

# Firms' Contribution to Regional Economic Development: Unravelling Some Explanatory and Moderating Variables

## Abstract

Drawing on entrepreneurial orientation (EO), family business, strategic decision-making (SDM) and social capital (SC) theories, we investigated whether the family and non-family firms contribute differently to regional economic development (RED) and the moderating role of family involvement in firms. Using survey research design and data from 307 Kenyan firms, the findings of the study showed that: a) Firms' EO positively influences RED, but the effect of family firms' EO on RED is twice that of nonfamily firms; b) the relationship between strategic decision-making and RED is negative and this is more pronounced in family firms than nonfamily firms; c) Bridging social capital's (BSC) influence on firms' contributions to RED is positive, but nonfamily firms' BSC effect is twice that of family firms; d) family involvement moderates the effects of firms' contribution to RED. The overall conclusion of this study is that better understanding of firms' effect on RED can be achieved by using a range of theories in combination, as such use would help to unpack the underlying mechanisms through which firms influence RED. Finally, theoretical and practical implications are discussed.

**Keywords:** decision-making; entrepreneurial orientation; firms; family involvement; regional economic development; social capital

## **Introduction**

Do family firms contribute differently to regional economic development compared to nonfamily firms? What are the firm-level factors that influence the firm's contribution to regional economic development and the role of family involvement in this? Entrepreneurship and regional development researchers contend that firm entrepreneurial activities affect economic development, but both have failed in opening-up the 'black box' which would help explain the mechanisms through which firm (especially the family firm) contribution to regional economic development are enabled.

Scholars in the field of family firms argue that family firms contribute more to economic development compared to their counterparts (Anderson and Reeb, 2003; Astrachan and Shanker, 2003). There has been a growing number of studies that investigated the differences in family and nonfamily firms' contribution to economic development with mixed findings. On one hand, the dominance of family firms is criticised for the economic slowdown of some economies, particularly the one witnessed in the western economies during the 20<sup>th</sup> century, due to their concentrated ownership (Brown, 2002). On the other hand, some scholars have argued that family firms are special actors that have a positive impact on economic development (Basco, 2015; Stough et al., 2015). The third stream of research argues for the balanced presence of both sets of firms for sustainable economic development (e.g. Memili et al., 2015). The reported differences are attributed to firm-level differences in strategic choices between family and nonfamily firms because of family involvement in the ownership, management and governance (Carney, 2005). However, the effects of family influence on firm entrepreneurial behaviour were not examined in terms of their effects on a regional level. Previous studies have demonstrated that, the prevalence of family and nonfamily firms may have different impact on economic growth (Memili, Fang, Chrisman,

and De Massis, 2015) or the regional context may influence the prevalence of family versus non-family start-ups (e.g. Bird and Wennberg, 2013) and the embeddedness of family firms in the regional environment will alter the economic development (Basco, 2015). However, previous studies did not explore the empirical relationship between (entrepreneurial) families, family firms, and the regional economic development.

Although prior studies maintained that firms' regional contribution differs by type of ownership (family versus nonfamily), this study goes beyond the ontological view of firms and seeks to examine the factors which account for the differentiated contribution of family and nonfamily firms. This research framing also requires the examination of to what extent family involvement in firms moderates the strategic choices of firms which account for the differentiated contribution of both set of firms on regional development. We hypothesise that differences in strategic choices (entrepreneurial orientation, decision making and developing bridging social capital) of both family and nonfamily firm may help explain these firms' differentiated contribution to RED. We consider the move from the micro-level effect of firms to their aggregated effect on regional development as an important advance in entrepreneurship and family studies.

The link between entrepreneurship and economic development is well-established. Entrepreneurship allows firms to be profitable with obvious positive impacts on the firms and economy (Zahra, 1991; Covin and Slevin, 1991; Zahra and Covin, 1995; Wiklund and Shepherd, 2005; Engelen et al., 2015). In emerging/developing economies contexts, some studies established positive association between firm entrepreneurship and regional development. For instance, firms operating in a more hostile and uncertain market dynamics that typifies the emerging economies tend to be more innovative, focus on strategic renewal and engage in corporate venturing in order to be able to survive and compete globally.

Although several studies have focussed on the implication of emerging economic context on corporate entrepreneurship and organisations performance (Chaston and Scott, 2012; Yiu and Lau, 2008), studies that focus on the relationship between firm-level entrepreneurship and regional development, and the effect of family involvement in relationship between firm-level strategic choices and regional development are rare. Kenya, a developing economy in Sub-Saharan Africa, provided a critical context to study the firms' (family and nonfamily) contribution to RED drawing on family business, entrepreneurship, regional development and strategic decision-making literatures and survey research strategy.

This paper makes three contribution to family business, strategic orientation and regional development literatures. First, it links the family business literature to entrepreneurship, strategic management and regional development literatures. Second, the paper unpacks the black-box by identifying the mechanism through which firms contribute to RED and how these factors (entrepreneurial orientation, strategic decision-making and social capital) would help to explain the differentiated contribution of firms to RED. In doing so, it responds, to call for studies that use multiple theories to further a holistic understanding of firm-level (family and nonfamily) effects on regional development (e.g., Basco, 2015). Third, it extends the extant studies which found family involvement as a key differentiator between family and nonfamily firms by providing supporting empirical evidence from the developing economy context. Further, the study provides relevant implications for firm practices, and enterprising and regional development policies. The rest of the paper is organised as follows. In section two we review relevant literatures to develop conceptual framework and advance testable hypotheses. This is followed by presenting our research method in section three. Section four presents the results of hypothesis testing. Finally, we discuss our findings relevance in relation to the literatures and to draw apt contributions and conclusion of the study.

