incorporate critical components of information processing theory, namely: (a) the utilization of schemas (knowledge structures) by individuals to effectively organize, expand, and modify their self-knowledge and decision-making capabilities; (b) the rational and intuitive cognitive processes employed by individuals to utilize their acquired knowledge in decision-making; and (c) the metacognitive processes employed by individuals to manage problem-solving activities effectively (Peterson et al., 1991; Sampson Jr. et al., 2004).

According to Egelhoff (1991), the emergence of complexity in an organization is a result of the integration and coordination of various operations. In order to effectively manage this complexity, firms must enhance their ability to process information. Hence, in the context of international expansion, it becomes imperative for managers to establish

information processing mechanisms that can effectively handle the complexities associated with operating in a global environment. These mechanisms should be designed to facilitate the efficient acquisition and analysis of pertinent information (Hsu et al., 2013; Tushman & Nadler, 1978). Furthermore, as previously stated, the upper echelons theory posits that senior executives frequently confront an abundance of knowledge that is beyond their capacity for complete comprehension. Shaw (1990) explains that top executives rely on established cognitive frameworks and heuristics to streamline the decision-making process as a result of the inherent constraints of human intellectual capabilities. Hence, according to the top-echelon hypothesis, the cognitive perspectives of CEOs are influenced by their qualities, which subsequently impact their capacity to tolerate ambiguity and handle complexity. This, in turn, is associated with their information-processing capacities.

The process of internationalization has various potential advantages for firms; nevertheless, effectively capitalizing on these prospects entails substantial organizational hurdles. According to Karagozoglu & Lindell (1998), management competency and lack of knowledge are the primary challenges encountered by organizations during the process of internationalization. Hence, it is anticipated that the demographic characteristics of CEOs, namely those pertaining to cognitive ability in information processing, will exert a significant influence on international operations. Herrmann & Datta (2005) discovered that younger managers have a more receptive mindset and a higher propensity to adjust to novel contexts compared to their older counterparts. According to Sambharya (1996), the incorporation of international expertise by senior executives can provide advantageous outcomes, mainly when it involves the assimilation of a culture of learning and the management of uncertainties inherent in multinational operations. According to the study conducted by Daily et al. (2000), it was discovered that worldwide CEO experience plays a crucial role in the association between international diversification and business performance, yielding a noteworthy favorable impact. Therefore, we posit that chief executive officers (CEOs) with enhanced information processing capabilities possess the capacity to enhance the association between internationalization and company performance.

2.5 Karakteristik Demografi CEO

The significance of the executive director's (CEO) attributes is underscored in the literature (Bandiera et al., 2020; Fernández-Temprano & Tejerina-Gaite, 2020; Ghardallou et al., 2020). Executive managers have a pivotal role in making strategic decisions that are essential for the long-term viability and success of the organization. The primary focus of their position is progressively shifting towards investment matters aimed at fostering substantial organizational transformation, with the ultimate objective of generating value. The presence of foreign experience and education among the board of directors or CEO can enhance the advantages of internationalization, as it equips the organization with the ability to effectively capitalize on opportunities arising from global marketplaces (Purkayastha et al., 2020).

2.5.1 CEO Educational Level

It has been argued that managers with a higher level of education are more likely to have the cognitive abilities to process information so that they can make appropriate decisions in complex environments, analyze new situations, and have an excellent ability to deal with difficulties and ambiguities by distinguishing between available alternatives (Bantel & Jackson, 1989; Cheng et al., 2020; Wiersema & Bantel, 1992). According to Hsu et al. (2013), executives who possess a considerable level of education have the potential to engage in a more profound examination of decision-making processes. This

ability can enhance their information processing capacities, which is a crucial attribute for effectively managing organizations involved in internationalization. Hence, it is plausible that the sociocognitive qualities of executives, such as open-mindedness, enhanced information processing capabilities, and adaptability to change, are significant factors contributing to their achievement in international settings (Herrmann & Datta, 2005). Hence, we propose that:

H2: The educational level of the CEO positively moderates the relationship between internationalization and the performance of an SME.

2.5.2 CEO Tenure

In the upper-echelon literature, longer tenure has been related to a stronger commitment to the status quo (Hambrick et al., 1993) and less risk-taking proclivity (Finkelstein & Hambrick, 1990; Wiersema & Bantel, 1992). Furthermore, longer tenure has been linked to a tighter and more limited knowledge base, making them more inflexible, homogeneous, and insulated from the outside world, with the ability to impact strategic decisions (Datta & Rajagopalan, 1998; Finkelstein & Hambrick, 1990; Hambrick et al., 1993; Katz, 1982; Wally & Becerra, 2001; Wiersema & Bantel, 1992).

Top executives who have been in their positions for a more extended period exhibit a decreased propensity to adapt to new environmental conditions and demonstrate less enthusiasm for actively seeking out knowledge related to diversification as compared to their younger and less tenured peers. According to Finkelstein & Hambrick (1990), it is hypothesized that internationalizing organizations have higher and more intricate information processing demands. This necessitates CEOs with shorter tenures to possess new knowledge, skills, and theories as prerequisites for successful change management. Hence, taking into account the cognitive talents and information processing capacities of a Chief Executive Officer (CEO), it is probable that the judgments made by executives who have held their positions for an extended period may have a detrimental effect on the association between internationalization and the success of the organization. Therefore, we put forward the subsequent hypothesis:

H3: CEO position tenure negatively moderates the relationship between internationalization and the performance of an SME.

2.5.3. CEO Age

Child (1972) and Hart & Mellors (1970) contended that senior executives are typically more risk-averse than their younger counterparts, demonstrating a greater preference for financial security and careers. Older executives often reach a point in their lives and careers where economic and career security are most important (Hambrick & Mason, 1984), so they tend to avoid risky endeavors. According to Nohria & Ghoshal (1994), managers are faced with the dual task of modifying their cognitive frameworks, commonly referred to as mind maps, and subsequently adjusting the structures, systems, and processes that are built upon these frameworks in order to operate in new international contexts effectively. Elderly managers, due to diminished physical and cognitive capabilities, may have difficulties adapting their cognitive frameworks, leading to a reduced capacity for information processing compared to their younger counterparts (Herrmann & Datta, 2002). This phenomenon has the potential to restrict individuals' comprehension of foreign cultures, consumer behavior, and local rules, thereby diminishing the advantages associated with internationalization. Based on the sequence arguments above, we propose the subsequent hypothesis:

H4: CEO age negatively moderates the relationship between internationalization and performance.

