

Actual and intended growth in family firms and non-family owned firms: Are they different?

ERC Research Paper 60

June 2017

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The Enterprise Research Centre is an independent research centre which focusses on SME growth and productivity. ERC is a partnership between Warwick Business School, Aston Business School, Imperial College Business School, Strathclyde Business School, Birmingham Business School and Queen's University School of Management. The Centre is funded by the Economic and Social Research Council (ESRC); Department for Business, Energy & Industrial Strategy (BEIS); Innovate UK and the British Business Bank. The support of the funders is acknowledged. The views expressed in this report are those of the authors and do not necessarily represent those of the funders.

ABSTRACT

Drawing on the literature that deals with motivation theory and family theory, we argue that the small business owner-manager's beliefs and attitudes towards growth embrace family oriented values that affect the growth strategy of family-owned firms. We investigate the growth behaviours of family-owned small firms that are managed by the family member(s) and by a professional manager, as well as non-family businesses in the UK. We find a negative combined effect of family ownership and management involvement on small business growth in workforce size and turnover. Specifically, we find that family firms that involve externally sourced managers in the day to day control of the business are no different from non-family owned firms, in terms of reporting actual growth in employment size and turnover during the 12 months before as well as expecting growth in workforce size and turnover in the 12 months after. We also observe a significant difference in anticipating sales growth between family-controlled and non-family-controlled firms. However, this difference is not explained by management regime.

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EXECUTIVE SUMMARY

This article uses the first wave of *Longitudinal Small Business Survey* (SBS, 2015), and investigates the role of owner-management structure in affecting the growth behaviours of small- and medium-sized enterprises (SMEs) in the UK. Specifically, the study compares the growth propensities among family firms managed by the family member(s) only, family firms managed by externally sourced manager(s), and non-family-owned small firms. Based on the change-in-amount perspective (Penrose, 1951), growth is measured using three different indicators, including growth in employment size, growth in turnover, and growth in sales. The methods of analysis included probit regression and ordered probit regression estimations. Results of data analysis shows significant relationships between family effects and small business growth. Specifically, family-owned firms managed by owner-members are more cautious in pursuit of business growth and expansions. The key findings are reported below:

1. Small family businesses run by owner-managers only are less likely than non-family-owned businesses to experience growth in turnover and employment size during the 12 months before, but also will be less likely to expect growth in turnover and employment size in the 12 months after.
2. Small family businesses with externally sourced managers in the daily control of business are no different from non-family-owned firms in terms of reporting actual and expected growth in turnover and workforce size.
3. Small family-owned firms are significantly less likely than non-family-owned organizations to anticipate sales growth in the three years after. However, this difference is not explained by management regime.
4. Small business owner-managers' beliefs and attitudes towards growth embrace family values and have a significant effect on the growth propensity of family-owned SMEs.

We therefore propose the following recommendations:

1. Current government policy towards the development and growth of SMEs are mainly directed towards enhancing financial capability. In risk-averse oriented family businesses where prudent growth behaviour is more prevalent, easing the access to finance may not necessarily promote business expansion.

2. The overly conservative growth behaviour of small family business might be attributed to under-diversification of owner-family's wealth. In this case, using venture capital or utilising specific insurance/buffer mechanisms may significantly reduce the exposure to systematic business risk and encourage owner-managers to pursue entrepreneurial activities sensibly, expand their business regime and contribute to economic growth.

1. INTRODUCTION

There is a long but limited tradition of literature that contributes to the understanding of the relationship between family ownership and small business growth (Daily and Dollinger, 1992; Daily and Thompson, 1994; Maherault, 2000; Gallo et al., 2004; Rutherford et al. 2006; Oswald et al., 2009; Hamelin, 2013). Generally, the relationship is characterised as being starkly polarised in the family business literature (Nordqvist et al., 2008). On one hand, the stewardship perspective supports a positive effect of family ownership on growth as the owners and managers of family businesses act as the stewards to ensure the continuity or longevity of the enterprise and its mission (Miller et al., 2008). On the other hand, the stagnation perspective portrays a more negative picture of family businesses, arguing that its difficulties in growth and survival are attributed to resource restrictions (Chandler, 1990; Grassby, 2000), conservative strategies (Poza et al., 1997, Allio, 2004), and family conflicts such as succession difficulties (Jehn, 1997; Schulze et al., 2003). The scarce empirical evidence, however, has been inconclusive with negative (Hamelin, 2013; Gallo et al., 2004; Daily and Thompson, 1994) as well as insignificant relationships being reported (Oswald et al., 2009; Rutherford et al., 2006). This line of research has exclusively investigated the ownership dimension of family effect on small firm growth, disregarding the allocation of decision rights or governance structure.

A group of authors suggests that growth of a small business is at least partially determined by the entrepreneur or manager's motivations and intentions for expanding the business (Davidsson, 1991; Baum et al., 2001; Davidsson et al., 2002; Wiklund et al., 2003; Delmar and Wiklund, 2008). This argument is supported by the psychological construct of motivation theory which states that growth is an important outcome of entrepreneurial efforts that is closely linked to the individual's motivation (Davidsson et al., 2002). Specifically, small business managers' beliefs in relation to the consequence of growth shape their overall growth attitudes and motivations towards expanding the business (Wiklund et al., 2003). The proposition has important growth implications for small family businesses, as one distinguishing characteristic of such firms is that the owners and managers are often one and the same, i.e. members of the founder and/or owner family maintain a hands-on presence in the daily management of the company. According to Bowen's family system theory (Bowen, 1981; Kerr and

Bowen, 1988) and contextual family theory (Fowers and Wenger, 1997), the role of family as an emotional system has a strong influence on a given individual's development and values (Stein, 1985; Bernal and Ysern, 1986). Lumpkin et al. (2008) develop five family oriented values including tradition, stability, loyalty, trust, and interdependency which affect how the individual family members perceive, relate to, and 'value' family when making strategic decisions in relation to family businesses. Following this logic, one may argue that owner-managers of small family firms have different attitudes towards growth from professional managers. Given the prominence of family orientation on togetherness over individuation (Lumpkin et al., 2008), we argue that small family owner-managers may deliberately refrain from exploiting opportunities to grow businesses and have conservative growth expectation compared with externally sourced professional managers. Yet, a large majority of existing studies use family ownership as a primary proxy variable to investigate the family effect on growth, however, the family effect of owner-management concentration on small firm growth remains invisible.