## **Literature Review and Hypotheses Development**

### **Conceptualising Entrepreneurship within firms & family firms**

Entrepreneurship is considered a driver of economic development in both developed and developing economies around the world. Previous studies have identified a positive relationship between entrepreneurship and economic development (Acs & Swerb, 2007; Audretsch, 2007) such as on gross domestic product (GDP), employment and wealth creation (Upton, Teal, & Felan, 2001). To study the influence of family involvement on the firm-level entrepreneurial behaviour and its outcomes, we conceptualise entrepreneurship in family firms as suggested by previous scholars (Nordqvist and Melin, 2010; Bettinelli et al., 2017). Particularly, we adopt” Bettinelli’s et al. (2017) definition of entrepreneurship in family firms as “the firm-level entrepreneurial attitudes and activities that occur when a family is considerably involved in an established organisation” (p.509). Although there is no consensus on the definition of family businesses, we adopt the suggested definition by Westhead and Cowling (1998) as it broadly captures the demography (ownership, management), the relationship (kinship) and identity (perception). We operationalise family firms as firms with “more than 50% of ordinary voting shares were owned by members of the largest single-family group related by blood or marriage and company is perceived by the chief executive, managing director, or chairman to be a family business” (Westhead and Cowling (1998, p40). In addition, we embrace the suggested theoretical definition that the essence of the family (or family essence) to refer to “*the vision of the dominant family coalition and the intention of that dominant coalition to sustain such vision across generation*” (Chua et al., 1999; Litz, 1995).Based on this definition, in this paper we seek to explore the effect of family

involvement at the firm-level on the relationship between firm-level entrepreneurship and its impact on economic development.

Entrepreneurship within firms is studied using a range of concepts such as entrepreneurial orientation (Miller, 1983; Lumpkin and Dess, 1996), entrepreneurial posture (Covin and Slevin, 1991), corporate entrepreneurship (CE) (Vesper, 1984; Guth and Ginsberg, 1990; Zahra, 1991) and strategic entrepreneurship (Ireland et al., 2003). Of these terms, a majority of prior studies conceptualised firm-level entrepreneurship using either entrepreneurial orientation (Miller, 1983) or 'corporate entrepreneurship' (Zahra, 1991). While entrepreneurial orientation considers whether firms are entrepreneurial or less entrepreneurial, based on their innovativeness, proactiveness and risk-taking behaviours (Miller, 1983), corporate entrepreneurship focusses on transformation through strategic renewal (Guth and Ginsberg, 1990). Most studies have embraced CE as a broader concept that is associated with the process of organisational renewal and is associated with two distinct but related dimension: corporate renewal and venturing (Guth and Ginsberg, 1990; Zahra, 1993; Zahra, Kuratko and Jennings, 1999). However, there are several definitions of corporate entrepreneurship in the literature (Corbett et al., 2013), which have led to confusion and mixed findings as different conceptualisation and analysis have been adopted. Further, CE conceptualisation in prior studies failed to differentiate between entrepreneurial behaviours, attitudes, orientations, actions and dispositions at the firm-level resulting in the fragmentation in entrepreneurship studies. With the current notable development and significance of firm-level entrepreneurship, not only it is essential to be consistent to provide an acceptable definition but also is essential to differentiate between the different conceptualisations of entrepreneurship in order to provide consistent findings and implications.

Though debates exist whether entrepreneurial orientation (EO) refers to the attitudes, behaviours or both (Anderson et al., 2015; Randerson, 2016; Bettinelli et al., 2017), this paper applies EO to mean attitudes and activities that influence entrepreneurial behaviour of the firm. Further, we take note of Miller's suggestions to extend the horizon of EO by embracing the influence of other theories applied in the family business research that have an influence on the firm behaviours. The next section develops hypotheses to examine the extent to which firm contribution to RED differ by the two types of firms based on these theories.

### **Entrepreneurial orientation and family involvement**

Generally, some of the studies on entrepreneurship in family businesses (e.g. Cruz and Nordqvist, 2012; Zellweger, Nason and Nordqvist, 2011; Zellweger, Muhlebach, and Sieger, 2010; Short, Payne, Brigham, Lumpkin, and Broberg, 2009; Nordqvist, Habbershon, and Melin, 2008; Naldi, Nordqvist, Sjoberg and Wiklund, 2007) explore entrepreneurship using entrepreneurial orientation (EO) dimensions: autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness (Lumpkin and Dess, 1996). The EO dimensions have been used to describe entrepreneurial individuals and firms engaging in strategy making characterised by an active stance in pursuing opportunities, taking risks and driving innovations to generate wealth (Lumpkin & Dess, 1996; Dess, Lumpkin & Covin, 1997). Although some family studies that operationalise firm-level entrepreneurship using EO have successfully established the relationship between dimensions of EO and firm performance (Lumpkin and Dess, 1996), others established some inconsistencies. For instance, Payne et al (2009) found that there is less use of EO language in family firms. Similarly, according to Zellweger et al. (2010), family firms score lowly on the five dimensions of EO, which raises concerns on the appropriateness of EO in explaining entrepreneurial families and family firms' behaviour. As most of these studies' level of

analysis is either the individual (owner-manager) or firm, they underestimate the influence the family has on the entrepreneurial orientation and behaviours of family firms (Dyer, 2003, 2006). Further, most of the previous studies used EO as a unidimensional concept constituting innovativeness, proactiveness and risk taking, thus competitive aggressiveness and autonomy are less studied (Rauch, Wiklund, Lumpkin and Frese, 2009; Lumpkin and Dess, 1996).