2.5.4. CEO International Experience

Executives with international experience will find it easier to navigate global markets (Athanassiou & Nigh, 2000; Daily et al., 2000; Sambharya, 1996; Tihanyi et al., 2000). This is because these executives possess knowledge of foreign cultures and business practices and are more likely to be aware of international market opportunities. According to Jiang et al. (2020), entrepreneurs with prior experience or education overseas possess distinctive knowledge regarding the specific preferences and needs of international clientele. This knowledge enables them to effectively use resources from several nations in order to cater to these clients. The acquisition of international experience has been observed to contribute to the reduction of mental distance and perceived uncertainty associated with a specific market. Consequently, the founders of the organization did not perceive national borders as hindrances to their operations. According to Hagen & Zucchella (2014), it can be argued that entrepreneurs with international expertise are more likely to acquire a significant number of resources and exhibit superior decision-making abilities when it comes to internationalization, as compared to their counterparts who lack such experience.

H5: CEO international experience positively moderates the relationship between internationalization and performance.

2.5.5. CEO Gender

According to the findings of Grondin et al. (2001), there exists a disparity between the export activities of women-owned enterprises and those controlled by men, with the former demonstrating a lower likelihood of engaging in international trade. One factor that contributes to disparities in corporate financial decisions is the disparity in risk aversion between men and women (Vandegrift & Brown, 2005). This discrepancy in risk attitudes and traits has been found to have an impact on the decision-making processes within corporations (Wei, 2007). According to Khan & Vieito (2013), companies led by female CEOs exhibit lower levels of risk compared to those conducted by male CEOs. Jianakoplos & Bernasek (1998) demonstrated that women are less likely than males to take financial and investment risks. When firms must own assets, women are more risk-averse than men, and this disparity widens as investment uncertainty increases (Schubert et al., 2000).

H6: CEO gender positively moderates the relationship between internationalization and performance.

3. Method

3.1 Data and Sample

The initial sample for 2015–2021 comprises all companies listed on the Indonesia Stock Exchange (IDX). The data sources for this analysis consist of company annual reports and the Osiris database. The Osiris database yielded financial information. Annual company reports were mined for data on internationalization variables. These datasets were pooled, and the following sample selection criteria were used. First, all finance and insurance companies were excluded due to the unique character of their financial statements. Second, data-incomplete observations were excluded from the sample. After implementing the sample selection criteria, the final sample consists of 1097 family firm-year observations. Refer to Table 1 for a sampling.

Following the existing literature (Briano-Turrent et al., 2020; Kang & Kim, 2016; Yang, 2010), since previous research has shown that significant control over a company can be obtained with only 20 percent of the voting rights (Claessens et al., 2000; La Porta

et al., 1999), we define a company as a family company if the controlling shareholder of the family owns at least 20 percent of the company's shares, either directly or indirectly through a cross-ownership or ownership pyramid structure. This can be done directly or indirectly through cross-ownership or ownership pyramid structure. We have adjusted the cut-off percentage to comply with existing regulations in Indonesia, namely regulations from the financial services authority number 57/POJK.04/2017, which state that the controlling shareholder is a party that owns at least 20 percent of the total shares issued by the company to conduct business activities.

3.2 Variable Definitions

Performance is an essential indicator of organizational success and a company's competitive edge. Firm performance can be conceptualized in terms of two fundamental dimensions: financial and operational. Financial performance can be subdivided into accounting-based measures (reflecting past performance) and capital market-based measures (reflecting investors' expectations for future performance). In contrast, operational performance indicators do not directly reflect financial results but define the underlying fundamental processes that ultimately lead to financial performance (e.g., cost efficiency and technological capability). This research concentrates on financial performance based on capital market value, where internationalization is a long-term activity for the company, so investors will be concerned with the company's future performance with internationalization. This study employs Tobin's Q as a proxy for a company's long-term performance because it can also explain its growth prospects and capture its current profitability (Lang & Stulz, 1994).

Firm performance (FP) is the dependent variable and is measured by Tobin's Q:

$$\text{Tobin's } Q_{it} = \frac{(\text{Market Capitalization} + \text{Book Value of Debt})_{it}}{\text{Book Value of Assets}_{it}} \quad (1)$$

There are numerous methods for measuring a company's internationalization. In line with previous research (Hsu et al., 2013; Sambharya, 1996; Sanders & Carpenter, 1998), we utilize the ratio of foreign sales to total sales (FSTS) as an independent variable. As moderating variables, we selected a variety of CEO demographic characteristics, including education level, tenure, age, international experience, and gender. Similar to previous research, namely Hsu et al. (2013), where the education level of CEOs is measured on a seven-point scale, which reflects the highest level of education attained (1 = elementary school, 2 = middle school, 3 = high school, 4 = two-year university, 5 = four-year university, 6 = master's degree, 7 = PhD), CEO tenure is measured as the number of years the company's CEO has been in that position (Herrmann & Datta, 2002, 2006). The CEO's age is determined by subtracting their birth date from their current age (Briano-Turrent et al., 2020; Hsu et al., 2013).

Following previous research by Hsu et al. (2013), the international experience of CEOs is measured using three international exposure proxies. (1) Work experience abroad: The CEO has expatriate or professional experience outside of Indonesia (Herrmann & Datta, 2005; Reuber & Fischer, 2002). (2) The CEO oversees the global market (Herrmann & Datta, 2005; Reuber & Fischer, 2002). (3) International Education: CEOs studied outside Indonesia (Herrmann & Datta, 2002, 2006; Sambharya, 1996). We assess CEOs' worldwide experience using these three proxies and a dummy variable. Popli et al. (2022) measured the CEO's gender with a fictional variable 1 if the CEO is male and 0 if she is female. Because firm age can affect internationalization, we account for the years since the company's founding (Arregle et al., 2012). Given that international activities necessitate financial resources (Gomez-Mejia et al., 2010), we calculate

leverage, the ratio of total debt to total assets (Cirillo et al., 2022). We evaluate firm size based on total assets, and to reduce slope, we employ this log variable.

3.3 Methodology

This research employed the descriptive statistics test, the Pearson correlation test, and ordinary least squares regression analysis as analysis methods. Before executing the data, each variable used in the data must be winsorized, as the data distribution in this study has the potential to contain a large number of outliers. Winsorizing the data modifies the data's behavior and eliminates the issue caused by outlier data, such as partial data and inaccurate data transcription (Reifman & Garrett, 2010). This test was conducted after reducing the data to 1 percent and 99 percent precision. All control variables except the dummy variable are winsorized to eliminate data distribution outliers. The regression model utilized in this study was a clustering-by-firm regression in SPSS 26.

4. Result and Discussion

4.1 Descriptive Statistics

Table 1 provides descriptive statistics for the variables in the research. The average Tobin's q value is 1.32, with minimal and maximum values of 0.14 and 5.76, respectively. In addition, the average value of the FSTS variable is 0.08, which indicates that foreign sales of family businesses in Indonesia are still comparatively low, at less than 10 percent. The education level of CEOs ranges from a maximum of 7 (PhD) to a minimum of 2 (junior high school), indicating that there are CEOs with only a junior high school education. The longest-serving CEO has served for fifty years, while the shortest-serving has held the position for only a few months. The eldest CEO is known to be 85 years old, while the youngest is only 29 years old.