Hence, the purpose of the present study is to close the gap by exploring the combined effect of family ownership and involvement on small firm growth. We group SMEs into three categories: 1) non-family owned firms that presumably are run by professional manager(s), 2) family firms run by owner-managers only, and 3) family firms with professional managers involved in the daily control of the operation. Three indicators (sales, employment and turnover) are gathered from the first wave of UK Longitudinal Small Business Survey (SBS 2015), to proxy the three incidence of growth.

The remainder of the paper proceeds as follows. Section two reviews the primary theoretical framework (i.e. motivation theory and family theory literature) and empirical evidence. Section three describes the data and defines the variables. Section four presents the results. Section five discusses the findings and concludes the paper. The final section provides some implications for future research and managerial practice.

2. LITERATURE REVIEW AND HYPOTHESES DERIVATION

Motivation theories provide the theoretical underpinnings of why people behave in a certain way. One of the principal concepts in motivation theories is attitudes. An attitude pertains to the valuation of an object or a concept, i.e. the degree to which an object or concept is judged as good or bad (Wiklund et al., 2003). One of the dominant theoretical frameworks in the belief-attitude-behaviour literature is the expectancy-value theory of attitude (Ajzen, 1991), which is developed to predict specific attitudes in specific context (Ajzen and Fishbein, 1980). According to this theory, an individual's attitude towards a behaviour is a function of the salient beliefs that he or she holds about eliciting the behaviour. Beliefs associate an object with certain attributes (Wiklund et al., 2003). In the case of behavioural beliefs, the object is the behaviour of interest and the associated attributes are the expected results of that behaviour, which can be liked or disliked by the person. Ajzen and Fishbein (1980) stress that the beliefs must correspond to the specific behaviour in relation to action, target, context and time in order to permit understanding and prediction of the attitude. In our study, the specific behaviour that is of interest is growing a business. In order to predict a small business manager's behavioural intention of expanding the business to a certain extent, it is of significant importance to evaluate the beliefs of the possible consequences of undertaking such behaviour.

As indicated by the expectancy-value theory of attitudes, a plausible reason why a small business manager has a great propensity to limit growth is that he/she anticipates some negative consequences of business growth. Alternatively, a small firm manager is more likely to pursue growth strategy if the growth is expected to bring about positive consequences. Wiklund et al. (2003) suggest that the growth-related attitudes and behaviours exhibited by small business managers are shaped by the assessment of the relative importance of economic (e.g. financial outcomes) and non-economic motives (e.g. employee well-beings). Based on a comprehensive classical work on small business management and motivation (Smith, 1967; Bolton, 1971; Boswell, 1972; Stanworth and Curran, 1973; Deeks, 1976), Wiklund and his colleagues propose eight core areas that can affect small business managers' salient beliefs about growth (p. 251), including owner-manager's workload, work tasks, employee well-being, personal

income, control, independence, survival ability and product/service quality. Among them, we argue that expected consequences of growth in relation to control, independence and survival ability are consistent with family-oriented values (i.e. tradition, stability, loyalty, trust and interdependency) as proposed by Lumpkin et al., (2008). Particularly, the survival ability is closely linked to the concept of stability, which emphasizes the sense of permanence and security that family businesses can provide. It is self-evident that the owner-managers' need for control and independence relates to loyalty and interdependency, because these two aspects of family orientation refer to the degree to which family members are committed to each other and support one another emotionally (e.g. share jobs, triumphs and sorrows) and psychically (e.g. sharing resource and money). Together, they provide a useful conceptual framework to understand the difference in growth-related attitudes between owner-managers and professional managers in small family firms. In the following section, we consider how possible consequences of business expansion may be shaped by the small family owner-managers' beliefs with regards to family orientation and attitudes towards growth.

Among all firm-level resource, capital structure may have the most pronounced impact on SMEs pursuing further development and expansion (Rutherford et al., 2006). In comparison with externally sourced managers, owner-managers of family businesses are more likely to eschew external financing and rely on internal financing in order to avoid equity diversification and maintain control (Chandler, 1990; Grassby, 2000). For many family business owners, maintaining business ownership, independence and family control are top business priorities (Kotkin, 1984; Neubauer and Lank, 1998). In addition to this, owner-managers' needs for autonomy is also related to family altruism (i.e. loyalty and interdependence), that firm-level resources are shared or demanded by other family owners, members and managers. For instance, parents behave altruistically towards their offspring, in terms of using company resources to offer investments and/or to provide employment opportunities to their children who possess little or inadequate amounts of knowledge, skills and abilities (Schulze et al., 2003; Lubatkin, 2007). Owner-managers have a strong desire for control, and it is their quest to be more inclusive in their management styles and decision-making processes. Taking additional loans and sharing equity may be precisely

the prerequisite for achieving growth, however, this may be at the expense of losing independence and control in relation to lenders (Wiklund et al., 2003). As a result, owner-managers are restricted to taking decisions in their own interest and to allocating the company resource freely (Molly, 2010). These negative consequences of growth undermine owner-managers' beliefs and feelings of autonomy, and thus lead to a negative attitude towards growth.

The firm's survival ability associated with increased size is another expected consequence of growth that affects a small business manager's attitude towards expansion. Small family firm owners are said to be deeply concerned about the survival, stability and long-term prospects of the business, as a significant amount of family fortune, reputation and future are at stake (Miller et al., 2008). Ashwin et al. (2015) argue that under certain conditions owner-managers of family firms seek the long term welfare of the business over their private interests such as financial income and other disposable economic benefits. Notwithstanding, growth is associated with expected additional earnings, the high risk of failure (Morris, 1998) and the destruction of family wealth (Sharma et al., 1997) involved in business expansion and may discourage family firm owner-manager's attitudes and intention towards growth ambitions and opportunities (Poza et al., 1997; Allio, 2004). On the other hand, managers hired outside the members of owner families are more prone to opportunistic behaviours and are more risk-tolerant, because they have stronger financial incentives to achieve personal interest and welfare, including increased financial incomes, managerial reputation and other material benefits.