A focus on the competitive aggressiveness and autonomy reveal some interesting findings in relation to family firms. According to Lumpkin and Dess (2003) competitive aggressiveness is one of the salient dimensions of EO. Competitive aggressiveness refers to as “a firm’s propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace” (Lumpkin and Dess, 1996: 148). Rauch et al. (2009: 764) also define competitive aggressiveness as a “strong offensive posture or aggressive responses to competitive threats”. But studies suggest family firms tend to shy away from an aggressive posture as they adopt a “*competitive posture that avoids direct confrontation*”. They aim to dominate a niche market, which despite the size, ensures that they safeguard the longevity and survival of the family business. Instead of being aggressive and domineering, they prefer to be “hidden champions” (Simon 1996a; 1996b; Zellweger, et al. 2010).

Studies that explore the differences in family and nonfamily firms have established that firm-entrepreneurship differs by ownership types (Kellermanns, and Eddelston, 2006; Nordqvist, Habbershon, and Melin, 2008; Nordqvist and Melin, 2010). On one hand, some scholars have argued that family firms exude superior entrepreneurial behaviours compared to nonfamily firms (Nordqvist et al., 2008). For instance, family involvement is positively associated with innovative activities (De Massis et al., 2012), driving entrepreneurial activity (Kellermanns,



and Eddelston, 2006; Nordqvist and Melin, 2010), and applying a long-term orientations to enable a unique strategic positioning (Short et al., 2009; Zellweger, 2007). On the other hand, others argue that the presence of family ownership and management could have a negative implication on entrepreneurial behaviour (Gomez-Mejia et al., 2007; Kellermanns, Eddelston, Barnet and Pearson, 2008).

Although there seems to be no clear distinction on whether family firms exhibit a more entrepreneurial behaviour than nonfamily firms, existing studies maintain that the participation of a controlling family stakeholders in the firm strategic choices influences family firm's entrepreneurial strategy in different ways than observed in nonfamily firms. Because of the continued family involvement, family firms are more likely to seek entrepreneurial opportunities which fit with their long-term orientation, trans-generational agenda, and availability of survivability capital (Kellermanns, and Eddelston, 2006; Nordqvist and Melin, 2010). In an exploratory study, Michael-Tsabari, Labaki and Zachary (2014) found that family's needs and challenges significantly influence family firms' entrepreneurial behaviour as compared to business challenges. Therefore, the family involvement is a significant driver to firm-level entrepreneurial attitudes and activities with the implications on the family firm's contribution to regional economic development. In family firms, the EO dimensions are reflective of the context, that is, "the family background of these organisations" (Zellweger et al. 2010, 20) which is in contradiction to the arguments of Lumpkin and Dess (1996) that EO depends on the environmental and organisational factors mainly from the entrepreneurial perspective. Taken together, a) the firm's EO could contribute positively to the RED and b) the extent to which both firms contribute to the RED may differ because of family involvement in businesses. Hence, we hypothesise that:

*H1: There is a positive relationship between firm EO and firm's contribution to RED*

*H1a: Family firm's EO impact on the RED is larger than the private firms' EO.*

### **Strategic decision-making and socioemotional wealth**

Following some of the established family business scholars, we argue that family involvement in the business to be the key factor for the difference between family and nonfamily firms (Dyer 2003, 2006). This is because of: First) dominant families (or family coalitions) seek to have control over the firm (Zellweger et al. 2010; Gomez-Mejia et al., 2007, Carney 2005; Chua, Chrisman and Sharma, 1999) in order to control the strategic direction/choices of the firm (Basco, 2013, 2014) that enables them to pursue family centred goals (Kotlar and De Massis, 2013). Second, family firms are willing to accept lower financial returns and higher risks in order to retain family control over the firm, hence preserve their socioemotional wealth (Berrone, Cruz, and Gomez-Mejia 2012; Gomez-Mejia et al., 2007). Third, Further, the family participation influences the firms' strategic goals (De Massis and Kotler, 2014) because of their focus on a long-term orientation, creation of transgenerational wealth (Habbershon, 2006) and affective endowment of family members (Berrone, Cruz, and Gomez-Mejia, 2012) as opposed to the short-term orientation focused on economic performance by the nonfamily firms.

The presence of family leads to 'familiness' which represent idiosyncratic resources and capabilities that generate competitive advantages. However, familiness can lead to distinctive or constrictive behaviours (Habbershon and William, 1999) which either positively or negatively impact on the firm's wealth generation (Habbershon et al., 2003) and value creation (Chrisman et al., 2003) across family firms. Using the notion of socio-emotional

wealth (SEW), an increased attention has been paid by the family business scholars to facilitate the distinctions between family and nonfamily firms (Hasenzagl, Hatak, and Frank, 2018; Gomez-Mejia et al, 2011). Kotler and De Massis (2013) demonstrated the influence that a controlling family stakeholder had on the implementation of the family-centred economic and noneconomic goals within the firm. Further, using a sample from the Spanish businesses, Gomez Mejia et al. (2007) find that family firm's managerial decision such as risk taking is influenced by socioemotional wealth (SEW). They argue that family firms were more likely to shy away from making decisions that would put the firm at risk despite the potential of wealth or value creation (Chrisman et al., 2003; Habbershon et al., 2003). Further, Habbershon (2006) argues that when enterprising, it generates resources and capabilities that influence the firm's enterprising strategy to generate transgenerational wealth. These studies demonstrate that socioemotional wealth influences decision making in several organisational areas such as management processes, firm strategies, corporate governance, stakeholder relationship and businesses venturing (Gomez-Mejia, Cruz et al, 2011; Dawson and Mussolino, 2014). Related to SEW is the concept of 'familiness' which could be an asset or liability (dark-side) to family firms' performance depending on how family firm prioritise non-economic goals described above (Basco, 2015; Dawson and Mussolino, 2014).

