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Masterthesis

Socio-emotional wealth and internationalization of family firms: The moderating effects of CEO personality traits

Brian Janssen

Scriptie ingediend tot het behalen van de graad van master in de handelswetenschappen, afstudeerrichting ondernemerschap en management

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This master thesis was written during the COVID-19 crisis in 2020. This global health crisis might have had an impact on the (writing) process, the research activities and the research results that are at the basis of this thesis.

Internationalization and socioemotional wealth of family firms: The moderating effects of CEO personality traits

Brian Janssen[1]

Abstract
This paper aims to examine three different relationships between different constructs, namely socioemotional wealth, internationalization and CEOs personality traits. First, the relationship between socioemotional wealth and internationalization will be defined, which is the baseline hypothesis in this study. Additionally, the effects of the personality traits of the CEO in family firms will be examined on socioemotional wealth and the extent of internationalization, separately. Based on the upper echelons and socioemotional wealth theories, we argue that CEOs play an important role in the internationalization of family firms. Based on a unique, hand-collected data set, we examine the personality traits of CEOs in Belgian family firms using the Big Five personality scale.

Keywords: Socioemotional wealth, Family businesses, CEO personality, Internationalization, Big Five traits

1. Introduction

Within the growing body of research on family firms, the topics of socioemotional wealth and internationalization are receiving increased attention. Family firms represent the majority of companies and are an important source for the generation of jobs in most countries. Now that markets tend toward a greater level of globalization, family firms must adapt to the many changes. Previous studies have shown that it is difficult to reach a consensus for a generally accepted definition on family firms, while everyone could interpret a family firm differently. For the purpose of this study, family firms are defined as any firm in which two or more family members are involved in the management, and the majority (50%) of ownership or control lies within the family (Chua, Chrisman and Sharma, 1999; Miller and Le Breton-Miller, 2006; Voordeckers, Van Gils and Van den Heuvel, 2007; Westhead and Cowling, 1998). Even when several members of the family participate in the management of the business (Kallmuenzer, Hora and Peters, 2018), firms are classified as a family firm. A generally accepted definition by several studies is "a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families" (Chua, Chrisman and Sharma, 1999, p. 28).

Over the last twenty years, many internationalization scholars became interested in the subject of family firms due to their pervasiveness and complexity. This because, internationalization is becoming an intriguing and, at the same time, a challenging opportunity for family firms (Parker, 1998; Zahra and George, 2002; Rabbiosi *et al.,* 2019), as it can often be seen as a way to revitalize the family and the firm, as a way to survive over time (Claver *et al.,* 2007) or to expand their activities given the current trend of globalization. However, empirical evidence on the process of internationalization within family firms remains inconclusive. As most reviews conclude that family firms are less likely to internationalize than non-family firms (Arregle *et al.,* 2016; Kontinen and Ojala, 2010; Pukall and Calabrò, 2014) and that they prefer to choose regions that are very close to their domestic market (Gómez-Mejía *et al*., 2010), there is also research that has produced contradictory findings. Due to the desire for long-term survival, family firms mostly need to undertake foreign expansion as the internationalization of the business can prove beneficial to the long-term competitiveness of family firms. It allows the organization to access a larger market, achieve economies of scale, diversify risk, or simply avoid competitive disadvantages (Gallo and Sveen, 1991). In short, international expansion provides firms with the opportunity for growth and the ability to access knowledge in foreign locations, but at the same time, it produces high costs and uncertainties (Contractor, Kumar and Kundu, 2007).

Within the internationalization process, research shows that family firms make decisions (differently than) unlike non-family firms (Gómez-Mejía, Cruz, Berrone and De Castro, 2011). Family firms may take into account non-economic factors and goals aimed at serving the family, such as the development and protection of socioemotional wealth the family derives from the business (Gómez-Mejía, Haynes, Jacobson and Moyano-Fuentes, 2007). Socioemotional wealth is defined by Gómez-Mejía *et al.* as 'the non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of family dynasty' (Gómez-Mejía *et al.,* 2007, p. 106). The socioemotional wealth perspective suggests that family firm owners gain from the socioemotional wealth aspect of the firm (Gómez-Mejía *et al.,* 2007). In addition, they may make internationalization decisions that fulfill their motivations to preserve and enhance their socioemotional wealth, unlike the internationalization decisions of non-family firms. Socioemotional wealth could have a positive effect on firm internationalization as family firms that want to pass their business on to next generations will have a long-term perspective look on their firm and are easily persuaded to invest in developing human resources, capabilities, relationships with stakeholders, and financial reserves (Scholes, Mustafa and Chen., 2015). But most empirical evidence suggests a negative relationship between socioemotional wealth and internationalization while in order to internationalize the business, the stock and flow of socioemotional wealth will be directly impacted (Chua *et al.,* 2015). Family firms may have to cede ownership to a certain degree or may need the capability of non-family CEOs at the top of their firm. Other forms of socioemotional wealth in family firms suggested by Gómez-Mejía *et al.* (2007) are; the ability to exercise control, belonging, perpetuation of family values, maintaining family dynasty, conservation of social capital, deciding on blood-ties rather than competence and family altruism.

In the past, much research has already been done on the socio-demographic data of the CEO and their influence on foreign market entry mode or internationalization (Hsu *et al*., 2013; Laufs *et al.*, 2016), including the CEOs age, firm tenure, educational level and international experience. The CEOs age influences his or her propensity for risk taking and change and the capacity for information processing and analysis (e.g. Agarwal, 1994; Herrmann and Datta, 2002, 2006; Wiersema and Bantel, 1992). Older CEOs for example, tend to avoid these risks because they have reached a point in their lives at which financial security and career security are indispensable (Hambrick and Mason, 1984; Laufs *et al.,* 2016). On the other hand, also CEO firm tenure, educational level and individual international experience plays a significant role in determining a foreign market entry mode choice (Laufs *et al.,* 2016). Research suggests that the CEOs international experience helps to reduce the uncertainty associated with foreign market entry (Carpenter *et al*., 2001, 2003; Hennart, 1991), as the accumulated knowledge of foreign cultures, geographic markets, and business practices increases the CEOs awareness of international opportunities (Athanassiou and Nigh, 2002; Fernhaber *et al.,* 2009; Herrmann and Datta, 2006; Tihanyi *et al.,* 2000). Hsu *et al.* (2013) agrees with this statement, their results indicate that there may be a positive relationship between CEOs who are more educated or possess greater international experience and better internationalization performance. It is for this reason that we included these variables within our study.

As we can conclude from the above, the internationalization decisions made by family firms are very much influenced by the CEO at the top of the firm. From previous work, we learn that there is little theoretical and empirical work dedicated to the personality traits of family firm CEOs. There are a few papers devoted to the personality traits of family owners or founders and their relationship with the performance of the firm (Leutner *et al.,* 2014; Chatterjee and Hambrick, 2007; Hiller and Hambrick, 2005), saying that personality traits shape how family owners notice, interpret, and respond to environmental stimuli and, therefore, influence their strategic choices. Nonetheless, the personality of the CEO is becoming an important topic in strategic management.

Drawing on upper echelons theory, research has highlighted that the CEOs personality is reflected in the strategic decisions, structure and performance of the organization they lead (e.g., Herrmann and Nadkarni, 2014; Nadkarni and Herrmann, 2010). Hambrick and Mason (1984) first concluded that the organizational outcomes – strategic choices and performance levels – are partially predicted by executives' background characteristics. Hambrick (2007) later redefined these characteristics as experiences, values and personalities and concluded that these characteristics greatly influence executives' (the CEO and his/her selected top management team) interpretations of the situations they face and, in turn, affect their choices. If we want to understand why some organizations do the things they do, inevitably, we must examine executives characteristics, because they take actions through the lens of their personal experiences, values, personalities, and other similar human factors.