The possibility of increased conflicts between majority and minority shareholders in relation to business expansion is another determinant of owner-managers' attitudes towards growth. Given that divergent groups of shareholders may pursue competing goals in pursuit of growth, family-owned firms provide fertile grounds for relationship conflicts (Miller and Rice, 1988; Boles, 1996). For instance, conflicts may emerge as a consequence of discrepancies between financial (e.g. increasing sales) and non-financial goals (e.g. secure family employment), or disparities between family (e.g. maintain family control over the business) and business objectives (e.g. global market or international expansion). In other words, growth may lead to conflicts among the members of family shareholders, which can jeopardise the survival of the firm and hamper the

optimal functioning of the family business (Kellermanns and Eddleston, 2007; 2004; Jehn, 1997). These expected negative concerns of expansion in relation to survivability and permanence of family businesses may lead to a more negative owner-manager's attitude towards growth.

Empirical studies that have examined the effects of owner-management structure on small family business growth have been absent. Two studies did test the combined effect of family ownership and involvement on growth and performance, but not in the context of small firms only. In a study of 409 US manufacturing firms, Zahra (2003) explores the family effects on firm growth as operationalised by international expansion, and finds that there is a positive effect of individual and combined effect of family ownership and involvement on internationalisation of a firm's operation. Barth et al. (2005) examined the effect of owner-management on the productivity in 438 Norwegian establishments each with more than 10 employees, and found that family businesses were less productive than non-family-owned businesses. This productivity is explained by the management regime: family firms run by professional managers are equally productive as non-family-owned business, whereas those managed by owner-managers are significantly less productive.

Based on the existing literature, a family business (or family ownership) behaves in a "less economically efficient" way than a non-family business, however, we hypothesize:

H1: The family business managed by professional manager(s) is more inclined to behave like non-family firms, as the effect of family involvement is weakened.

3. METHODOLOGY

3.1 Data

The Small Business Survey (SBS) 2015 is a nationally represented employer dataset in the UK, which is based on a stratified sample of SMEs that employ up to 249 people, inclusive of those with no employees. The survey is the latest in series of annual and biennial Small Business Surveys (SBS) dating back to

2003,¹ and the first wave of the Longitudinal Small Business Surveys (LSBS) which were commissioned by Department for Business, Innovation & Skills (BIS). It is a large-scale telephone survey of 15,502 UK small business owners and managers, comprising of 13,620 from IDBR (n=72,388; response rate =18.8%) and 1,882 from Dun and Bradstreet (n=21,481; response rate=8.8%)². The survey provides useful insights into a range of issues in UK small organizations, including business performance, growth and success, business network and innovation, financial issues and the use of business support, and recruitment and training aspects.

3.2 Dependent variable

The phenomenon of growth can either denote merely an increase in amount, such as growth in output, sales or export, or imply an increase in size or improvement in quality that results from a process of development (Penrose, 1951). From the change-in-amount perspective, growth can be operationalised using a range of different indicators, such as sales, employment, asset, turnover and profit (Delmar, 1997; Weinzimmer et al., 1998; Wiklund, 1998). Given the availability of information in SBS2015 dataset, we include and analyse three growth indicators (i.e. turnover, employment and sales) separately. This approach has been found to be viable both theoretically and empirically. For example, using transaction cost theory, Chandler et al. (2005) explain when growth in sales and employment do and do not move closely together.

Growth in employment size: Managerial respondents were asked to indicate whether the number of employees on the payroll increased in the 12 months or is expected to increase in the 12 months after, score 1 if 'more than currently'; otherwise 0.

Growth in turnover: Managerial respondents were asked to indicate the extent to which the turnover of business grew in the 12 months before or is expected to

¹ Due to changes to questions asked and the sampling methodology, data collected from Small Business Survey 2015 cannot always be compared with previous SBSs.

² Firms extracted from IDBR are VAT registered or had employees; whereas Dun and Bradstreet contains sampled firms with unregistered zero employees non-VAT paying businesses that are not included in the IDBR.

grow in the 12 months after, measured on a seven-point scale (0, 'no or shrinkage'; 1, '0-4%'; 2, '5-9%'; 3, '10-14%'; 4, '15-19%'; 5, '20-29%'; or 6, '30%+').

Growth in sales: Measured by the percentage the SME aim to grow sales in 3 years' time, measured on a seven-point scale (0, 'no'; 1, '1-9%'; 2, '10-24%'; 3, '25-49%'; 4, '50-74%'; 5, '75-99%'; or 6, '100% or more').

3.3. Owner management structure

The key explanatory variable – owner-management structure is created using two items: Q1) 'Is your business a family owned business, that is one which is majority owned by members of the same family?'; and Q2) 'Does your business have any directors in day to day control of your business who are not owners or partners?'. We were able to group SMEs into three categories: 1) non-family owned business if the response to Q1 is '0'; 2) family business run by owner-managers only if Q1 score '1' and Q2 score '0'; and 3) family business with professional managers involved in daily operation if Q1 and Q2 both score '1'.

3.3. Control variables

In line with prior research (e.g. Olson et al., 2003; Barth et al., 2005; Sciascia et al., 2012), we control for firm size, age, types of industry, legal status, geographical locations, presence of working owners/partners, number of sites in operation, and firm capability. Firm size is measured by the number of employees currently on the payroll. Firm age is constructed by the number of years the firm had been trading. Industry type is coded into 14 different categories based on UK Standard Industrial Classification (SIC) 2007. Legal status is summarized into four types: sole proprietorship, company, partnership and other. Geographical location is derived based on the region or state (i.e. England, Scotland, Wales and Northern Ireland) where the business is located. The working owners/partners work in the business is measured by whether they are present or not. The number of sites is constructed by the log of the number of sites in operation including the head office in the UK. Firm capability is constructed by a composite score of capabilities for people management, developing and implementing a business plan and strategy, developing and introducing new

products or services, accessing external finance and operation management (Cronbach's $\alpha = 0.74$).