We propose that both entrepreneurship and regional development researchers should consider the family influence (a condition that is missing from nonfamily firms) when examining the influence of family firm entrepreneurship on regional development. This is because both familiness and SEW, the distinctive features of the family business, influence the strategic choice of family firms and in turn may influence the extent to which family and nonfamily firms contribute to RED.

Extant literature based on the resource-based view (RBV) argues that family firms possess a competitive advantage compared to their counterparts (Habbershon and Williams, 1999; Habbershon, Williams and MacMillan, 2003). Scholars contend that the overlap of family and firm systems in the family business generates idiosyncratic resources and capabilities (referred to as “familiness”), which when used effectively result in wealth creation (Habbershon, et al., 2003) and/or value creation (Chua et al., 2003). Similarly, Basco (2015) maintains that regional familiness (aggregation of ‘familiness’ at regional level) influence regional development. However, empirical studies that link firm level familiness to regional level familiness and performance are rare.

Familiness can manifest in several ways which can lead to either distinctive or constrictive behaviour in family firms. Other than the established idiosyncratic resources and capabilities, participation on strategic decision making can have a positive or negative on organisational performance. The participation of family stakeholders (such as managers, employees, spouses) in the strategic decision-making processes creates unique context based on their control and allocation of both financial and nonfinancial resources which could lead to different outcomes. De Massis and Kortlar (2014) opined that family business owners negotiate with their nonfamily counterparts in order to retain control over the strategic direction of the firm to maintain family-centred goals. Maintaining SEW and familiness thus requires family firm managers to adopt an inclusive and participative decision-making strategy. For instance, sharing information with other family stakeholders and employees enables consensus on the goals and contribution to organisational performance. Evidence shows that the concentration of ownership in family firms is associated with greater involvement of family members in strategic decision making (Kellermanns and Eddleston, 2004). Provided that family firms improve regional familiness (Basco, 2015), are long-orientated, focus primarily in maintain SEW, they are likely to be embedded in regions and

hence contribute more to regional development. Based on the foregoing arguments we advance the below hypothesis:

*H2: Strategic decision-making will be positively associated with stronger contribution to regional development in family firms compared to nonfamily firms.*

### **Bridging social capital and family involvement**

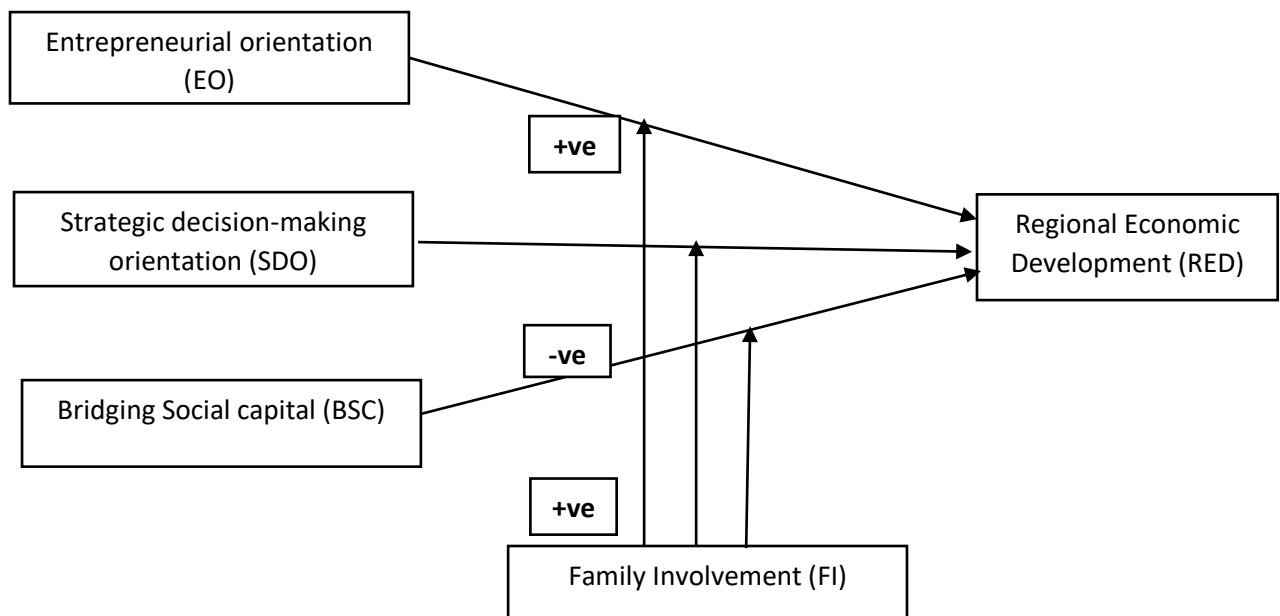
Theoretically, Basco (2015) argues that firm's ability to alter endogenous and exogenous factors and hence regional development depend on the firm's embeddedness in the regional environment structures. This argument builds on the familiness construct proposed by Habbershon et al (1999) to conceptualise a "regional familiness" which is underpinned by the influence and strategic decision-making power of a controlling family stakeholder within a top management team. Family firms' embeddedness in regional structure could be examined using the social capital lens as it shows how networks and connections build by family members would help to explain family firms' contribution to RED. In particular, this paper draws on bridging social capital dimension, to explore how family firms' interaction with external environment using networks and connections help explain the better contribution they make to RED when compared to nonfamily firms.