Previous research has examined the internationalization- socioemotional wealth relationship of family firms by focusing on the different dimensions (FIBER) of socioemotional wealth. Despite all these promising studies, scholars still possess only a limited understanding of the strategic implications of CEO personality on the two subjects. Majority of the studies based on the upper echelons theory have discussed the most common demographics characteristics of top management toward organizations outcomes, but the "top management's personality" has been largely ignored (Gerstner *et al*., 2013). Studies about the role of CEO personality and the big five of personality and their influence to socioemotional wealth are absent. Given the discussion on how CEO personality influences both socioemotional wealth-related and strategic decisions of the firm, such as internationalization, it would be very valuable to perform the current study which investigates the personality traits of CEOs of family firms. Some studies about the role of personality in family firm internationalization or performance (Anwar, Shah and Khan, 2018; Franco and Prata, 2019) produced valuable information which we will compare with our results.

What is therefore missing is a coherent approach that compares socioemotional wealth, internationalization and the personality traits of the CEO. Our objective is thus to first look at the relation between socioemotional wealth and internationalization. This in addition to current research, which have studied this relationship over the years (Yang *et al.,* 2018). The objective of this relationship is to have a solid base from where we can start our study. From here on, the discussion of the influence of the CEOs personality traits on these two constructs have more contribution.

2. Theoretical framework

The objective of this chapter is to define literature findings and develop theoretical hypotheses. There are three sections in this chapter: First, socioemotional wealth in the family firm literature is reviewed, focusing on the preservation of socioemotional wealth. Second, internationalization of family firms is discussed, with the emphasize on the presence of a family CEO or non-family CEO. The final section consists of CEO personality traits, focusing on the Big Five personality. In the last two sections we will formulate one hypothesis or more relating to the section's title.

2.1. Socioemotional wealth

Socioemotional wealth are affect-related values that may primarily relate to the family's unrestricted authority within the firm, the family influence over the firm, and the strong identification of the family with the firm (Berrone *et al.,* 2012). More specifically, it aims to explain family firms' specific behaviors. The concept is seen as the defining feature of a family business. It is central, enduring, and a unique reference point for decisions to the dominant family principal, influencing everything the firm does (Gómez-Mejía *et al.,* 2011).

As becoming the dominant paradigm in family firms research, socioemotional wealth has its roots in behavioral theory (Cyert and March, 1963) and its usage for explaining its influence on decisions is based on prospect theory (Kahneman and Tversky, 1979) and the behavioral agency theory (BAM) (Wiseman and Gómez-Mejía, 1998). The BAM integrates viewpoints of other theories (agency theory, prospect theory, and the behavioral theory) and aims to explain managerial risk-taking, which is determined by the situation (Hasenzagl, Hatak and Frank, 2017). One major contribution of BAM is the replacement of an assumption of risk aversion with an assumption of loss aversion in models of corporate governance. By assuming loss aversion, we portray agent self-interest in a manner that differs from the "wealth maximizing" view generally implied in agency formulations (Wiseman and Gomez-Mejia, 1998). Another central assumption of the BAM is that firms make choices depending on the reference point of the firm's dominant principal (Berrone, Cruz and Gómez-Mejía 2012, 259). In family firms, the preservation of socioemotional wealth is considered to be the dominant reference point.

However, this depiction does not capture the full behavioral spectrum of family firms in reality. While there are numerous family firms who set positive standards because of socioemotional wealth, the family firm literature is laden with stories of family firms that have ignored and even abused non-family stakeholders (e.g., Gordon and Nicholson, 2008; Kidwell and Kidwell, 2010; La Porta, Lopez-De-Silanes, Shleifer and Vishny, 2002). Kellermanns, Eddleston and Zellweger (2012) suggest there is a dark side to socioemotional wealth, which can affect non-family stakeholders. They note, for example, that family firms may be willing to accept greater performance risk (Gómez-Mejía *et al*., 2007), ignore or eliminate organizational controls (Kidwell and Kidwell, 2010) or seek a higher business valuation from non-family members, all due to socioemotional wealth. Zellweger (2017) agrees with this in his book "managing the family business". Existing research suggests that strong family identification with the firm can create an 'us-vs.-them' mentality that causes the family to place their needs above those of non-family stakeholders. Building up on this Zellweger (2017) had found that firm performance was at the highest point when the firm underlined their willingness to take entrepreneurial risks and not only their family business image.

We learned from recent studies that family firms strive for the preservation of socioemotional wealth. It is this preservation logic that drives internationalization decisions (Pukall and Calabrò, 2014; Kraus *et al*., 2016; Cesinger *et al.,* 2016). In recent years, a group of scholars developed a model to address this underlying motivation of family principals to preserve their non-financial utilities, called the socioemotional wealth preservation model. The model predicts that family principals are 'loss averse' with respect to socioemotional wealth, this is to say, they will embrace risky decisions that preserve socioemotional wealth even if they are expected to decrease economic wealth. In addition, they will avoid risky decisions that might increase economic wealth but reduce socioemotional wealth. Hasenzagl *et al.* (2017) agrees on this, saying that when the socioemotional wealth of the firm gets threatened the principal will make strategic choices that will avoid potential reduction of socioemotional wealth, even if achieving this objective might come at the expense of other firm objectives (Berrone, Cruz and Gómez-Mejía 2012; Zellweger *et al.* 2012; Hasenzagl *et al.,* 2017). Contradicting evidence concludes that family members differ in the extent to which they want to preserve socioemotional wealth. Even non-family members can indicate strong positions towards socioemotional wealth (Miller and Le Breton-Miller, 2014). The preservation logic is supported by Hegel's theory on Recognition (1807). Within this theory Hegel (1807) states that family firm owners have a passion for family recognition, and consider family recognition as the most important factor in their strategic decision-making. If family recognition is threatened, family firm owners are ready to sacrifice economic gains in order to maintain or restore their family recognition.

Having a member of the controlling family operating as the firm's CEO is an example of a socioemotional wealth-preserving mechanism, as it is a way for family firms to achieve the values stringed to socioemotional wealth (Naldi *et al.* 2013, 1343). Family CEOs desire control over their family business (Zellweger *et al.,* 2012). They hope to do this through appointing family members to top positions within the family business or at the board. Even family members who are shareholders within the company can influence governance and strategic choices. In this way, socioemotional wealth will be more salient when the CEO belongs to the family or when the CEO doubles as the board chair (Berrone *et al.,* 2012).

2.2. Internationalization of family firms

The decision to internationalize is a committing and demanding step that is associated with risk that may endanger the family firm's socioemotional wealth (Stieg *et al.,* 2018). Furthermore, socioemotional wealth can be seen as the reference point for family firm owners when making strategic decisions, such as internationalization, because they are desperate to avoid socioemotional wealth losses. International expansion (e.g. the planned expansion of a company's business activities into countries in several regions throughout the world) is basically based on the opportunities of internationally exploiting the competitive advantages firms have in domestic markets. To make this kind of change, family firms have to take into account various factors. The uncertainty and complexity of the process and a lack of resources usually work against foreign expansion (Fernández and J. Nieto, 2005). Further, the firm must have strategic resources and deeper knowledge that will provide it with a competitive advantage over local firms. Namely exporting goods will give a company a deeper knowledge of the nature of the new markets, on how to proceed on these specific markets and it will provide the given family business with the necessary information to keep expanding abroad with a lower degree of the uncertainty factor.

As an attempt to understand family firms' entry modes into foreign markets, we remind the reader of the risk averse attitude of family firms and the fact that family firms are more likely to choose psychically close countries and proceed stepwise favoring first indirect entry modes (Claver *et al.,* 2007; Graves and Thomas, 2008; Kontinen and Ojala, 2010). This means that the family business does not sell directly to the foreign/international market, but through an intermediary who takes on all the risks associated with the export activities. Research expects the family firm to go abroad based on its relationships with important partners or is also likely to follow a partner abroad if that partner firm has a valuable network position in one or more foreign countries (Johanson and Vahlne, 2009).