4. RESULTS

4.1 Analytical techniques

To examine empirically the relationship between family ownership and management involvement on growth in SMEs, we estimate probit (i.e. growth in employment size) and ordered probit regressions (i.e. growth in turnover and sales), while controlling for a range of firm characteristics. Though both coefficient and marginal effects of probit and ordered probit estimations are reported, our analysis is primarily drawn on estimation results of marginal effects because both modelling are concerned with how changes in the predictors translate into the probability of observing a particular (ordinal) outcome (Wooldridge, 2009).

4.2 The effect of family ownership on growth

Before examining the combined effect of family ownership and involvement on small business growth, we test the individual effect of family ownership on SMEs growth on employment size, turnover and sales. The probit estimation results for the influence of the family ownership in relation to growth in workforce size are presented in Table 1. The results suggest that the probability that a family business reported an actual growth in employment size during the 12 months before is significantly lower than the non-family-controlled business and so is the expected growth in workforce size for the 12 months after. The ordered probit estimation outcomes for growth in turnover and sales are shown in Table 2. We observe that the family firms not only are less likely than the non-family-owned businesses to experience an increase in turnover during the year before, but also less likely to expect an increase in turnover in the year after and sales for the three years after. In line with prior studies (Dailly and Thompson, 1994; Gallo et al., 2004; Hamelin, 2013), our findings support a statistically significant and negative effect of family ownership on small business growth.

4.3 The effect of family ownership and management involvement on growth

The probit estimation results for growth in employment size are presented in Table 3. Owner-management structure has a negative effect on the growth of SMEs. Specifically, family firms with owner-managers involved in the day to day control of the business is 5.1 percentage points less likely to experience an increase in workforce size the 12 months before than non-family-owned managers (Panel A), and 3 percentage points less likely to expect increased employment size in the 12 months after (Panel B). However, there is no significant difference in growth behaviours between family firms which appoints externally sourced professional managers and non-family-owned businesses. The results provide strong support for our hypothesis H1.

The ordered probit estimation outcomes for growth in turnover and sales are shown in Table 4. The combined effect of family ownership and management involvement on actual and expected growth in turnover is negative. More specifically, the possibility that a family firm ran by owner-managers only experienced growth in turnover during the year before is significantly lower than non-family-owned firms, regardless the percentage of growth rate (Panel A). The actual growth patterns of family businesses with professional managers involved in daily control of the businesses do not differ significantly from that of non-family-owned firms. These results also apply to expected growth in turnover (Panel B). The results presented in both panels provide further support of hypothesis H1. Panel C shows the coefficient and marginal effect results in relation to expected growth in sales in the three years after. Overall, the results suggest that family firms are less likely to expect a boost in sales than non-family-controlled firms, regardless of the management structure. In other words, there is a significant difference in anticipating sales growth between family and non-family-owned organisations, however, the difference is not explained by management regime.

5. DISCUSSION

Research on the impact of family effect on small firm performance has emerged since the early 1990s. However, studies that investigate the influence of family effect on small business growth remain relatively scarce (Hamelin, 2013), with a

large majority of research devoted to the effect of family ownership and overlooking the family effect of management structure in business expansion. Drawing on expectancy-value theory of attitudes (Ajzen, 1991) and family orientation developed on a basis of family therapy literature (e.g. Bowen, 1981; Kerr and Bowen, 1988; Fowers and Wenger, 1997), we argue that small business growth difference between family-owned and non-family-owned businesses can be explained by the management regime. Hence, the study sought to generate empirical evidence of the family effect on small business growth. The family effect is constructed by combining family ownership and management involvement, while, growth is captured by three growth indicators, i.e. employment size, growth and sales. We compare actual and expected growth behaviour among non-family-controlled firms, family firms managed by owner-managers only, and family businesses that involved professional managers.

Overall, our findings suggest a negative effect of family effect on the actual and expected growth in employment size and turnover. That is, family firms that have professional managers in management teams are no different from non-family-owned firms, in terms of reporting growth in workforce size and turnover for the year before and anticipating growth in the 12 months after. These findings collaborate with evidence of the recent study by Chang and Shim (2015) who further went on to state that the growth strategies are even more active, once the professional managers are graduates of elite universities, because they did not have to contend with any legacies of the family even though they keep their high ownership controls. One potential explanation of these results, albeit tentative, is that small organizations with same individual(s) from owner family of the business dominating both ownership and management of the firm and who are highly family-oriented have a strong desire of passing the business to succeeding generations (James, 1999) and allowing key business decisions to be shaped by the family (Chua et al., 1999).

In many small family firms, owner-managers' beliefs and attitudes towards growth are deeply affected and shaped by family oriented values. Particularly, the assurances of tradition, stability, permanence, safety and security of the family wealth and legacy, as well as the sense of commitment and indebtedness embodied in family altruism are often prioritized over other economic goals. Whereas, for professional managers in family firms, they have no significant

personal financial stake in and socio-emotional attachment to the family business. Instead, they are more likely to be motivated to actively explore growth opportunities to maximize the efficiency of the operation, because their reputation, personal interests and benefits are closely linked to performance and success of the business. Rather interestingly, Feldman et al. (2013) argue that family owned businesses will venture into a growth opportunity only if it is greater than the value; it creates for non-family owned businesses as they have other operational motives rather than building up share values. For instance, as Wennberg et al. (2011) points out that if the intention of the family owners is to pass on to the next generation, then they would be very risk adverse prioritizing long term stability and survival over growth. These non-economic goals embrace the family orientations (i.e. stability, interdependence) proposed by Lumpkin et al. (2008), which is consistent with one core area (i.e. survival ability) that affect small business managers' salient beliefs about growth (Wiklund et al., 2013).

Nicholson (2008) points out that the negative flip side of family firms in relation to the issues of principal-principal agency can lead to conservative growth strategies with respect to preservations of their undiversified portfolios. As noted by Desender et al. (2013), "Family control represents a distinctive class of investors in that they hold undiversified portfolios..." (p14). López-Delgado and Diéguez-Soto (2015) suggest that any type of owner concentrated business will always outperform one that is owner dispersed. Specifically, the lone family owned business will outperform one that is owned by more than one family owner. Essentially, with dispersed ownership there are agency costs which undermine the actual and intended growth, whereas with any owner concentrated business there is stewardship where the agents become role holders.