Social capital defined as the personal and social networks that enable managers or firms to overcome constraints created by institutional voids-can produce both positive and negative outcomes on the regional economic development. For Pearson, Carr and Shaw (2008) familiness is manifested in the structural (social interactions and networks), cognitive (shared vision and purpose, as well as unique language stories, and culture), and relational (trust, norm, obligations and identity) dimensions. Sharma (2008) extends the social capital

perspective by introducing the internal and external social capital. This paves way for the discussion on how binding and bridging social capital interplay to enable achieving competitive advantage, survivability and growth of family and nonfamily firms. For instance, Tokarczyk et al. (2007) used familiness construct to demonstrate how family firms develop a market orientation of their firms. Likewise, Cabrare-Suarez et al. (2011, 34) argue that the social capital elements of familiness give the family firm greater potential for developing a market orientation. Finally, Basco (2015) draws on the concept of familiness to build a framework that explores how family firms may contribute to regional development by being integral to regional familiness. Basco's framework thus is focused at a macro level. He posits that family firms' contribution to regional economic-social development is achieved because of family firms' influence on regional factors and processes. Familiness is likely to influence the depth and breadth of personal and social capital with top managers in other firms, community leaders, government officials and agents. Such relationships enable firms not only to overcome the institutional voids firm experience in developing economies but also to positively influence organisational performance, thus regional economic development. Therefore, we posit that

*H3: The outcome of firm bridging capital on regional economic development will be stronger for family firms than nonfamily firms.*

The conceptual framework in Figure 1 summarises the hypotheses and expected relationships between explanatory variables (FEO, SDM, and BSC) and dependent variables (RED) and the moderating variable (family involvement).



## Research Methods

The data for this study were collected using a web-based survey research questionnaire distributed to members of the top management team (founders and co-founders, chief executive officers, managing directors and heads of functional departments) of manufacturing and service firms operating in Kenya. In September 2016, a research clearance was sought and granted from the National Commission for Science, Technology and Innovation (NACOSTI). The study applied a rigorous ethical process to gain trust and to solicit participation of respondents. These ethical considerations included: a) participants' consent form that explain the research purpose, research objectives and their role in answering the questionnaire survey; b) promise in keeping the anonymity and confidentiality of information received and that such information would be used for study purpose only; c) they could have access to summary study results if they provide either the founder/co-founder/CEOs or their contact information.

Using accessible data bases of firms, the study organised a sampling frame of the study. Of these, 1544 firms were selected using systematic sampling technique. Only 410 (26.55%) firms responded of which 307 returned fully completed responses and hence used in this study. Hence, the effective response rate was 20% and this compares favourably with other similar studies. The sample adequacy measure proposed by Hair et al., (2006) and Ho (2006) were also met.

The questionnaire used for data collection tapped responses on respondents' demographic profiles, firm and ownership characteristics, firm's entrepreneurial orientation, decision making strategy, and bridging social capital, and contribution to regional economic development. We undertook the following measures to address the validity and reliability of data gathered. First, we made sure that only senior managers answered the survey questionnaire. Second, the survey questionnaire was worded and designed to collect data at firm-level rather than an individual. To this end, a pilot was done to pre-test the questionnaire and fine-tune questions to ensure both validity and reliability (Boshoff, 2009). Third, validity and reliability tests, including convergent, discriminant and common method biased (CMB) statistical tests were performed to ensure that the data was suitable for data analysis using structural equation modelling (SEM). For instance, Harman's (1967) one-factor test was used to check whether common method bias was a problem from the data set obtained for this study.

### **Profile of firms**

In terms of respondent's position in the firm, the highest number of respondents held the position of the founder/co-founder or the CEO (n=73) followed by marketing/sales (n=64), managing directors (n=31), finance managers (n=29), operations/general (n=26), human resource (n=11), production (n=16), projects/programme (n=10), procurement (n=11) and



others (n=15). The sample consisted of 222 males and 85 females. The age of the respondents ranged from 18-64, with only 2 participants above 65 years. Most of the participants had an undergraduate (168) degree followed by postgraduate (93), college diplomas (34), secondary (6), primary (5) and one did not attend school.

The respondents were asked how many years their firm has been operating at the time of the survey. The responses showed that 73 firms were in business for less than five years, 48 firms were 5-9 years, 38 were 10-14, 33 were 15-19, 20 were 20-24, and 95 were in business for over 25 years. Based on the number of employees, the sample consisted 89 large, 102 medium, 69 small and 47 micro firms. In terms of firms' geographical distribution of sales, 22 firms operated locally, 95 at national level, 101 in regional markets, 33 in Africa and the rest 54 in globally. The firms were operating in diverse sectors with the largest sector being manufacturing (77).

In this study, firms were categorised using two conditions: ownership type and high/low family involvement. In terms of ownership, 124 firms were family firms and 183 were nonfamily firms. Using parameters such as the belonging of founder/co-founder/ CEOs belongs to the owning family, the number of family managers in TMT, generations involved, and possibility of interfamily succession (Chua et al., 1999) resulted in classifying 92 firms as having high family involvement and the rest 125 with low family involvement.

## **Variables and Measures**

### *Regional Economic Development*

The RED measures were obtained from both the theoretical and empirical literature that has tested them on a macro level rather than a firm-level, using other methods of analysis such as

econometrics (Thurik, Wennekers and Ulaner, 2002; Adusei, 2016; Audretsch and Thurik, 2002). The participating managers were asked to assess the extent to which their businesses contributed to RED (ranging 1- 'very marginal' to 7 –'very significant) using an 8 items. After testing both the convergent and discriminant validity of the items, six (contribution to GDP, employment within a firm, job creation opportunities, % of income allocation for communities' benefits, and regional transformation agenda) were selected as they were loaded highly within the latent variable and averaged (0.795) with the Cronbach value of 0.897.