Nonetheless, the decision of internationalization has strong implications for socioemotional wealth endowments as it directly impacts the stock and flow of socioemotional wealth (Chua *et al.,* 2015). Based on socioemotional wealth, the founders of family firms are usually unwilling to change the organizational structures and professional management systems that favor decentralization of the decision-making process (Fernández and Nieto, 2005). In addition, family firms are also equipped with fewer specialized managerial capabilities than non-family firms (Graves and Thomas, 2008) and, as a result, have lower levels of international business experience. The founder is usually unwilling to recruit qualified non-family professionals, while these could help expand the company's activities to new countries.

2.2.1. Presence of family CEO

Family members execute control over strategic decisions, and the power to control can be exerted directly by family members as CEO or chairman of the executive board. Previous research indicated that family CEOs have a strong preference for control and like being in charge (Kets de Vries, 1985; Barth, Gulbrandsen and Schønea., 2005). For being successful within this position, you need to be strong-minded and have opinions about how things should be done (Dyer, 1989: Schein, 1995; Kelleci *et al.,* 2018). But being a family CEO carries lots of emotional attachment because of the great personal consequences that are linked with the fate of the family firm. They usually have strong incentives to increase firm value because their wealth is closely tied to firm performance (Lin, 2012) and therefore choose the often difficult path of internationalization.

Research according to this topic is inconclusive. When the CEO is part of the owning family, the level of internationalization is supposedly positively influenced. But, longer tenures of family CEOs will lead to less internationalization (Zahra, 2005). Yet, some research discovered a negative relationship between family ownership and international activities (Yang *et al.,* 2018). They argue that moderators like family characteristics (i.e., presence of founder CEOs and family succession intention) could have an impact on socioemotional wealth and found that they strengthen this negative relationship.

2.2.2. Presence of non-family CEO

Family firms may not possess managerial and market knowledge or sufficient human resources within the top management team (Claver *et al.,* 2009; Vandekerkhof, Steijvers, Hendriks and Voordeckers, 2014), as they usually enjoy fewer opportunities to gain international knowledge (Kuo, Kao, Chang and Chiu, 2012). Most family firms overcome this lack by hiring non-family CEOs or generally involving non-family members in the governance structure (Calabrò *et al.,* 2013; Lohe and Calabrò, 2017), as they mostly have more foreign experience due to education and prior experiences (Sanchez-Famoso *et al.,* 2015). This inclusion of a non-family CEO can be important for the survival and growth of the family firm (Block, 2011; Dyer, 1989; Klein, 2000; Sonfield and Lussier, 2009). In fact, family firms with low socioemotional wealth endowment achieve strong international performance by depending on external resources. The owning family is then willing to accept high socioemotional wealth losses by allowing external (non-family) owners to enter the firm (Gomez-Mejia *et al.,* 2011). The main reason for these family firm owners is to achieve strong international growth, although some of their decision-making power will vanish (Kraus *et al.,* 2016).

On the other hand, family firms with high socioemotional wealth endowment achieve high levels of internationalization when there are also other external factors combined with the presence of a non-family CEO (Kraus *et al.,* 2016). While this outcome seems counterintuitive with the rest of this study, the decision to invite a non-family CEO does not stem from socioemotional wealth preservation tendencies, but rather from the motivation to gain socioemotional wealth. In addition, the presence of external parties in the ownership and in the Board ought to reduce the extent to which a socioemotional wealth preservation logic drives the internationalization decisions (Piana and Vecchi, 2017). Although family firms appear to be willing to develop long-term internationalization plans, their limited resources, together with the tendency to avoid taking risky decisions, because of the fear of loss of control and family wealth, constrain export activity (Wang, 2006; Claver *et al.,* 2008). Accordingly, the decision to further internationalize and use external resources ceases to trigger further losses in socioemotional wealth. Thus,

Basic hypothesis #1: The importance of socioemotional wealth in family firms will be negatively related to the extent of internationalization (BH).

2.3. CEO personality traits

Usually, a family firm is led by an individual with a great cognitive framework – the CEO- who combines experience and knowledge. Therefore, the personality of CEOs influence firms' outcomes and decision making processes (Herrmann and Nadkarni, 2014). This assumption is researched by lots of researchers, concluding that the strategy and success of the family firm critically depends on the leadership behavior of the firm's CEO (Hambrick, 2007; Peterson, Smith, Martorana and Owens, 2003). The personality of a CEO reflects the individual's distinctive patterns of behavior in changing life situations, thoughts and emotions (e.g., Funder, 2001; Mischel, 1993). These 'cognitive frames' even play a very big role in the making of effective decisions in an ambiguous environment (Kaplan, 2008).

Studying executive personality will discover what a certain person will do in a given situation, how he will react to certain adjustments in the workplace, how he handles change. In deciding which theory to use, the Big Five theory (John and Srivastava, 1999) is the most widely accepted among researchers to describe an individual's personality. The Big Five research model is a universal model, independent of linguistic and cultural effects. Gosling *et al*. (2003) argue that the Big Five structure is a hierarchical model of personality traits divided in five dimensions, each one showing two poles, one positive, the other negative, and contains various adjectives. The big five traits consist of extraversion, agreeableness, neuroticism, conscientiousness and openness to experience. Researchers have found that these personality traits influence organizational outcomes such as strategic change, flexibility, and firm performance (e.g., Colbert *et al.,* 2014; Herrmann and Nadkarni, 2014; Nadkarni and Herrmann, 2010). To the best of our knowledge, only a few papers examined the connection between CEOs personality traits and internationalization (Anwar *et al.,* 2018; Franco and Prata, 2019) and not one paper examined the connection between CEOs personality traits and socioemotional wealth. This study aims to explore this relationship further and hopes to be stepping stone for future investigation.

2.3.1. *Extraversion*

The first personality trait of the Big Five is extraversion. Traits frequently associated with it include being sociable, talkative, assertive, optimistic, cheerful and robust (Mayfield *et al.,* 2008). Extraversion is compatible with pursuing excitement, novelty, and challenge, the goals of stimulation values (Roccas *et al.,* 2016). On the other hand, persons who score low on extraversion, tend to be retiring, reserved and cautious.

This specific trait has been found to be related to job performance in occupations where interactions with others are a significant portion of the job (Barrick and Mount 1991; Mount *et al.,* 1998). These jobs may include manager roles or CEOs, while research has shown that extraverted people are more likely to take on leadership roles (Judge *et al.,* 1999). Other research from Watson and Clark (1997) agrees with this. They concluded that extraverts will tend to exhibit inspirational leadership (e.g., having an optimistic view of the future). Due to their positivism, they are likely to generate confidence and enthusiasm among followers.

The internationalization of the firm can be helped by social networks or partners. Being an extravert should facilitate the development of these associates, resulting in stronger relationships with suppliers and customers (Baker, 1994; Barringer and Greening, 1998). Therefore, it is considered that CEOs who possess this trait will give less importance to the preservation of socioemotional wealth due to the cautiousness and reserved attitude of the CEO.

Although these findings were for entrepreneurs outside Europe, we expect to find similar results for entrepreneurs in the sample of this study.

Partial hypothesis #1: Extravert personality of CEOs will negatively influence socioemotional wealth (PH1a). Extravert personality of CEOs will positively influence the extent of internationalization (PH1b).

2.3.2. *Agreeableness*

Individuals with agreeableness traits are courteous, trustworthy, cooperative, compliant, have forgiving attitudes and tolerant minds (Barrick and Mount, 1991). Baron and Markman (2000) infer that entrepreneurs who are trusting and cooperative in their business relationships are more likely to develop alliances with larger companies, resulting in shareholder wealth and venture survival which can facilitate the internationalization process. Agreeableness is also quite compatible with adaptability and innovation in organizations (LePine and Van Dyne, 2001). People who score high on this trait are more likely to engage in novel actions and newness. In contrast, people who score low on agreeableness might pursue dominance and control over others, the goal of power values (Roccas *et al.,* 2016). We might compare this with a CEO who wants the total control of the family firm and is not interested in expanding abroad. In comparing this to socioemotional wealth, we think that CEOs who score low on agreeableness are restricted from foreign duties as they want to have significant control over their family firm. Thus, we expect that agreeableness personality of CEOs will negatively influence socioemotional wealth in family firms.