Table 1: Statistic Descriptive

	N	Min	Max	Mean	Std. Dev
TOBIN'S Q	1,097	0.14	5.76	1.32	0.90
FSTS	1,097	0.00	1.00	0.08	0.18
C_EDU	1,097	2.00	7.00	5.09	0.95
C_TEN	1,097	0.08	50.00	10.85	11.63
C_AGE	1,097	29.00	85.00	56.19	10.52
C_EXP	1,097	0.00	1.00	0.58	0.49
C_GEN	1,097	0.00	1.00	0.91	0.29
FIRMAGE	1,097	4.00	100.00	33.91	13.38
FIRMSIZE	1,097	23.00	33.00	28.52	1.60
LEVERAGE	1,097	0.00	1.95	0.48	0.28

Source: Prepared by the authors.

4.2 Pearson Correlation

The Pearson correlation in Table 2 illustrates the univariate relationship between each variable. The FSTS demonstrates statistically significant correlations with the TOBIN's Q. Only the CEO's age has a significant relationship with the TOBIN's Q for the moderating variable. In contrast, education, years of service, international experience, and gender have the opposite effect. Several control variables, including firm size and leverage, produce statistically significant results with TOBIN's Q, but firm age does not.

Table 2: Pearson Correlation

	TOBIN'S Q	FSTS	C_EDU	C_TEN	C_AGE	C_EXP	C_GEN	FIRM AGE	FIRM SIZE	LEVERAGE
TOBIN'S Q	1.000									
FSTS	0.085*** (0.002)	1.000								
C_EDU	0.008 (0.399)	-0.030 (0.161)	1.000							
C_TEN	-0.030 (0.161)	0.143*** (0.000)	-0.203*** (0.000)	1.000						
C_AGE	-0.085*** (0.002)	0.041* (0.088)	-0.370*** (0.000)	0.404*** (0.000)	1.000					
C_EXP	0.034 (0.127)	0.034 (0.131)	0.465*** (0.000)	-0.094*** (0.001)	-0.261*** (0.000)	1.000				
C_GEN	-0.018 (0.273)	0.009 (0.387)	-0.087*** (0.002)	0.077*** (0.005)	0.091*** (0.001)	0.054** (0.037)	1.000			
FIRMAGE	-0.021 (0.245)	0.184*** (0.000)	0.055 (0.033)	0.226*** (0.000)	0.163*** (0.000)	0.068** (0.013)	-0.003 (0.461)	1.000		
FIRMSIZE	0.071*** (0.009)	0.010 (0.376)	0.021 (0.239)	-0.070** (0.011)	0.112*** (0.000)	-0.002 (0.471)	0.124*** (0.000)	0.121*** (0.000)	1.000	
LEVERAGE	0.047* (0.060)	0.092*** (0.001)	0.021** (0.021)	-0.061 (0.281)	0.018*** (0.007)	-0.074*** (0.000)	0.075*** (0.006)	0.130*** (0.000)	0.106*** (0.000)	1.000

Source: Prepared by the authors

4.3 Regression Result of Internationalization to Family Firm Performance

To test hypothesis 1, we begin with a standard ordinary least squares (OLS) regression, controlling for industry and year-fixed effects. We perform a Hausman test to determine whether a fixed effect or random effect model is more appropriate. The results of the Hausman test support the acceptance of an alternative hypothesis, suggesting that the fixed-effect model fits our database better than the random-effect model. In addition, we control for both industry and year fixed effects in our regressions. The regression model is described as follows:

$$\text{TOBIN's } Q_{i,t} = \beta_0 + \beta_1 \text{FSTS}_{i,t} + \beta_2 \text{C_EDU}_{i,t} + \beta_3 \text{C_TEN}_{i,t} + \beta_4 \text{C_AGE}_{i,t} + \beta_5 \text{C_EXPI}_{i,t} + \beta_6 \text{C_GEN}_{i,t} + \beta_7 \text{FIRMAGE}_{i,t} + \beta_8 \text{FIRMSIZE}_{i,t} + \beta_9 \text{LEVERAGE}_{i,t} \quad (2)$$

In Table 3, model 1 indicates that internationalization, as measured by the ratio of foreign sales to total sales (FSTS), has a positive effect on the long-term financial performance of family businesses with a level of significance of 1 per cent. (coeff=0.447; t=1.2). This indicates that internationalization can accommodate family-owned businesses focusing on the long term. This orientation may imply that long-term survival is the basis for all firm decisions (Donckels & Frohlich, 1991). In particular, it supports implementing optimal long-term investment policies, including Internationalization (James, 1999; Stein, 1989). According to Fernández-Olmos et al. (2016), the capacity of family businesses to cultivate long-term relationships with company stakeholders across generations gives them a distinct advantage in developing social capital. Following this, Miller et al. (2008) predicted that family-owned businesses develop more enduring customer networks. This study's findings corroborate those of Merino et al. (2014), who discovered that family significantly impacts company internationalization.

With a level of significance of 1 percent, the results of model 4's regression show that the education of the CEO has a negative effect on the relationship between internationalization and firm performance. (coeff=0.097; t=2.865). This suggests that the relationship between internationalization and performance weakens as the CEO's level of education increases. CEOs with a higher level of education are cognitively oriented and capable of analyzing a complex set of factors. In addition to providing several benefits that can enhance performance, internationalization also presents several obstacles that businesses must overcome, such as the increased cost of novelty obligations that arise from exposure to new rules and new methods of conducting trade and the increased organizational and environmental complexity that increases governance costs, coordination, and transactions (Stinchcombe, 1965; Lu & Beamish, 2004; Zaheer & Mosakowski, 1997). This is what causes CEOs with advanced degrees to consider an increasing number of factors so they can halt their internationalization efforts.

According to Zhou & Wang (2014), CEOs with a solid educational background perceive their education as a personal investment, leading them to anticipate greater returns commensurate with their higher level of education. This remark pertains to the theoretical framework of human capital (Becker, 1964; Mincer, 1958), that individuals tend to exhibit persistence in their decision-making process when determining the optimal level of investment in their human capital. The individuals will undertake a comparative analysis of the anticipated future income associated with various job choices while also considering the expenses incurred in acquiring the necessary education to pursue these careers, including the duration of time spent in educational settings. In light of these conditions, individuals will exercise greater caution with respect to engaging in

high-risk financial strategies (Chua et al., 2020). The decision to pursue internationalization may be weakened as the CEO's degree of education increases due to the significant dangers that must be confronted.