On the other hand, we find that family firms are significantly less likely than non-family-controlled firms to plan an increase in sales over the three years after. One plausible explanation of this result is that the degree of the family involvement in family firms that appoint professional managers in our data is too large. Sciascia et al. (2012) suggest that growth aspirations may be actually maximized when the degree of family involvement in running the business is at best moderate. Given a substantial proportion of family wealth and fortune is invested in family businesses, small family managers are increasingly cautious about exploring opportunities to expand business. As a result, conservative growth policies are

more likely to be preferred over the longer horizon.

The study makes two important contributions to small business growth literature. Firstly, it underlines a negative, combined effect of family ownership and involvement in the adoption of prudent growth strategy in SMEs. The results lend empirical support to a potential interaction of applying and collaborating motivation theory and family theory literature in understanding small business managers' beliefs of and attitudes towards growth. It seems that the growth of SMEs is driven by motivation rather than value maximisation (Cassar, 2007; Delmar and Wilklund, 2008). The motivation behind the conservative growth behaviour may be tentatively illustrated by various dimensions and characteristics of family orientation (Lumpkin et al., 2008), which play a critical role in developing and influencing small family owner-managers' values of expanding business. Second, the mode of family ownership itself may not sufficiently capture family effect and offer a thorough understanding of growth behaviour in SMEs. The study therefore, provides empirical support to the line of research that the growth pattern of the SME is also associated with the allocation of decision rights or management regime (Hart, 2001). Using the combined effect of family ownership plus involvement in management as a proxy variable is a more desirable alternative to enhance the explanatory power of family effect on the growth of SMEs.

6. IMPLICATION

The study has important implications for future research. Firstly, we measure the family ownership based on one single item that was available in the Small Business Survey (2015) dataset. That is, whether the majority of the firms belong to members of the same family. Future research may benefit from using a multidimensional concept to the concept of family ownership, such as the percentage of family stake in the business. Secondly, our main focus of the analysis is the family effect on the growth of SMEs, and the arguments are drawn upon small business managers' beliefs and attitudes towards growth and the role of family orientation in shaping owner-managers' beliefs. Future research is encouraged to examine the significance of these explanatory factors behind overly cautious growth behaviour pursued by SMEs, particularly financing capacity and the characteristics of decision-makers (e.g. beliefs and attitudes of

owner managers towards growth). In the near future, as new survey waves will be available, panel frameworks can be employed not only to make inferences but also, distinguish between survivors and non-survivors. Last but not least, our conclusions are drawn in the UK small business sector, however, family businesses vary considerably in risk taking that can affect growth behaviour. Differences can embed in various contextual factors, such as national culture (Perkins, 2000), historical experience (Masurel and Smit, 2000) and environmental dynamics within family firms (Simon, 1996). Future studies may investigate whether and/or examine how these macro- and micro-environmental factors can motivate or hamper small business growth behaviour.

The study also sheds light on managerial practice to family firms and on policies that improve the growth of SMEs. Though hiring individuals outside family members at management level may lead to agency problems associated with monitoring and enforcement, the results demonstrate that the involvement of professional managers in family firms leads to a significant difference in explaining growth behaviour in SMEs. Hence, the competence of managers and decision-makers also matters considerably in evaluating the efficient operation of the business and maximising economic growth in SMEs. As Barth et al. (2005: 125) suggested, “After all, professional managers are selected from a larger pool of talent”. Current governmental policy towards the development and growth of SMEs mainly focuses on enhancing their financing capability (Hamelin, 2013). The negative effect of ownership structure on SMEs suggests that such policy initiatives should also account for growth behaviour. In risk adverse oriented family businesses where conservative growth behaviour is prevalent, easing the access to finance may not necessarily promote business expansion. In addition to this, one possible explanation for the family owned companies’ prudent growth strategy is the under-diversification of owner family’s wealth (Naldi et al., 2007). In this case, using venture capital or employing specific insurance/buffer mechanism may reduce the exposure to systematic business risk and encourage owner-managers to undertake entrepreneurial activities sensibly and expand their business regime.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Ajzen, I. and Fishbein, M. (1980). *Understanding Attitudes and Predicting Behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Allio, K.M. (2004). Family businesses: Their virtues, vices, and strategic path. *Strategy and Leadership*, 32(4): 24-34.
- Ashwin, A., Rishikesha, S., Krishna, T. and Rejie, G. (2015). Family firms in India: family involvement, innovation and agency and stewardship behaviors. *Asia Pacific Journal of Management*, 32: 869–900.
- Barth, E., Gulbrandsen, T. and Schone, P. (2005). Family ownership and productivity: the role of owner-management. *Journal of Corporate Finance*, 11, 107-127.
- Baum, J.R., Locke, E.A. and Smith, K.G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44(2), 292-303.
- Bernal, G. and Ysern, E. (1986). Family therapy and ideology. *Journal of Marital and Family Therapy*, 12, 129-135.
- Boles, J. (1996). Influences of work-family conflict on job satisfaction, life satisfaction and quitting intentions among business owners: The case of family-operated businesses. *Family Business Review*, 9, 61-74.
- Bolton, J.E. (1971). *Small Firms*. Report of the Committee of Inquiry on Small Firms. London: Her Majesty's Stationary Office.
- Boswell, J. (1972). *The Rise and Decline of Small Firms*. London: Allen and Unwin.
- Bowen, M. (1981). *Family Therapy in Clinical Practice*. Northvale, NJ: Jason Aronson.
- Cassar, G. (2007). Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth performances and achieved growth. *Entrepreneurships and Regional Development*, 19, 89-107
- Chandler, A.D. Jr. (1990). *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Harvard University Press.
- Chandler, G.N., McKelvie, A. and Davidsson, P. (2005). New venture growth: A transaction cost perspective. Paper presented at the Academy of Management Conference, Honolulu.
- Chang, S. and Shim, J. (2015). When does transitioning from family to

professional management improve firm performance? *Strategic Management Journal*, 9(36), 1297-1316.

Chua, J.H., Chrisman, J.J. and Sharma, P. (1999). Defining the family business by behaviour. *Entrepreneurship Theory and Practice*, 23(4): 19-39.