An agreeable CEO is more creative in problem solving approaches (Myszkowski *et al.,* 2014) which is beneficial for entry into new and unknown markets. Based on the discussion above, we could propose that agreeable CEOs could help internationalization in family firms. Thus,

Partial hypothesis #2: Agreeableness personality of CEOs will negatively influence socioemotional wealth (PH2a). Agreeableness personality of CEOs will positively influence the extent of internationalization (PH2b).

2.3.3. *Neuroticism*

Individuals high in neuroticism tend to view the world through a negative lens (Bono and Judge, 2004). They experience feelings as anxious, depressed, angry, and insecure (Roccas *et al.,* 2016). Neuroticism can lead an individual to focus on the negative aspects of a situation, rather than the positives. Barrick *et al.* (2001) found that emotional instability equals individuals who are low performers and are less willing to adopt a change or face challenges (Barrick *et al.,* 2001). Entering unknown markets successfully with the family firm is therefore a new challenge, which managers with high neuroticism will fail to do. They will not be able to tolerate these stressful situations as taking personal risks which will endanger their future employment (Ciavarella *et al.,* 2004). CEOs who score high on neuroticism would seek comfort in the current situation and would not accept change. In addition, we think that neuroticism personality of CEOs will positive influence socioemotional wealth.

On the other side, individuals low on neuroticism are prone to stress and tend to have sustained periods of depression, irritability and anxiety (Judge *et al.,* 1999). They are able to maintain a more consistent perspective on events. Chang *et al.* (2016) expects that stable emotional people are more willing to read information from reports to achieve better decision-making performance, which is necessary for internationalization.

Discussing the mindset of neuroticism personality, people who score high on this personality trait will often feel comfort in normal situations rather than searching for a challenging task (Rossberger, 2014). Thus, *Partial hypothesis #3: Neuroticism personality of CEOs will positively influence socioemotional wealth (PH3a). Neuroticism personality of CEOs will negatively influence the extent of internationalization (PH3b).*

2.3.4. *Conscientiousness*

The fourth trait has been one of the most commonly studied traits in work psychology, conscientiousness. Individuals high in conscientiousness are dependable, responsible, organized, hardworking, achievement-oriented, and task-oriented (Barrick and Mount, 1991; Van Ness and Seifert, 2016). All of them characteristics that a successful CEO should acquire. Conscientiousness CEOs are motivated to perform at a high level and to take appropriate action to improve their job performance (Devaraj *et al*., 2008). They perceive and support change in the workplace (Liu *et al*., 2012) and analyze the situations to improve firm's performance through new approaches or new experiments (Myszkowski *et al.,* 2014). From this point, we expect that conscientious CEOs will positive influence the socioemotional wealth of the family firm, as they take the actions necessary to achieve their goals (de Jong et al., 2013) and to procure their responsibility towards the other family members.

A recent study found that conscientiousness has an insignificant influence on the internationalization process of small firms (SMEs)(Anwar et al., 2018). However, we could not find evidence where conscientiousness would have a negative effect on internationalization. Until this day, the relationship between this trait and firm's strategic behaviors and change is vague and elusive. Based on these arguments, we still think conscientiousness rather have a positive influence on the following two constructs:

Partial hypothesis #4: Conscientiousness personality of CEOs will positively influence socioemotional wealth (PH4a). Conscientiousness personality of CEOs will positively influence the extent of internationalization (PH4b).

2.3.5. *Openness to experience*

Openness to experience represents individuals' tendencies to be creative, introspective, imaginative, resourceful, and insightful (John and Srivastava, 1999). Individuals high in this trait are emotionally responsive and intellectually curious (McCrae, 1996). In addition, openness has been found to be positively correlated with verbal types of intelligence (Schretlen *et al.,* 2010). Naturally, individuals who are open to new experiences place themselves in situations where they would acquire new knowledge, like a new market. Contrary to this, individuals who score low on openness to experience are more conservative and follow the traditions and norms, which is in line with the enhancement of socioemotional wealth. We expect that they are more comfortable in following the existing norms and think that CEOs who score high on openness will negatively influence the socioemotional wealth of the family firm.

Individuals having a high degree of openness to experience will often enjoy venturing beyond their comfort zone. Therefore, it is suggested that CEOs who acquire this trait do not hesitate to face a challenge and even have the ability to solve problems through critical thinking, thereby deemed to enter into an unfamiliar market (Myszkowski *et al.,* 2014). Thus, *Partial hypothesis #5: Openness to experience personality of CEOs will negatively influence socioemotional wealth (PH5a). Openness to experience personality of CEOs will positively influence the extent of internationalization(PH5b).*

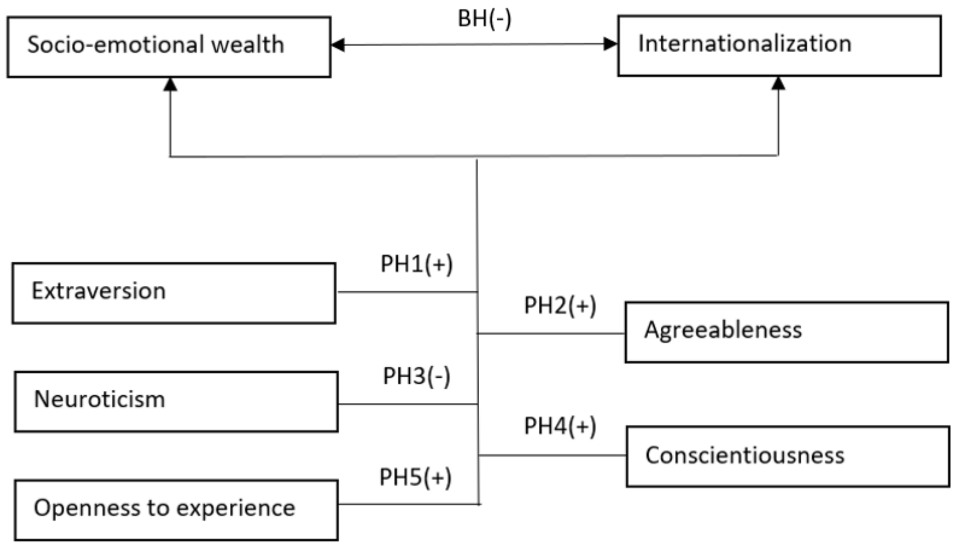

Figure 1. Conceptual framework of CEO personality, SEW and internationalization in family firms.

3. Methodology

This section explains the data collection and sample selection processes. Subsequently, it specifies the main variables, measures, and techniques of analysis to test the research model.

3.1. Data collection and sample

The research design is a quantitative approach. Structured questionnaires were prepared to collect data from CEOs from Belgian family firms. The average amount of time that it takes to complete the questionnaire was 5 minutes, which increases the response rate. We requested CEO's to fill the survey forms as they are the targeted audience in our study. We also chose for this data-collecting instrument, because a questionnaire is a tool to generate a great amount of information. The following parts were included within the questionnaire:

(1) 13 questions relating to the firm's general data;
(2) 25 questions about the CEO personality traits (Big Five Inventory Scale - John and Srivastava, 1999; Mayfield *et al.,* 2008)
(3) 4 questions about SMEs internationalization in the last 2 years (Adomako *et al.,* 2017)
(4) 9 questions about socioemotional wealth related to their preferences (SEWi scale– Debicki *et al.,* 2016)

To obtain data for this research, information was gained through several ways. First, two agreements were formalized with "Voka limburg" and "VKW limburg". Both entities, due to their certain network of family businesses, offered their help. They provided us with addresses and contacts who would definitely fill in the questionnaire. Further, through my personal connections I could find many other CEO's.