### *Firm Entrepreneurial Orientation*

The EO scale used in this study consisted of fifteen items adopted from Casillas and Moreno (2010). A seven-point Likert scale questionnaire was used contrary to the previously adopted semantic scale used by some studies (e.g. Wiklund and Shephard, 2005). As argued by Van Wyk and Adonisi (2012, p.19) "psychometric instruments are not always portable between cultures" and might have affect construct validity hence may lead to erroneous results and conclusion (Boshoff, 2009). We found this observation helpful (relevant) when piloting our study as the semantic style of EO did not work as we expected. The scale report indicated an acceptable construct validity using EFA (all variables average was above 0.7) and a reliability (Cronbach's  $\alpha$  value of 0.890).

### *Strategic Decision-Making*

Strategic decision-making process in the firm was measured using five items derived from the theoretical and empirical arguments (Kellermanns and Eddleston, 2007).The senior managers were asked to assess the extent to which top management in their business had

placed emphasis on ensuring that the decision-making processes were participative, interactive, allowed open exchange of ideas on strategic issues and involved other employees of the firm regularly. The responses were tapped using a seven-point scale ranging from 1- “strongly disagree” to 7- “strongly agree”. The items have high communalities and loaded highly within a single latent variable with the average of over 0.7 and the Cronbach’s  $\alpha$  value of 0.883.

### *Bridging Social Capital*

The social capital was measured using three variables adopted from (Acquaah, 2007). These variables capture the development of interpersonal and social networking relationships by top management teams of firms with (1) community leaders, (2) political leaders, and (3) government agencies and officials. The participating managers were asked to assess the extent to which the top managers in their firm have developed and used personal and social networking relationships in the last three 3years using seven-point scale, ranging from 1- “very little” to 7- “very extensive” involvement. The constructs convergent validity is achieved as the communalities are above 0.5 and the average was 0.7. The internal reliability and consistency demonstrate the appropriateness of the measured construct (Cronbach’s value 0.772).

### *Family Involvement*

Family participation in the business was measured using five variables that are related to the involvement of the owning family members in the top management positions. Particularly, the five variables used in the study referred to whether in the business (1) the respondent is a member of the owner’s family; (2) the owner’s family was represented by at least two or more members in the TMT; (3)the percentage of ownership held by the owner’s family; (4) the generations of the owner’s family involved in managing the business; and (5) whether the

in the case of the CEO retiring, the position will be filled by either a family member or nonfamily member. Similar to other studies (e.g. Casillas and Moreno, 2010), these variables were transformed and added to unidimensional variable of family involvement. Other studies used similar measurements to assess level of family involvement in the management teams and strategic decision-making process (Juszkiewicz et al., 2005; Uhlner, 2005; Casillas and Moreno, 2010). The family involvement was captured in dummy variable: 1 representing high family involvement and 0 for low family involvement.

### *Control Variables*

We used firm size, age, ownership, market outreach, and sector as control variables in the analysis as suggested by previous theoretical and empirical studies.

### **Data Analysis**

Structural equation modelling (SEM) analysis techniques were used to test the relationship between entrepreneurial orientation, strategic decision making, social capital (bridging), and regional economic development. Table 1 summarises the main variables considered in this study that were extracted using the EFA. The variables had high correlations among themselves and had an average latent factor above 0.7, hence construct validity was met as recommended. Collinearity and multicollinearity of the constructs were tested, and it was determined that they were acceptable for the estimation of SEM (Hair et al., 2006; Ho, 2006). Further, to check about common method bias, we followed the suggestion of Harman's single factor testing to test the measurement model. After assessing both the standardised regression weights and standardised covariance weights we determined that there was some evidence of common method variance in the regional development latent factor. To remedy this, we

carried some iterations, and decided to create a data set that included CMB adjusted variables where composites were computed which were averages of the constructs (Hair et al., 2006).

**Table 1: Factor Analysis**

<b>Variables</b>	<b>Items</b>	<b>Item Loadings</b>	<b>Cronbach</b>	<b>Composite reliability</b>	<b>AVE</b>	<b>Goodness of fit</b>
<b>Firm Entrepreneurial Orientation (FEO)</b>	EO-IProc	0.846				$\chi^2 = 3269.134$
	EO-ROri	0.783				df=2170
	EO-RExp	0.775				$\chi^2$ : df= 1.5
	EO-REnv	0.764				RMSEA= .024
	EO-Ppos	0.71				IFI = .943
	EO-Pint	0.66	0.89	0.875	0.502	TLI= .934
	EO-CAId	0.648				CFI=.942
	EO-CAPost	0.629				
<b>Participative Decision-Making</b>	DecMake	0.924				
	DecEmp	0.888				
	DecInte	0.788	0.883	0.887	0.613	
	DecExc	0.783				

	DecOpen	0.726			
<b>Bridging Social Capital (BSC))</b>	SoCom	0.861			
	SoPol	0.812	0.772	1.396	4.105
	SoGov	0.605			
<b>Regional Economic development (RED)</b>	RED-GDP	0.85			
	RED-Eco	0.846			
	RED-Empran	0.841	0.897	2.311	6.797
	RED-Com	0.785			
	RED-Emp	0.747			
	RED-Opp	0.664			

The proposed hypotheses were tested using the structural model provided in figure 1. SEM was preferred for this study as it allows for testing the multiple relations using covariance structure analysis compared to other multivariate analysis methods that use variance techniques (Hair et al., 2006). Table 2 summarises the correlation matrix showing the assessment of discriminant validity using average variance estimates (AVE) for the structural model. After a few iterations the AVE values (shown in Bold) were all greater than the correlation between the factors indicating evidence that construct validity was achieved, thus there was no validity concerns. First, we took consideration of the multivariate relationships.