Daily, C. and Thompson, S. (1994). Ownership structure, strategic posture, and firm growth: An empirical examination. *Family Business Review*, 7, 237-249.

Daily, C.M. and Dollinger, M.J. (1992). An empirical examination of ownership structure in family and professionally managed firms. *Family Business Review*, 5(2): 117-136.

Davidsson, P. (1991). Continued entrepreneurship: ability, need and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405-429.

Davidsson, P., Delmar, F. and Wiklund, J. (2002). Entrepreneurship as growth: growth as entrepreneurship. In Hitt, M.A., Ireland, R.D., Camp, S.M. and Sexton, D.L. (eds). *Strategic Entrepreneurship: Creating a New Mindset* (pp.328-342). Oxford, UK: Blackwell.

Deeks, J. (1976). *The Small Firm Owner-manager: Entrepreneurial Behaviour and Management Practice*. New York: Praeger.

Delmar, F. (1997). Measuring growth: Methodological considerations and empirical results. In Donckels, R. and Miettinen, A. (Eds), *Entrepreneurship and SME Research: On Its Way to the Next Millennium* (pp.190-216). Aldershot, UK and Brookfield, VA: Ashgate.

Delmar, F. and Wiklund, J. (2008). The effect of small business manager's growth motivation on firm growth: A longitudinal study. *Entrepreneurship Theory and Practice*, 32(3): 437-457.

Desender, K. A. Aguilera, R.V. Cladera, R.C and García-Cestona M. A. (2013). When Does Ownership Matter? Board Characteristics and Behavior. *Strategic Management Journal*, 34(7), 823-842.

Feldman, E.R., Gilson, S.C. and Willalonga, B. (2013). Corporate divestitures and family control. Working paper.

Flowers, B.J. and Wenger, A. (1997). Are trustworthiness and fairness enough? Contextual family therapy and the good family. *Journal of Marital and Family Therapy*, 23, 153-169.

Gallo, M., Tapies, J. and Cappuyns, K. (2004). Comparison of family and nonfamily business: Financial logic and personal preferences. *Family Business Review*, 14, 303-318.

- Grassby, R. (2000). *Kinship and Capitalism*. Cambridge, MA: Cambridge University Press.
- Hamelin, A. (2013). Influence of family ownership on small business growth. Evidence from French SMEs. *Small Business Economics*, 41, 563-579.
- Hart, O. (2001). Financial contracting. *Journal of Economic Literature*, 39(4): 1079-1100.
- James, H. (1999). Owners as manager, extended horizons and the family firm. *International Journal of Economics Business*, 6, 41-56.
- Jehn, K.A. (1997). A quantitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly*, 42(3): 530-558.
- Kellermanns, F.W. and Eddleston, K.A. (2004). Feuding families: when conflict does a family firm good. *Entrepreneurship Theory and Practice*, 28(3): 209-228.
- Kellermanns, F.W. and Eddleston, K.A. (2007). A family perspective on when conflict benefits family firm performance. *Journal of Business Research*, 60(10): 1048-1057.
- Kerr, M.E. and Bowen, M. (1988). *Family Evaluation*. New York: W. W. Norton.
- Kotkin, J. (1984). Why smart companies are saying no to venture capital. *INC*, August, 65-75.
- López-Delgado, P. and Diéguez-Soto, J. (2015). Lone founders, types of private family businesses and firm performance. *Journal of Family Business Strategy*, 6(2), 73-85.
- Lubatkin, M.H. (2007). One more time: What is a realistic theory of corporate governance? *Journal of Organizational Behaviour*, 28, 56-67.
- Lumpkin, G.T., Martin, W. and Vaughn, M. (2008). Family orientation: Individual-level influences on family firm outcomes. *Family Business Review*, 21, 127-138.
- Maherault, L. (2000). The influence of going public on investment policy: An empirical study of French family-owned businesses. *Family Business Review*, 13, 71-79.
- Masurel, E. and Smit, H. (2000). Planning behaviour of small firms in central Vietnam. *Journal of Small Business Management*, 38(2): 95-102.
- Miller, D., Le Breton-Millier, I. and Scholnick, B. (2008). Stewardship vs stagnation: An empirical comparison of small family and non-family businesses. *Journal of Management Studies*, 45(1): 51-78.
- Miller, D., Minichilli, A. and Corbetta, G. (2015). Is family leadership always beneficial? *Strategic Management Journal*, 5 (34): 553-571.

- Miller, E.J. and Rice, A.K. (1988). The family business in contemporary society. *Family Business Review*, 1, 193-210.
- Molly, V., Laveren, E. and Deloof, M. (2010). Family Business Succession and Its Impact on Financial Structure and Performance. *Family Business Review*, 23.2 (2010): 131–147.
- Morris, M.H. (1998). *Entrepreneurial Intensity*. Westport, CT: Quorum Books.
- Naldi, L., Nordqvist, M., Sjöberg, K. and Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review*, 20(1): 33-47.
- Neubauer, F. and Lank, A. (1998). *The Family Business: Its Governance for Sustainability*. London: McMillan Press.
- Nicholson, N., 2008a. Evolutionary psychology and family business: a new synthesis for theory, research and practice. *Family Business Review* 21, 103–118.
- Nordqvist, N., Habbershon, T.G. and Melin, L. (2008). Transgenerational entrepreneurship: exploring EO in family firms. In Landstrom, H., Crijns, H. and Laveren, E. (Eds). *Entrepreneurship, Sustainable Growth and Performance: Frontiers in European Entrepreneurship Research* (pp.93-116). Cheltenham: Edward Elgar.
- Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K. Z. and Duncan, K. A. (2003). Impact of family and business on family business sustainability. *Journal of Business Venturing*, 18(5), 639–666.
- Oswald, S.L., Muse, L.A. and Rutherford, M.W. (2009). The influence of large stake family control on performance: Is it agency or entrenchment? *Journal of Small Business Management*, 47(1): 116-135.
- Penrose, E.T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley.
- Perkins, D. (2000). Law, family ties, and the East Asian way of business. In Harison, L. and Huntington, S (Eds), *Culture Matters, How Values Shape Human Progress*. New York, NY: Basic Books.
- Poza, E.J., Alfred, T. and Maheshwari, A. (1997). Stakeholder perceptions of culture and management practices in family and family firms. *Family Business Review*, 10(2): 135-155.
- Rutherford, M.W., Muse, L. and Oswald, S. (2006). A new perspective on the developmental model for family business. *Family Business Review*, 19(4): 317-

333.