The questionnaire was completed in March. Unfortunately the entities made us wait to send out the questionnaire because of the corona crisis. Therefore, it was sent out between 9 June and 9 July 2020. The response rate was low, even when we used personal email addresses or contacted them by telephone. This could be related to the effect of corona and the need to save the losses of their firms. Of the 250 firms we contacted, only 30 CEOs managed to fill in the questionnaire which is equal to 8,33%. These answered surveys were all usable from 30 family firms in 6 industries (e.g., manufacturing, construction, trading, services, transport and nutrition).

3.2. Dependent, independent and control variables

3.2.1. Dependent variables

Socioemotional wealth and the extent of internationalization are dependent variables in this study. Since the majority of the firms of the sample are private firms and thus the possibility to obtain information about the degree of internationalization is difficult, a self-reported approach is used. Four items used by Adomako *et al.* (2017) were integrated into the questionnaire as these items cover broader scope of the internationalization process. For the other dependent variable, socioemotional wealth, the SEWi scale (Debicki *et al.,* 2016) is used. The SEWi scale consists of 9 items that are reworded from a previous list of 24 items, due to expert feedback and pre-test survey results. Internal consistency of the 4-item internationalization scale and the SEWi scale was measured by the Cronbach alpha (DeVellis, 2011). Cronbach's alpha is 0,947 for the 4-item internationalization scale and 0,852 for the SEWi scale.

3.2.2. Independent variables

The independent variables exist of the big five personality traits: extraversion, agreeableness, neuroticism, conscientiousness and openness to experience. The measurement was likewise the dependent variables through five-point Likert scales ranging from: 1 – disagree to 5 – agree. The 25 questions for the personality traits were self-composed by combining two questionnaires from previous studies (Big Five Inventory Scale - John and Srivastava, 1999; Mayfield *et al.,* 2008). The Cronbach's Alpha for the self-composed Big Five traits scale is 0,799.

3.2.3. Control variables

Other variables that could influence the dependent and independent variables are also included in the study. For example, the CEOs age or tenure could influence the extent of internationalization. Another factor that we need to take into consideration is the academic level of the CEO. Exploration on this subject confirms that the higher the CEO academic level of achievement, the higher level of success in international expansion (Ramón-Llorens *et al.,* 2017). A higher academic level gives the CEO more competence in dealing with new information and to effectively function in various circumstances, which leads to a successful internationalization process for the family business. Nonetheless, Van Praag (2003) claims that the founder's academic qualifications are not a relevant factor. When investigating internationalization decisions, it is crucial to eliminate the effects of prior international experience (Claver *et al.,* 2009). While international experience reduces the CEOs' uncertainty about foreign markets and results in increased propensity to internationalize (Erramilli, 1991; Gatignon and Anderson, 1988). Further, the variables firm age, size, industry, historic information and TMT (top management team) size could probably impact socioemotional wealth or internationalization. It is therefore important to include these control variables in the study.

Table 1 Profile of the firms

Description		Frequency	%
Size management team	Less than 3	3	10.00
	3-5 managers	12	40.00
	More than 5 managers	12	40.00
	Missing	3	10.00
Generational control	First generation, the founder	7	23.33
	2nd generation	10	33.33
	3rd generation and after	13	43.33
Size of firm	Less than 20 employees	4	13.30
	20-50 employees	7	23.30
	51-100 employees	8	26.70
	100-250 employees	5	16.70
	More than 250 employees	6	20.00
Experience in foreign org.	No experience	6	20.00
	10 years and less	6	20.00
	11-20 years	6	20.00
	21 and above years	12	40.00

Percentage or share in foreign markets	20% and less	18	60.00
	21-40%	7	23.30
	41-60%	0	0.00
	61-80%	3	10.00
	81-100%	2	6.70
Industry	Manufacturing	10	33.33
	Trading	4	13.33
	Services	7	23.33
	Construction	5	16.70
	Transport	1	3.33
	Nutrition	3	10.00

Most of the respondents in this study consists of family CEOs (50%). Of the represented firms, there are 13 firms where the third generation or more is active. The majority of the firms (60%) have a share in foreign markets less than 20% and we found 6 firms that have more than 250 employees (Table 1).

Table 2 Socio-demographic data of the CEO

Description		Frequency	%
Gender	Female	6	20.00
	Male	24	80.00
Function	Family CEO	15	50.00
	Non-family CEO	3	10.00
	Management	12	40.00
Experience (CEO)	Less than 5 year	5	29.40
	5-10 years	2	11.80
	11-20 years	3	17.60
	More than 20 years	7	41.20
Age	18-38 years	7	23.30
	39-50 years	7	23.30
	51-65 years	13	43.30
	66-80 years	3	10.00
Academic Qualification	Basic Education	1	3.30
	Secondary Education	3	10.00
	Higher Education (bachelor, master)	25	83.30
	Other	1	3.30

Of the 30 respondents, most are male (80%). The majority of CEOs have more than 20 years' experience in their domain (41,2%). The most common age of the respondents is between 51 and 65 years and as for academic qualification, 4 have basic or secondary education and 25 have higher education (Table 2).

3.3. Analyses

Data analysis was performed based on the Statistical Package for Social Sciences (SPSS, version 26) and SPSS Amos. SPSS Amos is a powerful structural equation modeling (SEM) software to perform standard multivariate analysis methods, including regression, factor analysis, correlation and analysis of variance. All of the previous techniques are used in this study, which makes SPSS Amos the perfect software for this study.

To examine the basic hypothesis, regression analysis was used to observe the correlation between socioemotional wealth and the extent of internationalization. Furthermore, the regression allows us to determine which control variables could impact the relationship between the two dependent variables. First an exploratory factor analysis and confirmatory factor analysis were produced to look at the factor loadings and the model fit. Followed by a correlation matrix and the hierarchical regression analysis.

The partial hypotheses were also validated through multiple linear regression methods, both for socioemotional wealth and the extent of internationalization. All models were found linear and no outliers were found.

4. Research results

This chapter includes the description of the results of the statistical analyses employed to test the hypotheses developed in Chapter II.

First, this research performed structural equation modeling (SEM) in AMOS 26 to acquire the measurement model and structural model. Skewness and Kurtosis were checked in SPSS to assess whether the data had a steady normality. The results beneath indicate (Table II) that the dependent and independent variables have a Skewness and Kurtosis level that lies between -2 and +2 (George and Mallery, 2010). Other measures in Table II are mean and standard deviation of the variables. Mean values of the variables range from 2.25 to 3.94 and standard deviation values of the variables range from 0.49 to 1.12.

Table 3 Descriptive statistics

Constructs	Mean	Std. Deviation	Skewness	Kurtosis
Extraversion	3.8257	0.56747	.399	-.553
Agreeableness	3.9400	0.49032	.177	-.421
Neuroticism	2.2467	0.55506	-.860	.158
Conscientiousness	3.8067	0.62474	-.346	-.356
Openness	3.7933	0.57890	-.230	-.209
Internationalization	2.6667	1.19506	.146	-.713
Socioemotional wealth	3.3917	0.65073	.001	.722

4.1. Operationalization of the SEWi scale

Before the correlation and regression analysis of the basic hypothesis, the 9-item pool (SEWi) was pretested using our small sample. We tested this by an exploratory factor analysis and confirmatory factor analysis.

Exploratory factor analysis (EFA)

EFA is used in this research to uncover the underlying structure of a relatively large set of variables. We performed EFA to check whether item clusters are formed as proposed. EFA involves 9 proposed items to determine the number of factors. The results of EFA are shown in Table III and the items of which factor loading is higher than 0.40 are maintained. A total of 2 factors came out this test, each with 2 or more items assigned to. The Kaiser-Mayer-Olkin measure of sampling adequacy had an acceptable value of .724, indicating that the sample is adequate and no remedial action should be taken.