With a level of significance of 5 per cent, the results of model 4's regression show that the CEO's length of service has a negative effect on the link between internationalization and firm performance. (coeff = 0.058; $t = 2.208$). This shows that the relationship between internationalization and performance weakens as the CEO's tenure increases. According to the hypothesis, senior executives who have been in their jobs for a long time are less likely to adapt to new situations and actively seek out information from different sources than their younger and less-experienced peers (Hsu et al., 2013). CEOs with a longer tenure in related companies will better comprehend the company's condition than those with a shorter tenure. This also discourages CEOs with extended tenure from making internationalization decisions for the company's long-term viability.

The results of model 4's regression show that older CEO age has a negative effect on the relationship between internationalization and firm performance, with a level of significance of 10 per cent. (coeff = 0.056; $t = 1.698$). This indicates that the relationship between internationalization and performance weakens as the CEO ages. The results of this study agree with those of Hsu et al. (2013), who found that CEOs who are older, more risk-averse, have less physical and mental stamina, and have weaker information processing and analysis skills are less likely to see future possibilities. In the company's international activities and in solving difficult problems linked to internationalization, which may hurt the company's performance in internationalizing.

Model 5's regression results indicate that CEOs with international experience have a 10 percent significant negative impact on the relationship between internationalization and firm performance. (coeff = 0.055; $t = 1.831$). These findings suggest that the relationship between internationalization and performance is attenuated when the CEO has international experience. This phenomenon indicates that international experience can provide executives with an overview of the opportunities attained through internationalization; however, executives will also be presented with various challenges that businesses must address. According to Herrmann & Datta (2002), executives who possess international experience have acquired a wealth of knowledge pertaining to various cultures and business methods, resulting in a heightened level of awareness regarding international market potential. The foreign expertise of the CEO may serve as a more reliable factor for family businesses to assess the viability of internationalization initiatives. One of the limitations inherent in family-owned businesses is their tendency towards a cautious approach in the decision-making process, resulting in a reluctance to undertake risky ventures. The inherent conservatism of family-owned enterprises presents challenges in achieving rapid growth. The expansion of family enterprises on an international scale introduces a heightened level of complexity to their operating environment (Fernández-Olmos et al., 2016; Westhead et al., 2001). Hence, the CEO's worldwide experience may hinder the effective internationalization efforts of family enterprises.

With a level of significance of 5 percent, the results of model 6 regression show that male CEOs have a positive effect on the link between internationalization and firm success (coeff = 0.066; $t = 2.060$). These findings suggest that the relationship between internationalization and performance is strengthened when the CEO is a man. This is consistent with previous research indicating that women-owned businesses may be less likely to export than those owned by males (Grondin & Schaefer, 1995). Women are more risk-averse than men, and the differences in attitudes and risk characteristics between the sexes influence financial decisions within companies (Booth, 2009;

Vandegrift & Brown, 2005; Wei, 2007). The control variable firm size consistently significantly affects regression models 1 through 6. In contrast, the control variables of firm age and leverage have no significant impact on the performance of family businesses.

Table 3: Regression Results of Internationalization to TOBIN's Q

	(1)	(2)	(3)	(4)	(5)	(6)
FSTS	0.447*** (1.213)	0.455*** (2.968)	0.530*** (3.352)	0.446*** (2.906)	0.451*** (2.934)	0.435*** (2.832)
<i>C_EDU</i>	-0.039 (1.148)	-0.047 (1.378)	-0.036 (1.069)	-0.038 (1.120)	-0.039 (1.151)	-0.039 (1.159)
<i>C_TEN</i>	0.001 (0.228)	0.000 (0.176)	0.001 (0.485)	0.001 (0.429)	0.001 (0.337)	0.001 (0.299)
<i>C_AGE</i>	- 0.009*** (2.748)	-0.008*** (2.717)	-0.008*** (2.671)	-0.009*** (2.928)	-0.008*** (2.750)	-0.009*** (2.873)
<i>C_EXP</i>	0.048 (0.771)	0.049 (0.785)	0.056 (0.888)	0.050 (0.803)	0.045 (0.708)	0.053 (0.838)
<i>C_GEN</i>	-0.091 (0.939)	-0.097 (1.007)	-0.095 (0.988)	-0.085 (0.880)	-0.100 (1.032)	-0.077 (0.801)
INTXC_EDU		-0.097*** (2.865)				
INTXC_TEN			-0.058** (2.208)			
INTXC_AGE				-0.056* (1.698)		
INTXC_EXP					-0.055* (1.831)	
INTXC_GEN						0.066** (2.060)
<i>FIRMAGE</i>	-0.002 (1.154)	-0.002 (1.150)	-0.003 (1.329)	-0.002 (1.135)	-0.003 (1.230)	-0.003 (1.200)
<i>FIRMSIZE</i>	0.050*** (2.839)	0.047*** (2.693)	0.049*** (2.795)	0.048*** (2.760)	0.051*** (2.920)	0.051*** (2.914)
<i>LEVERAGE</i>	0.093 (0.929)	0.114 (1.133)	-0.058 (0.961)	0.104 (1.030)	-0.055 (1.831)	0.081 (0.803)
_cons	0.638 (1.213)	0.734 (1.396)	0.634 (1.207)	0.682 (1.296)	0.601 (1.143)	0.612 (1.164)
Industry Fixed Effect	Included	Included	Included	Included	Included	Included
Year Fixed Effect	Included	Included	Included	Included	Included	Included
r ²	0.025	0.033	0.030	0.028	0.028	0.029
r ² _a	0.017	0.024	0.021	0.019	0.019	0.020
N	1097	1097	1097	1097	1097	1097

Note: The numbers reported in parentheses are regression t-statistics (in OLS regressions).

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

Source: Prepared by the authors

4.4 Robustness Analysis

As a robustness test, this study employs a three-year gap between the dependent and independent variables because it safeguards against the possibility of reverse causality and allows sufficient time for internationalization efforts to bear fruit. These calculations are consistent with prior internationalization research (George et al., 2005;

Hsu et al., 2013; Zahra et al., 2000). Consequently, the value of the dependent variable spans 2015–2021, whereas the value of the independent variable spans 2012–2018. It can be seen that FSTS has a significant positive relationship with company performance, as measured by TOBIN's Q. These results indicate that the primary regression in this study is reliable. The results of subsequent regressions in the second and third models are consistent with the results of the primary regression, which indicates that the education level and tenure of the CEO substantially reduce the positive impact of internationalization on firm performance.