Second, we incorporated the different control variables into the analysis. Third, the interaction effects of the three independent variables were taken into consideration. Finally, we included the moderation effects of family involvement, with one group having a high family involvement (n=96) while the other group low family involvement (n=211). The model fit was considered appropriate based on the RMSEA (0.04), CFI (0.97) TLI (0.963) (Scholderer et al., 2004; Hair et al., 2006; Blunch, 2013).

**Table 2: The correlation matrix for assessing discriminant validity test using average variance experience**

<b>Construct</b>	<b>Construct reliability (CR)</b>	<b>AVE</b>	<b>MSV</b>	<b>FEO</b>	<b>RED</b>	<b>BSC</b>	<b>PDM</b>
Entrepreneurial Orientation	0.875	0.502	0.352	<b>0.709</b>			
RED	0.895	0.589	0.361	0.455	<b>0.767</b>		
Bridging Social Capital	0.781	0.545	0.251	0.269	0.501	<b>0.738</b>	
Strategic Decision Making	0.887	0.613	0.323	0.568	0.244	0.246	<b>0.783</b>

**Results – hypotheses testing**

Table 3 below provides a summary of hypotheses testing. The individual structural model was tested for the direct effects of the three independent variables (FEO, SDM and BSC) on regional development (RED). From the predicted relationships the findings show that: a) firm entrepreneurial orientation (FEO) has a direct positive and significant effect on RED ( $\beta=.198$ ,  $p=.001$ ). In addition, family firms' EO makes a higher significant contribution to RED ( $\beta$  0.278,  $p=0.002$ ) compared to nonfamily firms EO with a positive but nonsignificant effect to RED ( $\beta =0.109$ ,  $p=0.287$ ). Hence both H1 and H1a are confirmed.

Testing of the relationship between firms' strategic decision-making and its effect on RED showed statistically significant but negative effect ( $\beta= -.182$ ,  $p=.000$ ). This negative effect is, however, higher and significant ( $\beta =-.236$ ,  $p$  0.000) in family firms when compared to nonfamily firms which is negative and insignificant ( $\beta =-.107$ ,  $p$  0.201). Hence, hypothesis H2 was not accepted.

The direct effect analysis on the relationship between firms bridging social capital and its effects on the RED, showed positive and significant effects ( $\beta =0.277$ ,  $p < 0.01$ ). However, in contrary to our prediction, nonfamily firms BSC effect on RED is much stronger ( $\beta =0.291$ ,  $p < 0.01$ ) than the family firms' BSC effect ( $\beta =0.138$ ,  $p < 0.10$ ). Hence, H3 is rejected.

Finally, even though, we did not a priori predict the effect of control variables such as firm age, size, sector and geographical operations on the RED, we found that firm size to have positive and significant effect on RED in both set of firms. In contrast, as firm age increases, its impact on RED is negative and significant ( $\beta =-0.081$ ,  $p < 0.10$ ) and this is especially true for family firms ( $\beta =-0.082$ ,  $p < 0.10$ ). With an increase in firm age, nonfamily firms' impact also negative but not significant ( $\beta =-0.047$ ,  $p$  0.248).

Table 3: Hypotheses testing results



Regression Path	Direct Effects	Family Firms	Nonfamily firms	Z Values
EO>RED	<b>0.198(0.001)</b>	<b>0.278(0.002)</b>	0.109(0.287)	-1.25
SDM>RED	<b>-0.182(***)</b>	<b>-0.236(***)</b>	-0.107(0.201)	1.181
BSC>RED	<b>0.277(***)</b>	0.138(0.097)	<b>0.291(***)</b>	1.463
FirmSize>RED	<b>0.236(***)</b>	0.242(0.013)	<b>0.357(***)</b>	0.913
FirmAge>RED	-0.081(0.094)	-0.082(0.094)	-0.047(0.248)	0.549

**Notes: \*\*\* p-value < 0.01; \*\* p-value < 0.05; \* p-value < 0.10**

Combined, these findings indicate that firm's entrepreneurial orientation, strategic decision-making and development of bridging social capital are mechanism through which both set of firms contribute to RED.

### **Discussion and conclusion**

This study sought to examines whether family firms contribute differently to regional economic development compared to nonfamily firms and the conditions that may explain such differences. Drawing on entrepreneurship, family business, resource-based view and social capital literatures the study identified three possible explanatory variables – entrepreneurial orientation, strategic decision-making and bridging social capital along with family involvement as a moderator in explaining the differences between the two sets of firms.

The findings of this study are interesting as they unpacked the black-box by showing not only the mechanism through which firms (family and nonfamily) contribute to regional development but also the differentiated effect of these variables in both set of firms. We think

the study unravels three important insights into the firms' effect on regional development which are relevant and timely to further knowledge and inform business practice and policy. First, family firms' EO effect on RED is greater and significant compared to nonfamily firms. Second, strategic decision-making effect in family firms tend to be more negatively and significantly related to RED though it was less negative and insignificant in nonfamily firms. Third, the effect of BSC in nonfamily firms is stronger and significant, though on aggregate firms' BSC has positive and significant impact on the RED. These important insights are discussed below.