Table 4 Results of EFA test on SEWi scale

	Factor 1	Factor 2
Family prominence		
Recognition of the family in the domestic community for generous actions of the firm		0.944
Accumulation and conservation of social capital		0.641
Maintenance of family reputation through the business	0.611	
Family continuity		
Maintaining the unity of the family	0.742	
Preservation of family dynasty in the business	0.840	
Maintaining our family values through the operation of our business	0.884	
Family enrichment		
Happiness of family members outside the business		0.524
Enhancing family harmony through operating the business	0.901	
Consideration of the needs of our family in our business decisions	0.585	

Confirmatory factor analysis (CFA)

The next step is to test the theoretically developed structure, by involving confirmatory factor analysis. In the past there are many criteria used to assess whether there is a good model fit. For the study of the socioemotional wealth importance scale, we will check some measures obtained by SPSS Amos. Including the ratio of X^2 to its degree of freedom (df), root mean square error of approximation (RMSEA), Tucker Lewis Index (TLI) and the comparative fit index (CFI).

Normally, adequate or acceptable fit of the model would be completed when: X^2/df < 2, RMSEA < .05, TLI and CFI > .95. This is the case for model 2, we became this model by deleting variable 7 who had the lowest factor score.

Table 5 Results of CFA on SEWi scale

Item	Model 1 (SEWi – 9 items)	Model 2 (SEWi – 8 items)
X^2/df	1.247	0.812
P	0.180	0.695
RMSEA	0.092	0.000
TLI	0.910	1.067
CFI	0.935	1.000

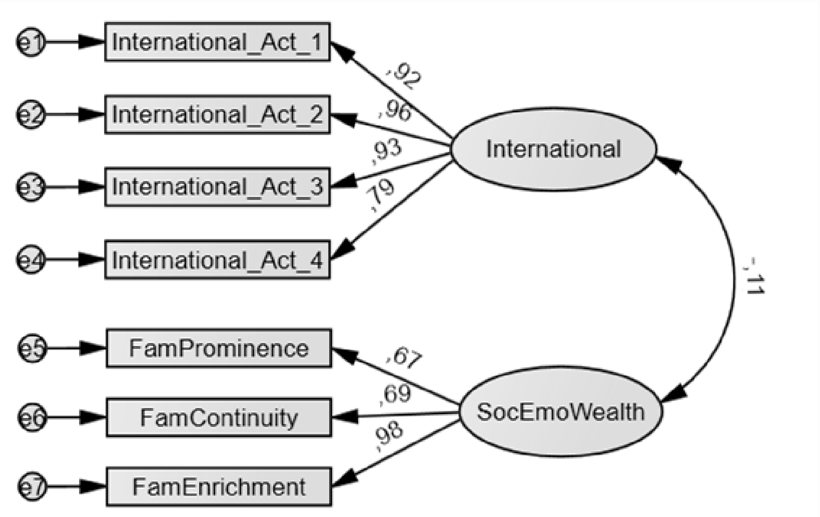

Figure 2. **Structural model (CFA) of the relationship between socioemotional wealth and internationalization**

According to these statistics, socioemotional wealth could be constructed by the 9-item SEWi scale. Both models almost successfully passed the EFA and CFA. The Cronbach's Alpha of the models is also 0.852 and 0.844 which indicates that the test or scale of use is accurate for measuring socioemotional wealth. Model fits are given in Table 5 where $X^2/df = 0.812$ indicated a good model fit (Hair *et al.,* 2010). TLI =1.067 and CFI = 1.000 indicate a good model as both values are above 0.90 and RMSEA = 0.000 is less than 0.080 (Hair *et al.,* 2010).

Common method bias

In order to test for common method bias, all variables were entered into an exploratory factor analysis. The principal component factor analysis with Promax yielded 2 distinct factors with eigenvalues greater than 1.0. The first factor explained 47.30 per cent variance out of total 61.20 per cent which can be a problem. It leans to 50 per cent and holds a great sum of the total variance, thus we can not conclude that CMB is absent in this research (Podsakoff and Organ, 1986; Hair *et al.,* 2010).

4.2. Socioemotional wealth and internationalization

Before the analysis multicollinearity is tested. Multicollinearity can be a problem in a regression model because of the effect on the accuracy of the model. Through this problem, we might lose reliability in determining the effects of individual features in our model. To deal with this problem, we used the Variance Inflation Factor (VIF). All the VIF values were under 3, suggesting there are no problems with multicollinearity (Neter *et al.,* 1983). Further analysis within this study also documented VIF values of less than 3.

For testing the relationship between socioemotional wealth and internationalization, a Bivariate Correlations test is run with all the variables according to the firm's profile. The results (Table V) show a negative correlation between socioemotional wealth and internationalization of -0.090. This statistic is in line with previous research, suggesting that enhanced socioemotional wealth can have a negative effect on internationalization (Scholes, Mustafa and Chen, 2015). They concluded that, in order to be able to internationalize beyond exporting, there may have to be a reduced reliance on trust and a greater willingness for the family to be less harmonious.

When looking at the three dimensions that the SEWi scale was extracted, the results reveal that different dimensions have different effects on internationalization. The extent of internationalization has a positive correlation with Family prominence, and a negative correlation with Family continuity and Family enrichment. Nonetheless, these correlations indicate that there is a minor relationship between the two constructs. In conclusion, we could say that hypotheses 1 could be true, but we can not accept this hypothesis because of the insignificant factor ($p>0.05$).

The control variables: International experience and share in international markets have a statistically significant high correlation with internationalization (0.480 and 0.646), as these characteristics help a family firm CEO within the internationalization process.

Table 6 Correlation matrix

Constructs	1	2	3	4	5
Internationalization	1				
Socioemotional wealth	-0.090	1			
Family Prominence	0.100	0.802**	1		
Family Continuity	-0.206	0.841**	0.462*	1	
Family Enrichment	-0.098	0.921**	0.658**	0.674**	1
Generation	-0.269	-0.007	-0.129	0.120	-0.026
Industry	-0.242	-0.163	-0.234	-0.051	-0.149
Number employees	0.155	-0.309	-0.260	-0.252	-0.283
International exp.	0.480**	-0.075	-0.011	-0.022	-0.145
Share international markets	0.646**	-0.262	-0.296	-0.313	-0.091

Notes: **Correlation is significant at the 0.01 level (2-tailed-; *correlation is significant at the 0.05 level (2-tailed)

To test the basic hypotheses in this study, an hierarchical regression analysis is used and the results of the regression analysis are presented in Table 7. Regression analysis was performed using 3 models. The extent to which the particular variables in each model explain the variance in the extent of internationalization was indicated by the change in the value of R^2.

Model 1 is to test the overall effect of socioemotional wealth on internationalization. The model predicts an insignificant ($p>0.05$) negative relationship between both dependent variables. Model 2 is to test the main effects of the three dimensions of the SEWi scale. The results show the accumulative influence of the three dimensions is not significant (R^2 = 0.100, $p > 0.1$). Model 3 is to test the influence of control variables. Together the control variables contribute to an adjusted R^2 of 0.497 and the F-statistic is significant ($p < 0.05$). The results reveal that there is accumulative influence of the variable "share in international markets" of 0.663, which is significant ($p<0.01$).

From Table 7 we can conclude that higher levels of socioemotional wealth would be related to lower degrees of internationalization in family firms (Gómez-Mejía *et al.,* 2010). In addition to our empirical findings, family firms internationalize slower, but in the long-run to a similar degree than nonfamily firms. Most CEOs are keen to first build up relationships in foreign networks and will first acquire the higher levels of knowledge that are necessary for family CEOs before entering international markets (Pukall and Calabrò, 2014).