Schulze, W.S., Lubatkin, M.H. and Din, R.N. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, 18, 473-490.

Sciascia, S., Mazzola, P., Astrachan, J.H. and Pieper, T.M. (2012). The role of family ownership in international entrepreneurship: Exploring nonlinear effects. *Small Business Economics*, 38, 15-31.

Sharma, P., Chrisman, J.J. and Chua, J.H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review*, 10(1): 1-35.

Simon, H. (1996). *Hidden Champions: Lessons from 500 of the World's Best Unknown Companies*. Boston, MA: Harvard Business School Press.

Smith, N.R. (1967). *The Entrepreneur and His Firm: The Relationship between Type of Man and Type of Company*. East Lansing, MI: Michigan State University.

Stanworth, M.J. and Curran, J. (1973). *Management Motivation in the Smaller Business*. Epping, Essex: Gower Press.

Stein, H.F. (1985). Values and family therapy. In Schwartzman, J. (eds). *Families and Other Systems: The Macrosystemic Context of Family Therapy* (pp.201-243). New York: Guilford.

Weinzimmer, L.G., Nystrom, P.C. and Freeman, S.J. (1998). Measuring organizational growth: Issues, consequences and guidelines. *Journal of Management*, 24(2), 235-262.

Wennberg, K., Wiklund, J., Hellerstedt, K. and Nordqvist, M. (2011). Implications of Intra-Family and External Ownership Transfer of Family Firms: Short-Term and Long-Term Performance Differences. *Strategic Entrepreneurship Journal*, 4(5): 352-372.

Wiklund, J. (1998). *Small Firm Growth and Performance: Entrepreneurship and Beyond*. Doctoral disseratation. Jonkoping: Jonkoping International Business School.

Wiklund, J., Davdisson, P. and Delmar, F. (2003). What do they think and feel about growth? An expectancy-value approach to small business managers' attitudes towards growth. *Entrepreneurship Theory and Practice*, Spring, 247-270.

Wooldridge, J.M. (2009). *Introduction to Econometrics*. Mason, OH: South-Western Cengage Learning.

Zahra, S.Z. (2003). International expansion of US manufacturing family

businesses: The effect of ownership and involvement. *Journal of Business Venturing*, 18(4): 495-512.

Table 1: Probit regression estimation results for growth in employment size: family ownership

Dependent variables	Panel A: Actual growth in employment size		Panel B: Expected growth in employment size	
	Coef.	ME	Coef.	ME
Ownership structure in SMEs				
Family-owned business	-0.123***	-0.043**	-0.076*	-0.029*
	0.040	0.014	0.040	0.015
Controls	yes		yes	
Log likelihood	-3,975.04		-4,172.32	
Chi ² (degrees of freedom)	577.97(27)		398.13(27)	
Obs.	6,605		6,345	

Notes: ME=marginal effects.

Values below coefficients are standard errors.

Estimation results for controlled variables are available upon request.

***p<0.001; **p<0.05; *p<0.10.

Table 2: Ordered probit estimation results for growth in turnover and sales: family ownership

Panel A: Actual growth in turnover									
	Coef.	ME							
		T _{A0}	T _{A1}	T _{A2}	T _{A3}	T _{A4}	T _{A5}		
Ownership structure in SMEs	-0.071*	0.027*	-0.001**	-0.002**	-0.005*	-0.003*	-0.007*	-0.009*	
Family-owned business	0.037	0.014	0.0003	0.001	0.002	0.001	0.003	0.005	
Controls	yes								
Log likelihood	-8,250.88								
Chi ² (degrees of freedom)	484.52(27)								
Obs.	6,011								
Panel B: Expected growth in turnover									
	Coef.	ME							
		T _{E0}	T _{E1}	T _{E2}	T _{E3}	T _{E4}	T _{E5}		
Ownership structure in SMEs	-0.065*	0.025*	-	-0.011*	-0.005*	-0.002*	-0.007*	-0.009*	
Family-owned business	0.035	0.013		0.001	0.003	0.001	0.004	0.005	
Controls	yes								
Log likelihood	-9,365.19								
Chi ² (degrees of freedom)	589.22(27)								
Obs.	6,169								
Panel C: Expected growth in sales									
	Coef.	ME							
		S _{E0}	S _{E1}	S _{E2}	S _{E3}	S _{E4}	S _{E5}		
Ownership structure in SMEs	-0.107**	0.029**	0.007***	-	-0.012**	-0.009**	-0.001**	-0.013**	
Family-owned business	0.033	0.009	0.002		0.004	0.003	0.0004	0.004	
Controls	yes								
Log likelihood	-10,009.48								
Chi ² (degrees of freedom)	834.38(27)								
Obs.	6,288								

Notes: ME=Marginal effects

Growth rates: T_{A0}= none or shrinkage; T_{A1} =1-4%; T_{A2}=5-9%; T_{A3}=10-14%; T_{A4}=15-19%; T_{A5}=20-29%; T_{A6}=30%+.

Growth rates: T_{E0}= none; T_{E1} =1-4%; T_{E2}=5-9%; T_{E3}=10-14%; T_{E4}=15-19%; T_{E5}=20-29%; T_{E6}=30%+.

Growth rates: S_{E0}=no; S_{E1}=1-9%; S_{E2}=10-24%; S_{E3}=25-49%; S_{E4}=50-74%; S_{E5}=75-99%; S_{E6}=100% or more.

Values below coefficients are standard errors.

Estimation results for controlled variables are available upon request.