Although entrepreneurship is recognised as engine of economic growth/development, the findings of extant studies on the contribution of family and nonfamily firms to economic development are inconclusive. Scholars such as Memili et al., (2015) argue for a balanced presence of both set of firms for achieving optimum economic growth. Others have observed that the behavioural differences between family and nonfamily firms could lead to differentiated contribution, but these variables were not examined in holistic manner. This study adds to such studies by deploying the firm EO, strategic decision-making and bridging social capital in an integrated manner to unravel the mechanisms through which firm could make contribution to RED. Particularly, our study demonstrates the importance of conceptualising EO as a composite construct to extend our understanding of how firms influence regional economic development. This perspective is not intended to investigate or quantify the proportion that firms contribute to economic development as a result of firm level entrepreneurship. Further, we examined the role that strategic decision orientation and social capital (bridging) plays on firms' EO contribution to regional economic development depending on the level of family involvement. The empirical findings support our overall conceptual logic (as conceptualised in Figure 1) that firm-level entrepreneurial orientation is a composite construct that should embrace other related theories in order to understand its

theoretical implication on the organisational theory and strategy (George and Marino, 2011; Miller, 2011). This is demonstrated through the relationship between firm entrepreneurial behaviour and regional economic development correlate differently in firms depending on the degree of family involvement in the firm. This is an interesting finding for the field of entrepreneurship as it is an important addition in advancing understandings how firm level entrepreneurial orientation differs between family firms and nonfamily firms (Zellweger et al., 2010). Further, it is also important based on the recent calls for research that looks beyond the ontological differences between family firms and nonfamily firms and their influence on economic development (Basco 2015; Stough et al., 2015).

The finding that family firm EO effect on RED is stronger than the nonfamily firm is of interest to enterprising practice and policy to design the way in which entrepreneurial orientation could enhanced in firms. This an increased intensity of EO by family firms could be explained in reference to their long-term orientation and innovative behaviour but also contradict the finding of some previous studies which found low level entrepreneurship in family firms. The results support H1 which posits that the involvement of family members in the management and strategy of the firm has a positive influence on the firm entrepreneurship behaviour. These might be explained in reference to distinctive organisational culture (Zahra at al., 2004), concentration of ownership (Anderson and Reeb, 2003), and an ability to influence decisions. The presence of the family ownership allows family firms to focus on the long-term orientation and use or resources for innovation (Zahra et al, 2004). Further, Anderson and Reeb (2003) found evidence that family firms performed better than nonfamily firms, especially when family members serve as CEOs a condition that indicates a high involvement of the family into the business (Shanker and Astrachan, 1996).

It is an intriguing however why firm's strategic decision-making effect on RED is not only negative but more pronounced and significant in family firms. Three factors provide probable explanations. First, the interactive, participative, decision making process manifest in family firms may result in the family firms being more reactive, adaptive, slow in response to rapid market, competitive and policy changes, in turn affecting firm performance and its effect at regional level. Second, the effects of family control and high family involvement are likely to lead decisions that discourage risk-taking and competitive aggressiveness behaviours in order to achieve socioemotional wealth (SEW) (Berrone et al., 2012; Gomez-Mejia et al., 2007; Chrisman et al., 2010; Kotlar and De Massis, 2013). Third, the high family involvement in business leads to the family having a more family orientation, which focusses on transgenerational value creation rather short-term wealth/value (Habbershon, 2006; Zellweger et al., 2011). Martin and Lumpkin (2003) provided supporting evidence which showed that an increased focussed on family orientation will overtake the entrepreneurial orientation as the firm is passed on through generations.

Further, our study emphasises the importance of treating entrepreneurial orientation as a composite construct which is integrated and related to other theories, particularly RBV and Social capital in understanding the firm's influence to regional economic development. The ability of the firm TMT to form personal and social networks with external stakeholders positively influenced the firms' contribution to regional economic development, however, the relationship was more intense in nonfamily firms than family firms. Consistent with other prior studies (e.g. Peng and Luo, 2000; Acquaah, 2007) the development of bridging social capital positively influences the firms' performance, hence regional economic development (Grannovetter, 1985). Although the extant literature on family businesses argues that familiness is manifested in the process (relationship and networks), resources (Irava and Moores, 2010) and structural (social interactions and networks) (Pearson et al., 2008), it

appears that when it comes to bridging social capital (Alder and Kwon, 2002; Sharma, 2008) there is reduced influence compared to nonfamily firms. Therefore, it is possible to argue that family firms tend to develop more of bonding social capital than the bridging one. Subsequently, this reduces their intensity of firms' entrepreneurial orientation on regional economic development.

### **Conclusion and Limitations**

The overall conclusion of this study is that better understanding of firms' effect on RED can be achieved by using a range of theories in combination as such use would help to unpack the underlying mechanisms through which the firms influence RED. Moreover, family involvement and the focus on socio-emotional wealth significantly shape the family firms' strategic decision-making and entrepreneurial behaviour, which in turn, lead to a differentiated contribution to RED when compared to non-family firms.

As all other studies, this study has also its limitations. First, firm contribution at regional level is more complex for measuring and operationalisation. Future studies may consider use of longitudinal panel data to examine the true firms' effect on RED. Second, we used EO, SDM and BSC as explanatory variables but there might be other factors which could mediate the relationship between these independent variables and a dependent variable. Third, it would be of interest to expand the model by incorporating other moderating or mediating contextual factors such as those relating to geographical, cognitive, social, organisational or institutional proximity (Basco, 2015). Fourth, as suggested earlier, RED is studied from two approaches, economic and developmental perspectives and it would be of interest to delve into the regional processes such as information exchanges, learning processes, and competition dynamics (Basco, 2015).

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