Table 7 Hierarchical regression analysis

	Extent of internationalization		
	Model 1	Model 2	Model 3
Socioemotional wealth	-0.90	0.048	-0.420
Family prominence		0.291	0.664
Family continuity		-0.239	0.302
Family enrichment		-0.185	-0.271
Control variables			
Generation			-0.135
Industry			-0.087
Amount of employees			0.123
International experience			0.142
Share in international markets			0.663**
ΔR^2	0.008	0.091	0.553**
R^2	0.008	0.100	0.653**
Adjusted R^2	-0.027	-0.044	0.497**
F	0.229	0.691	4.181**

(1) Standardized coefficients (2) N=30, * if p<0.1, ** if p<0.05, *** if p<0.01

4.3. ***Implementing Big Five personality traits***

The purpose of this study was to determine the impact of CEOs personality traits on socioemotional wealth and the extent of internationalization. By integrating the Big Five personality traits through 25 questions about the CEO personality, we want to find out if our 5 hypotheses are correct. The scale we used is a collaboration of two previous scales (Big Five Inventory Scale - John and Srivastava, 1999; Mayfield et al., 2008).

As mentioned earlier, for the study of the partial hypotheses (second part) a Pearson correlation was preferred. We started with analyzing the correlation coefficients referring to all the variables presented in the research model including control variables. The results can be seen in Table 8. The correlation coefficients from the personality traits are very high and significant (p<0.01). Further, the matrix reveals that there is not much significance between the other variables. Openness to experience is the personality trait with highest correlation with internationalization and socioemotional wealth. Either, we cannot conclude that the correlation with internationalization is justified, because the correlation is not significant. Also extraversion has a positive correlation of 0.269 with internationalization.

We integrated the control variables that could impact the CEO of the family firm. From the beneath correlation matrix, we can see that CEO age and TMT size have a high positive correlation with internationalization. For socioemotional wealth, the highest correlated control variables are gender and CEO experience.

Table 8 Pearson correlation matrix

Constructs	1	2	3	4	5	6	7	8	9	10	11	12
Extraversion	1											
Agreeableness	0.462**	1										
Neuroticism	-0.556***	-0.283	1									
Conscientiousness	0.657***	0.542***	-0.371**	1								
Openness	0.378**	0.339*	-0.145	0.408**	1							
Internationalization	0.269	0.227	-0.124	0.202	0.319	1						
Socioemotional wealth	0.160	0.090	0.305	0.328*	0.432**	-0.90	1					
CEO Gender	-0.054	0.201	0.140	0.185	0.269	-0.035	0.247	1				
CEO experience	0.128	0.118	-0.210	0.444*	0.065	0.195	0.379	-0.203	1			
CEO age	0.206	0.212	-0.395**	0.303	0.128	0.313*	0.040	-0.123	0.704***	1		
CEO education	-0.131	-0.006	-0.149	-0.128	0.020	0.166	-0.198	0.134	0.070	0.182	1	
TMT size	0.291	0.040	-0.274	0.132	0.006	0.311	-0.187	0.000	0.228	0.097	0.354*	1

Notes: ***Correlation is significant at the 0.01 level (2-tailed); **correlation is significant at the 0.05 level (2-tailed);*correlation is significant at the 0.1 level (2-tailed)

4.3.1. Effect on socioemotional wealth

A multiple regression was used to predict socioemotional wealth from the Big Five personality traits (extraversion, agreeableness, neuroticism, conscientiousness and openness to experience). Table 9 consists of four regression models and is constructed with the forward method in SPSS. Model 1 considered all the independent variables. Model 2 included the effect of the CEOs gender and age. Further, CEO experience and education were included in model 3 and the last model consisted of all the previous variables with the TMT size. In model 1, the determination coefficient R^2 is 0.684, meaning that the independent variables (Big Five personality traits) account for 68,4% of the variance of socioemotional wealth. The strength of the relationship between the variables in the models is strong and growing stronger with the introduction of new control variables.

Table 9 Multiple linear regression models – socioemotional wealth

	Socioemotional wealth			
	Model 1	Model 2	Model 3	Model 4
Big Five personality				
Extraversion	0.154**	0.112	0.105	0.248
Agreeableness	-0.008**	-0.015	0.070	0.026
Neuroticism	0.126**	0.096	0.011	-0.066
Conscientiousness	0.522**	0.601	0.345	0.252
Openness	0.321**	0.300	0.349	0.317
Control variables				
CEO Gender		0.031	0.180	0.221
CEO age		-0.090	-0.324	-0.424
CEO experience			0.461	0.605
CEO education			-0.167	-0.148
TMT size				-0.232
ΔR^2	0.684**	0.005	0.095	0.029
R^2	0.684**	0.690	0.784	0.814
Adjusted R^2	0.540**	0.448	0.507	0.503
F	4.764**	2.855*	2.830	2.623

(2) Standardized coefficients (2) N=30, * if p<0.1, ** if p<0.05, *** if p<0.01

After an ANOVA-test on model 1, we can conclude that the Big Five personality traits are a significant predictor of socioemotional wealth (R^2 = 0.684; F=4.764; p<0.05). The CEO's level of extraversion (β = 0.154; p = 0.015<0.05), agreeableness (β = -0.008; p = 0.015<0.05), neuroticism (β = 0.126; p = 0.015<0.05), conscientiousness (β = 0.522; p = 0.015<0.05) and openness to experience (β = 0.321; p = 0.015<0.05) influence socioemotional wealth in family firms, since the p-value is statistically significant at a level of 5%.

- Neuroticism and conscientiousness present statistically significant values as they have a positive influence on socioemotional wealth. Hypotheses PH3a and PH4a are accepted.

- Extraversion and openness to experience were expected to negatively influence socioemotional wealth, through literature findings. Yet, these two personality traits have a positive influence on socioemotional wealth, so hypotheses PH1a and PH5a are rejected.
- Agreeableness rather has a small negative influence on socioemotional wealth (β = -0.008). Therefore, hypothesis PH2a is accepted.
- The introduction of the control variables in our regression model do not drastically change the influence of the independent variable (personality traits). Only the effect of conscientiousness (β = 0.252) is diminished in model 4.

Concerning the influence of the control variables on socioemotional wealth, the results suggest that:

- Gender (β = 0.221) and experience (β = 0.605) of the CEO positively influences socioemotional wealth in family firms.
- Age (β = -0.424) and education (β = -0.148) of the CEO and the size of the TMT (β = -0.232) negatively influences socioemotional wealth in family firms.

As already mentioned, socioemotional wealth is composed of three dimensions: family prominence, family continuity and family enrichment. Each of them are well discussed in this study and composed of three or two statements (SEWi scale). Therefore, it can be useful to measure the impact of the Big Five personality traits to each dimension separately, through multiple regression models (table 10).

Table 10 Multiple linear regression models – family prominence, family continuity and family enrichment

Independent variable	Socioemotional wealth		
	Family prominence	Family continuity	Family enrichment
Big Five personality			
Extraversion	0.360	0.192	-0.079
Agreeableness	-0.166	0.072	-0.111
Neuroticism	0.587**	0.478**	0.324
Conscientiousness	0.222	0.078	0.302
Openness	0.281	0.334*	0.362*
R^2	0.411**	0.318*	0.269
Adjusted R^2	0.289**	0.176*	0.116
F	3.355**	2.240*	1.765

(1) Standardized coefficients (2) N=30, * if p<0.1, ** if p<0.05, *** if p<0.01

The following multiple regression analysis (table 10) determined that there are various significant interaction effects for the integrated variables. It stands out that neuroticism has a positive influence on all dimensions. But, there are only significant effects on family prominence (β = 0.587) and family continuity (β = 0.478). The level of openness to experience personality of the CEO also influences the family continuity dimension in family firms, since it reveals statistically significant (p<0.1) and positive values. We cannot conclude that the other independent variables have an effect on socioemotional wealth, as their values are not significant.

4.3.2. Effect on internationalization

Our second dependent variable is internationalization, where we followed the same steps as taken for the other dependent variable. The VIF (Variance Inflation Factor) values for the next regression models (table 11) were under 3, and so it can be stated there are no problems in terms of multicollinearity.