Table 4: Robustness Results of Internationalization to TOBIN's Q

	(1)	(2)	(3)	(4)	(5)	(6)
INT	0.430*** (1.614)	0.445*** (2.911)	0.475*** (3.071)	0.453*** (2.867)	0.430*** (2.814)	0.423 (2.762)
C_EDU	-0.069** (1.970)	-0.075** (2.132)	-0.070** (2.008)	-0.067* (1.912)	-0.069** (1.992)	-0.068* (1.954)
C_TEN	0.004 (1.477)	0.004 (1.296)	0.004 (1.354)	0.004 (1.490)	0.004 (1.485)	0.004 (1.479)
C_AGE	- 0.013*** (4.278)	-0.013*** (4.123)	-0.013*** (4.295)	- 0.013*** (4.302)	- 0.013*** (4.271)	-0.013*** (4.273)
C_EXP	0.082 (1.298)	0.083 (1.309)	0.085 (1.343)	0.081 (1.273)	0.082 (1.295)	0.079 (1.244)
C_GEN	-0.024 (0.249)	-0.029 (0.304)	-0.022 (0.234)	-0.021 (0.220)	-0.029 (0.303)	-0.021 (0.219)
INTXC_EDU		-0.058* (1.720)				
INTXC_TEN			-0.051** (1.732)			
INTXC_AGE				-0.018 (0.562)		
INTXC_EXP					-0.017 (0.610)	
INTXC_GEN						0.019 (0.727)
FIRMAGE	-0.003 (1.435)	-0.003 (1.381)	-0.003 (1.543)	-0.003 (1.452)	-0.003 (1.459)	-0.003 (1.442)
FIRMSIZE	0.054*** (3.295)	0.052*** (3.159)	0.054*** (3.277)	0.054*** (3.247)	0.055*** (3.314)	0.054*** (3.252)
LEVERAGE	0.000 (0.809)	0.000 (0.271)	0.000 (0.248)	0.000 (0.229)	0.000 (0.218)	0.000 (0.233)
_cons	0.834 (1.614)	0.905 (1.748)	0.857 (1.660)	0.848 (1.638)	0.834 (1.613)	0.848 (1.640)
Industry Fixed Effect	Included	Included	Included	Included	Included	Included
Year Fixed Effect	Included	Included	Included	Included	Included	Included
r2	0.034	0.037	0.037	0.034	0.034	0.035
r2_a	0.026	0.028	0.028	0.025	0.026	0.029
N	1097	1097	1097	1097	1097	1097

Note: The numbers reported in parentheses are regression t-statistics (in OLS regressions).

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

Source: Prepared by the authors

4.5. Additional Analysis

As shown in Table 5, we also conduct additional analysis using ordinary least squares (OLS) with return on assets (ROA) as dependent variables. ROA represents accounting performance, while Tobin's Q represents market performance. In model 1, it is demonstrated that internationalization substantially influences the short-term performance of family-owned businesses. This indicates that internationalization activities undertaken by firms enhance not only long-term performance but also short-term performance. Models 2, 5, and 6 produce the same results as the regression on Tobin's q, namely that the level of international education and experience substantially reduces the positive effect of internationalization on performance, whereas gender enhances this effect. While models 3 and 4 yield divergent results with Tobin's q regression, CEO tenure and age do not moderate the relationship between internationalization and performance.

Table 5: Additional Analysis Result of Internationalisation to ROA

	(1)	(2)	(3)	(4)	(5)	(6)
INT	0.044*** (2.637)	0.045*** (2.684)	0.045*** (2.604)	0.044*** (2.642)	0.045*** (2.666)	0.044*** (2.601)
C_EDU	-0.007** (1.971)	-0.008** (2.157)	-0.007** (1.962)	-0.007** (1.999)	-0.007** (1.974)	-0.007** (1.974)
C_TEN	0.001** (2.560)	0.001*** (2.522)	0.001** (2.563)	0.001** (2.359)	0.001*** (2.676)	0.001* (2.589)
C_AGE	- 0.001*** (3.220)	- 0.001*** (3.164)	- 0.001*** (3.205)	- 0.001*** (3.069)	- 0.001*** (3.184)	- 0.001*** (3.255)
C_EXP	-0.012* (1.748)	-0.012* (1.742)	-0.012* (1.735)	-0.012* (1.777)	-0.013* (1.816)	-0.012* (1.717)
C_GEN	-0.008 (0.804)	-0.009 (0.859)	-0.009 (0.807)	-0.009 (0.858)	-0.010 (0.905)	-0.008 (0.741)
INTXC_EDU		- 0.009*** (2.353)				
INTXC_TEN			-0.001 (0.183)			
INTXC_AGE				0.006 (1.550)		
INTXC_EXP					-0.007** (1.973)	
INTXC_GEN						0.003** (0.915)
FIRMAGE	4.160 (0.176)	4.307 (0.182)	3.811 (0.161)	3.742 (0.158)	2.224 (0.094)	3.687 (0.156)
FIRMSIZE	0.013*** (6.968)	0.013*** (6.849)	0.013*** (6.959)	0.013*** (7.036)	0.014*** (7.057)	0.013*** (6.995)
LEVERAGE	- 0.145***	- 0.143***	- 0.145***	0.146*** (13.276)	- 0.144***	- 0.146***

	(1)	(2)	(3)	(4)	(5)	(6)
	(13.199)	(13.027)	(13.189)		(13.075)	(13.229)
_cons	-0.181	-0.173	-0.182	-0.186	0.186	0.183
	(3.149)	(3.001)	(3.149)	(3.224)	(3.228)	(3.171)
Industry Fixed Effect	Included	Included	Included	Included	Included	Included
Year Fixed Effect	Included	Included	Included	Included	Included	Included
r ²	0.175	0.179	0.175	0.177	0.178	0.176
r ² _a	0.168	0.172	0.167	0.169	0.170	0.68
N	1097	1097	1097	1097	1097	1097

Note: The numbers reported in parentheses are regression t-statistics (in OLS regressions).

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

Source: Prepared by the authors

5. Conclusion

This study examines the relationship between internationalization and the long-term performance of family firms, as measured by Tobin's q. This study presents moderating variables in CEO demographic characteristics, including educational attainment, tenure, age, international experience, and gender. Internationalization is hypothesized to have a positive relationship with the efficacy of family businesses. Using data from companies listed on the Indonesia Stock Exchange between 2015 and 2021, the study finds a significant positive correlation between internationalization and the performance of family-owned businesses. The results also indicate that four of the five demographic characteristics of CEOs, namely education level, tenure, age, and international experience, weaken the positive relationship between internationalization and firm performance. In contrast, gender has a significant positive impact, strengthening the relationship between internationalization and firm performance.

This study also contributes to the consensus regarding the effects of internationalization on company performance, particularly in family-owned businesses. Where internationalization activities provide increased benefits to enhance company performance, particularly over the long term, this encourages families to invest in long-term return opportunities by bolstering the orientation of family businesses that regard their company as an asset to be passed down to their children. As a robustness test, this study found a disparity between the dependent and independent variables and found that the results were consistent with the primary analysis. This study also examines the relationship between internationalization and the company's short-term performance as measured by return on assets (ROA) and finds a significant positive correlation. However, there are limitations to this study, including the use of only one measure of internationalization, namely foreign sales to total sales (FSTS).