***p<0.001; **p<0.05; *p<0.10.

Table 3: Probit regression estimation results for growth in employment size: owner-management structure

Dependent variables	Panel A: Actual growth in employment size		Panel B: Expected growth in employment size	
	Coef.	ME	Coef.	ME
Management in family-owned businesses				
Owner managers only	-0.148***	-0.051***	-0.079*	-0.030*
	0.042	0.015	0.042	0.016
Professional managers in daily control of the business	-0.031	-0.011	-0.042	-0.016
	0.059	0.021	0.06	0.023
Controls	yes	-	yes	-
Log likelihood	-3,378.55	-	-3,946.60	-
Chi ² (degrees of freedom)	555.17(28)	-	373.68(28)	-
Obs.	6,246		5,992	

Notes: ME=marginal effects.

Values below coefficients are standard errors.

Estimation results for controlled variables are available upon request.

***p<0.001; *p<0.10.

Table 4: Ordered probit estimation results for growth in turnover and sales: owner-management structure

Panel A: Actual growth in turnover										
	Coef.	ME								
		T _{A0}	T _{A1}	T _{A2}	T _{A3}	T _{A4}	T _{A5}	T _{A6}		
Management in family-owned businesses										
Owner managers only	-0.086*	0.028*	-0.0004*	-0.002*	-0.005*	-0.003*	-0.007*	-0.009*		
	0.038	0.014	0.0003	0.001	0.003	0.002	0.004	0.005		
Professional managers in daily control of the business	-0.050	0.018	-0.0003	-0.002	-0.003	-0.002	-0.005	-0.007		
	0.055	0.02	0.0004	0.002	0.004	0.002	0.005	0.007		
Controls										
yes	-7,880.75									
Log likelihood	454.73(28)									
Chi ² (degrees of freedom)	5.680									
Obs.	5,880									
Panel B: Expected growth in turnover										
	Coef.	ME								
		T _{E0}	T _{E1}	T _{E2}	T _{E3}	T _{E4}	T _{E5}	T _{E6}		
Management in family-owned businesses										
Owner managers only	-0.088*	0.028*	0.0001	-0.001*	-0.005*	-0.002*	-0.007*	-0.009*		
	0.037	0.014	0.0001	0.001	0.003	0.001	0.004	0.005		
Professional managers in daily control of the business	-0.031	0.012	0.00004	-0.0004	-0.002	-0.001	-0.003	-0.004		
	0.052	0.020	0.0001	0.001	0.004	0.002	0.006	0.007		
Controls										
yes	-8,933.83									
Log likelihood	545.22(28)									
Chi ² (degrees of freedom)	5.833									
Obs.	5,833									
Panel C: Expected growth in sales										
	Coef.	ME								
		S _{E0}	S _{E1}	S _{E2}	S _{E3}	S _{E4}	S _{E5}	S _{E6}		
Management in family-owned businesses										
Owner managers only	-0.095**	0.024***	0.007***	0.00002	-0.011***	-0.008**	-0.001**	-0.011**		
	0.035	0.008	0.003	0.0004	0.004	0.003	0.005	0.004		
Professional managers in daily control of the business	-0.095*	0.025*	0.007*	0.00002	-0.011*	-0.008*	-0.001*	-0.011*		
	0.050	0.013	0.004	0.001	0.006	0.004	0.001	0.006		
Controls										
yes	-9,034.22									
Log likelihood	916.12(30)									
Chi ² (degrees of freedom)	5.697									
Obs.	5,697									

Notes: ME=Marginal effects

Growth rates: T_{A0}= none or shrinkage; T_{A1}=1-4%; T_{A2}=5-9%; T_{A3}=10-14%; T_{A4}=15-19%; T_{A5}=20-29%; T_{A6}=30%+.

Growth rates: T_{E0}= none; T_{E1}=1-4%; T_{E2}=5-9%; T_{E3}=10-14%; T_{E4}=15-19%; T_{E5}=20-29%; T_{E6}=30%+.

Growth rates: S_{E0}=no; S_{E1}=1-9%; S_{E2}=10-24%; S_{E3}=25-49%; S_{E4}=50-74%; S_{E5}=75-99%; S_{E6}=100% or more.

Values below coefficients are standard errors.

Estimation results for controlled variables are available upon request.

***p<0.001; **p<0.05; *p<0.10.

Appendix

Table A1: Summary statistics (weighted estimates)

Variables	%	Mean	S.D.	Obs.
Dependent variables				
Actual growth in employment size				
More than currently	94.20			15,337
Stay the same or less	5.80			
Expected growth in employment size				
More than currently	71.15			14,636
Stay the same or less	28.85			
Actual growth in turnover				
None or shrinkage	74.49			13,849
0-4%	1.80			
5-9%	4.60			
10-14%	5.70			
15-19%	2.50			
20-29%	5.20			
30%+	5.70			
Expected growth in turnover				
No growth	66.73			14,072
0-4%	1.60			
5-9%	4.40			
10-14%	9.30			
15-19%	2.50			
20-29%	7.40			
30%+	8.10			
Expected growth in sales				
No growth	50.10			14,431
1-9%	8.50			
10-24%	18.60			
25-49%	10.00			
50-74%	5.60			
75-99%	1.00			
100% or more	6.80			
Independent Variables				
Ownership and governance structure				
Non-family-owned businesses	24.04			12,908
Family business with owner-managers only	72.31			
Family business with professional managers	3.64			

Controlled variables				
Firm age				
0-5yrs	15.25			
6-10yrs	18.32			15,444
11-20yrs	23.77			
more than 20yrs	42.66			
Industry				
Primary industry	3.40			
Manufacturing	5.10			
Construction	17.76			
Wholesale/retail	9.69			
Transport/storage	5.10			
Accommodation/food	3.39			
Information/communication	6.29			15,502
Financial/real estate	3.50			
Professional/scientific	14.71			
Administrative/support	8.22			
Education	4.97			
Health/social work	5.89			
Arts/entertainment	4.98			
Other service	6.00			
Legal status				
Sole Proprietorship	49.79			
Company	38.71			15,502
Partnership	7.76			
Other	3.75			
Presence of owner/partner in the business				
No	4.15			14,043
Yes	95.84			
Geographical region				
England	87.57			
Scotland	6.31			15,502
Wales	3.95			
Northern Ireland	2.17			
Firm size (number of employees)		1.75	0.03	15,502
Number of sites (log of number of sites in operation in the UK)		0.07	0.005	15,414
Firm capability		3.75	0.01	7,714

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