A multiple regression was used to predict internationalization from the independent variables and control variables. The extent of internationalization is used in the regression models as the dependent variable (Table 11). Four models were constructed with the equal independent and control variables. Unfortunately, none of the independent or control variables had a significant effect on the dependent variable.

Table 11 Multiple linear regression models – extent of internationalization

	Extent of internationalization			
	Model 1	Model 2	Model 3	Model 4
Big Five personality				
Extraversion	0.214	0.235	0.272	0.317
Agreeableness	0.201	0.330	0.396	0.454
Neuroticism	0.064	-0.260	-0.301	-0.402
Conscientiousness	0.057	-0.272	-0.385	-0.263
Openness	0.271	0.268	0.283	0.225
Control variables				
CEO Gender		0.164	0.221	0.166
CEO age		0.372	0.218	0.349
CEO experience			0.254	0.065
CEO education			0.074	0.048
TMT size				0.306
ΔR^2	0.044	0.083	0.029	0.051
R^2	0.044	0.126	0.155	0.207
Adjusted R^2	-0.391	-0.553	-0.930	-1.116
F	0.100	0.186	0.143	0.156

(1) Standardized coefficients (2) N=30, * if p<0.1, ** if p<0.05, *** if p<0.01

The big five traits (model 1) explains only 4.4% of the internationalization variance (R^2 = 0.044; F=0.100; p>0.1). The R^2-value is smaller than 0.10, indicating that there are large differences between the observed data and the fitted values. It can be inferred that all five personality traits can have a big impact on the extent of internationalization (model 4). This impact increases when all the control variables are included in the regression analysis.

The results above suggest the following:

- Extraversion (β = 0.317), agreeableness (β = 0.454) and openness to experience (β = 0.225) personality of the CEO positively influence the extent of internationalization in family firms.

- Neuroticism (β = -0.402) and conscientiousness (β = -0.263) personality of the CEO negatively influence the extent of internationalization in family firms.

For the implementation of the control variables in this regression model (Table 11), it stands out that:

- All control variables (age, gender, experience, education and TMT size) positively influence the extent of internationalization.
- Age (β = 0.349) of the CEO and the size of the TMT (β = 0.306) have the biggest impact on the extent of internationalization.

The results are simultaneous with the literature concerning personality traits and internationalization. This study reveals that extravert CEOs are more likely to internationalize, through social networking and persistent searching for new openings, these CEOs will easily exploit new opportunities (Johnson et al., 2003; Malhotra *et al.,* 2015). Another trait that implicates a CEO who is more interested to internationalize, is agreeableness. Agreeable CEOs are creative minded (Lant *et al*., 1992) and empower their employees in creating ideas that could challenge uncommon conventions and behaviors (Anwar *et al.,* 2018). These characteristics could foster internationalization. The last personality trait with a positive influence on the extent of internationalization is openness to experience. Previous study found that openness to experience CEOs are more flexible toward strategic process and are willing to take new actions and adopt novel approaches (Nadkarni and Herrmann, 2010). In this way, this study is consistent with prior studies because the values of extraversion and openness to experience in the different models are consistent and high.

The effect of conscientiousness in model 1 (β = 0.057), is consistent with prior studies (Bogner and Barr, 2000; LePine *et al.,* 2000; Anwar *et al.,* 2018). They conclude that conscientious managers are not challengers and do not like to enter into unfamiliar territory, i.e. international markets. Same as conscientiousness, neuroticism has a negative influence on the extent of internationalization. Even this last relationship is in line with past studies (Anwar *et al.,* 2018; Barrick *et al*., 2001) as our results indicate that neurotic personality hesitates to adopt challenges and merely avoids not familiar situations. Another characteristic of neurotic personality is the aversion to start their own business (Zhao *et al.,* 2010)

Still these effects are not proven to be statistically significant ($p>0.1$), which means that no conclusions or hypotheses can be made or accepted. Therefore, all the partial hypotheses concerning internationalization are rejected.

5. Conclusion

This last chapter is to discuss the study findings, contribution, limitation and indication for further research.

The purpose of this study was to firstly investigate the relationship between socioemotional wealth and internationalization. We hypothesized and found that the importance of socioemotional wealth in family firms is negatively related to the extent of internationalization. This result supports previous findings which argue that family-related factors have a negative impact on family firm's internationalization (Fernández and Nieto, 2005; Graves and Thomas, 2006; Kontinen and Ojala, 2010). For this hypothesis, a low correlation was found between socioemotional wealth and the extent of internationalization (β = -0.090). The negative relationship was proven, but the data may not be statistically significant ($p>0.1$) to accept the basic hypothesis.

Next, the influence of the big five personality traits (extraversion, agreeableness, neuroticism, conscientiousness and openness to experience) of CEOs on socioemotional wealth and the extent of internationalization were examined. After analysis of the partial hypotheses, we came to the conclusion that the independent variables in this study affect the socioemotional wealth of the family firm. All of the five personality traits have a significant ($p<0.05$) influence on socioemotional wealth, whereas CEOs extraversion, neuroticism, conscientiousness and openness to experience have a positive influence on the socioemotional wealth of the family firm and CEOs agreeableness has a negative influence on the socioemotional wealth of the family firm. Unfortunately, until this day there are no studies that have explored the impact of CEOs personality traits on socioemotional wealth of the family firm. Further on, the influence of the CEOs personality traits on the three dimensions of the SEWi scale were also studied. From this analysis it was possible to conclude that only neuroticism and openness to experience had statistically significant values. Neuroticism has a significant ($p<0.05$) positive effect on both family prominence as family continuity, and openness to experience has a significant ($p<0.1$) positive effect on both family continuity and family enrichment. This could be related to the fact that emotional personality could foster family prominence and family continuity, as the family members would be keen to praise the family values.

Third, we studied the influence of the big five personality traits of CEOs on the other dependent variable, internationalization. Our results indicate that no conclusions can be made from the multiple regression analysis, as there are no statistically significant values found. Possible reasons for this variability could be found in the small sample size (N=30), as a small sample size affects the power of a study and the reliability of a survey's results. Also the high standard deviation – a popular measure of variability - of internationalization (table 3) warns us that the data is spread over a large range of values.

This study attempts to fill the research gap by incorporating the effect of personality traits of chief executive officers (CEOs) on socioemotional wealth and the extent of internationalization. It provides evidence of how family involvement and management can affect strategic decisions about internationalization or the preservation of socioemotional wealth within family firms. This evidence can also lead us to some benefits and recommendations for small business owners, consultants and researchers. It could also be interesting for members of the board of directors to appoint the suitable

CEO. Still, the study’s findings indicate the need for more in-depth analysis of the role that the personality traits of family firms CEO have on the socioemotional wealth of the family firm.

Limitations to this study are the following. All the family firms in this study are from Belgium, therefore it can be that our data is culturally biased. It could be of use for further research to obtain data from different countries. Focusing on a single country might reflect some peculiarities of the national economic structure and environment (Franco and Prata, 2019). The next limitation was the fact that we could not consult a database of Belgian family firms, because of the General Data Protection Regulation (GDPR). Because of this bottleneck, we had to invent smart ways to come to the final data information. Therefore, I would suggest to future researchers in this domain to first be sure of obtaining enough data while the data of this research is found by self-approaching and connections. Also, the relatively small sample size of this study could affect the power of the study. We can see this in the significance of our results, which makes it difficult to determine if certain hypotheses should be accepted or rejected. The last limitation concerning this study, is the fact that within the data obtaining process, we assume that the CEOs are capable of producing an unbiased self-reflection. This is however very ambitious and one has to take into account this bias when analyzing the results of this thesis.

In conclusion, along with the studied insights into the relationships between the three different constructs, our study serves as a new field of expertise while there is limited research concerning these relationships. We hope that this study would give attention to future research within this domain.

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