Future research may employ alternative indicators to describe internationalization. The study confirmed that the index is comprehensive and complex enough to measure internationalization. Consequently, it is chosen from among other sizes. In addition, this study suggests using demographic characteristics of CEOs not tested in this study to extend the research findings. Despite its limitations, this study contributes to comprehending the relationship between internationalization and firm performance in family businesses.

References

- Almodóvar, P., & Rugman, A. M. (2014). The M curve and the performance of Spanish international new ventures. *British Journal of Management*, 25(SUPPL.1), 6–23.
- Altaf, N., & Shah, F. A. (2015). Internationalization and firm performance of Indian firms: Does product diversity matter?. *Pacific Science Review B: Humanities and Social Sciences*, 1(2), 76–84.
- Arregle, J. L., Chirico, F., Kano, L., Kundu, S. K., Majocchi, A., & Schulze, W. S. (2021). Family firm internationalization: Past research and an agenda for the future. *Journal of International Business Studies*, 52(6), 1159–1198.
- Arregle, J. L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73–95.
- Arregle, J. L., Naldi, L., Nordqvist, M., & Hitt, M. A. (2012). Internationalization of family-controlled firms: A study of the effects of external involvement in governance. *Entrepreneurship: Theory and Practice*, 36(6), 1115–1143.
- Athanassiou, N., & Nigh, D. (2000). Internationalization, tacit knowledge and the top management teams of MNCs. *Journal of International Business Studies*, 31(3), 471–487.
- Bandiera, O., Prat, A., Hansen, S., & Sadun, R. (2020). CEO behavior and firm performance. *Journal of Political Economy*, 128(4), 1325–1369.
- Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference?. *Strategic Management Journal*, 10(1 S), 107–124.
- Barker, V. L., & Mueller, G. C. (2002). CEO characteristics and firm R&D spending. *Management Science*, 48(6), 782–801.
- Basly, S. (2007). The internationalization of family SME an organizational learning and knowledge development perspective. *Baltic Journal of Management*, 2(2), 154–180.
- Bausch, A., & Krist, M. (2007). The effect of context-related moderators on the internationalization-performance relationship: Evidence from meta-analysis. *Management International Review*, 47(3), 319–347.
- Becker, G. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York: Columbia University Press.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279.
- Booth, A. L. (2009). Gender and competition. *Labour Economics*, 16(6), 599–606.
- Briano-Turrent, G. D. C., Li, M., & Peng, H. (2020). The impact of family-CEOs and their demographic characteristics on dividend payouts: Evidence from Latin America. *Research in International Business and Finance*, 51(August 2019), 1-18.
- Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34(4), 345–355.
- Casillas, J. C., Moreno, A. M., & Acedo, F. J. (2010). Internationalization of family businesses: A theoretical model based on international entrepreneurship perspective. *Global Management Journal*, 2(2), 16–33.

- Casson, M. (1999). The economics of the family firm. *Scandinavian Economic History Review*, 47(1), 10–23.
- Caves, R.E. (1996). *Multinational enterprise and economic analysis*. 2nd Ed. Cambridge: Cambridge University Press
- Chami, R. (1998). What's different about family businesses?. *SSRN Electronic Journal*, January 2001. Retrieved from <https://doi.org/10.2139/ssrn.38041>
- Cheng, T. Y., Li, Y. Q., Lin, Y. E., & Chih, H. H. (2020). Does the fit of managerial ability with firm strategy matters on firm performance. *Journal of Asian Finance, Economics and Business*, 7(4), 9–19.
- Cheong, K. C., Lee, P. P., & Lee, K. H. (2015). The internationalisation of family firms: Case histories of two Chinese overseas family firms. *Business History*, 57(6), 841–861.
- Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *sociology*, 6(1), 1–22.
- Chua, M., Hisyam, N., Razak, A., Nassir, A., & Yahya, M. H. (2020). Does CEO education influence the target leverage and speed of adjustment?. *Journal of Critical Reviews*, 7(12). 59-68.
- Chung, C. C., Lee, S.-H., Beamish, P. W., Southam, C., & Nam, D. D. (2013). Pitting real options theory against risk diversification theory: International diversification and joint ownership control in economic crisis. *Journal of World Business*, 48(1), 122–136.
- Cirillo, A., Muñoz-Bullón, F., Sánchez-Bueno, M. J., & Sciascia, S. (2022). Employee downsizing and sales internationalization strategy in family firms. *Journal of Family Business Strategy*, 13(2), 1-13.
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58 (1–2), 81-112.
- Claver, E., Rienda, L., & Quer, D. (2007). The internationalisation process in family firms: Choice of market entry strategies. *Journal of General Management*, 33(1), 1–14.
- Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansion and performance: The case of emerging market firms. *Journal of World Business*, 42(4), 401–417.
- Contractor, F. J., Kundu, S. K., & Hsu, C. C. (2003). A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34(1), 5–18.
- Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Prentice-Hall, Englewood Cliffs, NJ.
- Daily, C. M., Certo, S. T., & Dalton, D. R. (2000). International experience in the executive suite: The path to prosperity?. *Strategic Management Journal*, 21(4), 515–523. 1
- Daniels, J. D., & Bracker, J. (1989). Profit performance: do foreign operations make a difference?. *Management International Review*, 29(1), 46–56.
- Datta, D. K., & Guthrie, J. P. (1994). Executive succession: organizational antecedents of ceo characteristics. *Strategic Management Journal*, 15(7), 569–577.
- Datta, D. K., & Rajagopalan, N. (1998). Industry structure and CEO characteristics: An empirical study of succession events. *Strategic Management Journal*, 19(9), 833–852.
- Donckels, R., & Fröhlich, E. (1991). Are family businesses really different?. European experiences from STRATOS. *Family Business Review*, 3(2), 149-160.

- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19(1), 1–31.
- Dutton, J. E., & Duncan, R. B. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8(3), 279–295.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *The Academy of Management Review*, 23(4), 660-679.
- Egelhoff, W. G. (1991). Information-processing theory and the multinational enterprise. *Journal of International Business Studies*, 22(3), 341-368.
- Fernández-Olmos, M., Gargallo-Castel, A., & Giner-Bagües, E. (2016). Internationalisation and performance in Spanish family SMES: The W-curve. *BRQ Business Research Quarterly*, 19(2), 122–136.
- Fernández-Temprano, M. A., & Tejerina-Gaite, F. (2020). Types of directors, board diversity and firm performance. *Corporate Governance (Bingley)*, 20(2), 324–342.
- Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35(3), 484–503.
- Fonfara, K., Hauke-Lopes, A., Łuczak, M., Ratajczak-Mrozek, M., & Szczepański, R. (2009). Zachowanie przedsiębiorstwa w procesie internacjonalizacji [Enterprise behavior in the internationalization process]. Retrieved from https://www.researchgate.net/publication/282763608_Zachowanie_przedsiębiorstwa_w_procesie_internacjonalizacji
- Gallo, M.A., & Pont, C.G. (1996). Important factors in family business internationalization. *Family Business Review*, 9(1), 45-60.
- George, G., Wiklund, J., & Zahra, S. A. (2005). Ownership and the internationalization of small firms. *Journal of Management*, 31(2), 210–233.
- Ghardallou, W., Borgi, H., & Alkhalifah, H. (2020). CEO characteristics and firm performance: A study of saudi arabia listed firms. *Journal of Asian Finance, Economics and Business*, 7(11), 291–301.
- Glaum, M., & Oesterle, M. J. (2007). 40 years of research on internationalization and firm performance: More questions than answers?. *Management International Review*, 47(3), 307–317.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & de Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653–707.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47(2), 223–252.
- Grant, R. M. (1987). Multinationality and performance among British manufacturing companies. *Journal of International Business Studies*, 18(3), 79–89.
- Grondin, D., & Schaefer, N. (1995). Differences in the export activities of female-and male owned small and medium-sized enterprises. *Women in Management Review*, 10(8), 4–10.
- Grondin, D., Schaefer, N., & Schaefer, N. (2001). Differences in the female and male owned small and medium sized enterprises. *Women in Management Review*, 10(8), 4–10.
- Hagen, B., & Zucchella, A. (2014). Born global or born to run? The long-term growth of born global firms. *Management International Review*, 54(4), 497–525.

- Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. (1993). Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, 14(6), 401–418.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.
- Hamel, G., & Prahalad, C.K. (1985). Do you really have a global strategy?. *Harvard Business Review* 63(4), 139–148.
- Hart, P., & Mellors, J. (1970). Management youth and Company growth a correlation?. *Management Decision*, 4(1), 50–53.
- Herrmann, P., & Datta, D. K. (2002). CEO successor characteristics and the choice of foreign market entry mode: An empirical study. *Journal of International Business Studies*, 33(3), 551–569.
- Herrmann, P., & Datta, D. K. (2005). Relationships between top management team characteristics and international diversification: An empirical investigation. *British Journal of Management*, 16(1), 69–78.
- Herrmann, P., & Datta, D. K. (2006). CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies*, 43(4), 755–778.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4), 767–798.
- Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. (2006). International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6), 831–867.
- Hsu, W. T., Chen, H. L., & Cheng, C. Y. (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business*, 48(1), 1–12.
- Hymer, S.H. (1976) *The international operations of national firms: A study of direct foreign investment*. Cambridge, MA: MIT Press.
- James, H. S. (1999). Owner as manager, extended horizons and the family firm. *International Journal of Phytoremediation*, 21(1), 41–55.
- Jensen, M. C. (1994). Self-interest, altruism, incentives and agency theory. *Journal of Applied Corporate Finance*, 7(2), 40–45.
- Jianakoplos, N. A., & Bernasek, A. (1998). Are women more risk averse?. *Economic Inquiry*, 36(4), 620–630.
- Jiang, G., Kotabe, M., Zhang, F., Hao, A. W., Paul, J., & Wang, C. L. (2020). The determinants and performance of early internationalizing firms: A literature review and research agenda. *International Business Review*, 29(4), 1-14.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm-a model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies*, 8(1), 23–32.
- Kang, H. C., & Kim, J. (2016). Why do family firms switch between family CEOs and non-family professional CEO? Evidence from Korean Chaebols. *Review of Accounting and Finance*, 15(1), 45–64.
- Kano, L., Ciravegna, L., & Rattalino, F. (2021). The family as a platform for FSA development: Enriching new internalization theory with insights from family firm research. *Journal of International Business Studies*, 52(1), 148–160.
- Karagozoglu, N., & Lindell, M. (1998). Internationalization of small and medium-sized technology-based firms: An exploratory study. *Journal of Small Business Management*, 36(1), 44–59.
- Katz, R. (1982). The effects of group longevity on project communication and performance. *Administrative Science Quarterly*, 27(1), 81-104.

- Kesner, I. F., & Sebra, T. C. (1994). Executive succession: past, present & future. *Journal of Management*, 20(2), 327–372.
- Khan, W. A., & Vieito, J. P. (2013). CEO gender and firm performance. *Journal of Economics and Business*, 67, 55–66.
- Kim, W. Chan, Hwang, P., & Burgers, W. P. (1993). Multinationals' diversification and the risk-return trade-off. *Strategic Management Journal*, 14(4), 275–286.
- Kim, W.C., & Mauborgne, R. A. (1988). Becoming an effective global competitor. *Journal of Business Strategy*, 9(1), 33–37.
- Kirca, A. H., Hult, G. T. M., Deligonul, S., Perry, M. Z., & Cavusgil, S. T. (2012). A multilevel examination of the drivers of firm multinationality: A meta-analysis. *Journal of Management*, 38(2), 502–530.
- Kogut, B. (1985). Designing global strategies: Comparative and competitive value-added chains. *Sloan Management Review*, 26(4), 15–28.
- Kogut, B., & Chang, S. J. (1996). Platform investments and volatile exchange rates: direct investment in the U.S. by Japanese electronic companies. *The Review of Economics and Statistics*, 78(2), 221–231.
- Kumar, M. S. (1984). *Growth, acquisition and investment: An analysis of the growth of industrial firms and their overseas activities*. Cambridge : Cambridge university press.
- La Porta, R., Florencio Lopez-de-Silanes, & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.
- Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy*, 102(6), 1248–1280.
- Li, L. (2005). Is regional strategy more effective than global strategy in the US service industries?. *Management International Review*, 45(1), 37–57.
- Li, L. (2007). Multinationality and performance: A synthetic review and research agenda. *International Journal of Management Reviews*, 9(2), 117–139.
- Liu, Y., Lin, W. T., & Cheng, K. Y. (2011). Family ownership and the international involvement of Taiwan's high-technology firms: The moderating effect of high-discretion organizational slack. *Management and Organization Review*, 7(2), 201–222.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6–7), 565–586.
- Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The s-curve hypothesis. *The Academy of Management Journal*, 47(4), 598–609.
- Lu, J. W., Liang, X., Shan, M., & Liang, X. (2015). Internationalization and performance of Chinese family firms: The moderating role of corporate governance. *Management and Organization Review*, 11(4), 645–678.
- Merino, F., Monreal-Pérez, J., & Sánchez-Marín, G. (2014). Family SMEs' internationalization: Disentangling the influence of familiness on Spanish firms' export activity. *Journal of Small Business Management*, 53(4), 1164–1184.
- Geringer, J. M., Beamish, P. W., & daCosta, R. C. (1989). Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10(2), 109–119.
- Michel, A., & Shaked, I. (1986). Multinational corporations vs. domestic corporations: Financial performance and characteristics. *Journal of International Business Studies*, 17(3), 89–100.
- Miller, D., & Le Breton-Miller, I. (2005). Management insights from great and struggling family businesses. *Long Range Planning*, 38(6), 517–530.

- Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses. *Journal of Management Studies*, 45(1), 51–78.
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281–302.
- Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: effects on strategic decision making. *Family Business Review*, 15(3), 205–222.
- Nohria, N., & Ghoshal, S. (1994). Differentiated fit and shared values: Alternatives for managing headquarters- subsidiary relations. *Strategic Management Journal*, 15(6), 491–502.
- Peterson, G. W., Sampson Jr., J. P., & Reardon, R. C. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.
- Pierscioneck, Z., (2003). *Strategie konkurencji i rozwoju przedsiębiorstwa*. [Competition and enterprise development strategies]. Wydawnictwo Naukowe, Warszawa.
- Popli, M., Ahsan, F. M., & Mukherjee, D. (2022). Upper echelons and firm internationalization: A critical review and future directions. *Journal of Business Research*, 152(August), 505–521.
- Porter, M. E., & Spence, A. M. (1986). *Competition in global industries*. Boston: Harvard Business School Press.
- PricewaterhouseCoopers. (2014). *Survey Bisnis Keluarga 2014* [Indonesia report family business survey 2014] (November). Retrived from <https://www.pwc.com>.
- Purkayastha, A., Sharma, S., & Karna, A. (2020). Theoretical foundations of antecedents of internationalization and moderators in multinationality–performance relationship: What is missing?. *Cross Cultural and Strategic Management*, 27(2), 213–243.
- PWC. (2018). *The values effect. PWC global family business survey 2018*. Retrieved from <https://www.pwc.com>.
- Qian, G. (1996). The effect of multinationality measures upon the risk-return performance of US firms. *International Business Review*, 5(3), 247–265.
- Ray, S., Mondal, A., & Ramachandran, K. (2018). How does family involvement affect a firm’s internationalization? An investigation of Indian family firms. *Global Strategy Journal*, 8(1), 73–105.
- Reifman, A., & Garret, K. (2010). Winsorize. In N. J. Salkind (Ed.), *Encyclopedia of Research Design* (pp. 1636-1638). Thousand Oaks, CA: Sage.
- Reuber, A. R., & Fischer, E. (2002). Foreign sales and small firm growth: The moderating role of the management team. *Entrepreneurship Theory and Practice*, 27(1), 29–45.
- Roth, K. (1995). Managing international interdependence: CEO characteristics in a resource-based framework. *The Academy of Management Journal*, 38(1), 200–231.
- Ruigrok, W., & Wagner, H. (2003). Internationalization and performance: An organizational learning perspective. *MIR: Management International Review*, 43(1), 63–83.
- Sambharya, R. B. (1996). Foreign experience of top management teams and international diversification strategies of US. multinational corporations. *Strategic Management Journal*, 17, 739–746.
- Sampson Jr., J. P., Reardon, R. C., Peterson, G. W., & Lenz., J. G. (2004). *Career counseling and services: A cognitive information processing approach*. Pacific Grove, CA: Brooks/Cole.

- Sanders, W. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *The Academy of Management Journal*, 41(2), 158–178.
- Schubert, R., Gysler, M., Brown, M., & Brachinger, H.-W. (2000). Gender specific attitudes towards risk and ambiguity: An experimental investigation. *Institut für Wirtschaftsforschung, Eidgenössische Technische Hochschule Zürich (17)* Retrieved from <https://www.research-collection.ethz.ch>
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, 12(2), 99–116.
- Sharma, P., Chrisman, J. J., & Chua, J. H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review*, 10(1), 1–35.
- Shaw, J. B. (1990). A cognitive categorization model for the study of intercultural management. *Academy of Management Review*, 15(4), 626–645.
- Shyu, J. (2011). Family ownership and firm performance: Evidence from Taiwanese firms. *International Journal of Managerial Finance*, 7(4), 397–411.
- Siddharthan, N. S., & Lall, S. (1982). The recent growth of the largest us multinationals. *Oxford Bulletin of Economics and Statistics*, 44(1), 1-13.
- Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *Quarterly Journal of Economics*, 104(4), 655–669.
- Stinchcombe, A. L. (1965). Social structure and organizations. In J. P. March. (Ed.), *Handbook of organizations* (pp. 142–193). Place of Publication: Rand McNally.
- Suprianto, E., Rahmawati, R., Setiawan, D., & Aryani, Y. A. (2019). Controlling generation of family firms and earnings management in Indonesia: The role of accounting experts of audit committees. *Journal of International Studies*, 12(3), 265–276.
- Tallman, S., & Li, J. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1), 179–196.
- Thomas, D. E., & Eden, L. (2004). What is the shape of the multinationality-performance relationship?. *Multinational Business Review*, 12(1), 89–110.
- Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. (2000). Composition of the top management team and firm international diversification. *Journal of Management*, 26(6), 1157–1177.
- Tushman, M. L., & Nadler, D. A. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3(3), 613–624.
- Vandegrift, D., & Brown, P. (2005). Gender differences in the use of high-variance strategies in tournament competition. *Journal of Socio-Economics*, 34(6), 834–849.
- Wally, S., & Becerra, M. (2001). Top management team characteristics and strategic changes in international diversification. *Group & Organization Management*, 26(2), 165–188.
- Wei, X. (2007). Wage compensation for job-related illness: Evidence from a matched employer and employee survey in the UK. *Journal of Risk and Uncertainty*, 34(1), 85-98.
- Westhead, P., Wright, M., & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of Business Venturing*, 16(4), 333–358.
- Wiersema, M. F., & Bantel, K. a. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35(1), 91–121.

- Yang, M. L. (2010). The impact of controlling families and family CEOs on earnings management. *Family Business Review*, 23(3), 266–279.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *The Academy of Management Journal*, 38(2), 341–363.
- Zaheer, S., & Mosakowski, E. (1997). The dynamics of the liability of foreignness: a global study of survival in financial services. *Strategic Management Journal*, 18(6), 439–463.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: international diversity, mode of market entry, technological Learning, and Performance. *The Academy of Management Journal*, 43(5), 925–950.
- Zhou, W., & Wang, Y. (2014). An empirical study for corporate risk index: CEO characteristics affecting corporate risk-taking. *Journal of Applied Sciences*, 14(24) 3520–3525.