Under which circumstances do family SMEs achieve high growth? A behavioural perspective

Abstract

High-growth firms, particularly SMEs, contribute disproportionately to the creation of employment, wealth, and economic development around the world. Yet, knowledge of the circumstances under which such growth patterns occur is limited, and the findings with regard to SMEs are inconclusive. Adopting the behavioural agency model, we analyse the effect of family control and related nuances (i.e., degree of family ownership and presence of a family CEO) on SME growth. Furthermore, we argue that the type of slack resources and their availability are a crucial organisational contingency when investigating high growth in SMEs. Using a sample of 39,631 European SMEs over a 13-year period, we find that family SMEs are less likely to achieve high growth compared to non-family SMEs, and having a family CEO further reduces this likelihood. Instead, at higher (vs lower) levels of family ownership, the probability of family SMEs achieving high growth increases. Furthermore, the availability of high- and low-discretion slack resources influences these relationships. Our study advances current understanding of high growth in general, and in family SMEs in particular.

Keywords

high growth, SMEs, family control, family firm heterogeneity, slack resources

Introduction

The high-growth phenomenon, measured as compound annual growth in sales or employees above 20%, has attracted the attention of management and entrepreneurship scholars alike (Demir et al., 2017; De Santola and Gulati, 2017; Hart et al., 2021; Rasmussen et al., 2018). High growth is deemed important for economic development, innovation, and wealth creation (Anyadike-Danes et al., 2009; OECD, 2011; World Economic Forum, 2015). Researchers argue that understanding more about firm growth patterns should be a key objective of scholarly efforts (Bamiatzi and Kirchmaier, 2014; Demir et al., 2017; De Santola and Gulati, 2017; Hart et al., 2021), as they are highly relevant to government policy agendas (Mason and Brown, 2013). High growth relies on a sustained commitment to growth and the adoption of a growth logic that coherently and consistently permeates the organisation and its decision-making, entailing specific organisational and managerial challenges (Markman and Gartner, 2002; Delmar et al., 2003; De Santola and Gulati, 2017). The relevance of this phenomenon is particularly evident considering small- and

medium-sized enterprises (SMEs). On the one hand, SMEs have the flexibility to adapt quickly to changes, and might thus be good candidates to pursue high-growth patterns (De Santola and Gulati, 2017). On the other hand, they may suffer from resource and governance constraints, thus unable to identify or unwilling to embrace such growth patterns (Aldrich and Auster, 1986; Koryak et al., 2015).

However, current understanding of SMEs' high growth remains limited (Minola et al., 2017; Moreno and Casillas, 2007). The literature tends to associate their high growth with three main factors (Blackburn et al., 2013; Storey, 1994): the entrepreneur and his/her individual characteristics, such as age, gender, educational qualifications, and management style (Hambrick and Croizer, 1985; Raby et al., 2018); firm strategy and resources, for instance, engaging in alliances or acquisitions, the availability of financial slack and intellectual capital (Cassia and Minola, 2012; Koryak et al., 2015; Halabisky et al., 2006; Demir et al., 2017); and the strategy-environment fit (Ensley et al., 2003; Wright and Stigliani, 2013). Contemporary research highlights the need to "explore leadership in terms of cognitions, motivations and decisions" to understand SMEs' growth patterns (Koryak et al., 2015: 89). This is crucial due to the role of SME leaders in the growth process, e.g., through resource allocation (Wright and Stigliani, 2013). In this sense, governance is a factor that allows understanding the conditions under which SME leaders view high growth as desirable and feasible (Koryak et al., 2015). Surprisingly, studies that consider the role of governance for SMEs' high growth are scarce (O'Regan et al., 2006; Rasmussen et al., 2018).

Family SMEs offer a particularly intriguing context to explore how different "governance regimes" (Wright and Stigliani, 2013: 13) influence high growth (Rasmussen et al., 2018). Indeed, while high-growth scholars indicate family firms as a promising research setting (Bhalla et al., 2009; Bjuggren et al, 2013; Ensley et al., 2007; Megaravalli and Sampagnaro, 2018), the family business literature offers mixed findings on this phenomenon (Cirillo et al., 2020). This is because in family firms, economic and family-centred non-economic goals coalesce, such as reputation, ensuring family involvement and control across generations (Chrisman et al., 2012), potentially leading to cognitive conflicts that affect their growth trajectories and processes (Wright and Stigliani, 2013).

Therefore, we investigate under which circumstances family SMEs achieve high growth. We first argue that compared to non-family SMEs, family SMEs are less likely to embrace growth logics and achieve high growth. We build our hypotheses on the behavioural agency model (BAM; Wiseman and Gomez-Mejia, 1998) according to which the growth preferences of family decision-makers are affected by family-related motives and interests. Family decision-makers might frame

strategies aimed at achieving high growth as particularly risky due to the potential loss of the family's affective endowment (Gomez-Mejia et al., 2007, 2011). Second, by focusing on family SMEs only, we consider two nuances of family control, namely the degree of family ownership and the presence of a family CEO, and how these affect high growth. The argument behind our hypotheses is that the perception of the anticipated loss associated with high growth is even stronger for family SMEs with higher levels of family control in terms of family ownership or the presence of a family CEO. Third, we consider that high growth in SMEs depends on the organisational contingencies at play. The literature identifies the availability of slack resources, namely a cushion of excess resources that the firm has discretion over (Bourgeois, 1981; Cyert and March, 1963; George, 2005; Nohria and Gulati, 1996), as a crucial organisational resource that might affect growth-related decision-making (Koryak et al., 2015). In particular, we consider high- and lowdiscretion slack (HDS and LDS hereafter) as moderators of the direct relationships. The different degrees of discretion associated with these two types of slack, together with their specific growth logic - product expansion for HDS and market expansion for LDS (Mishina et al., 2004) - help explain the high-growth phenomenon. Based on the preferences of family firm decision-makers regarding their growth logic, we hypothesise that the negative relationship between family influence and high growth is strengthened by HDS and weakened by LDS.

We test our hypotheses on a sample of 39,631 European family SMEs over a 13-year period. Our results show that family SMEs are less likely to achieve high growth compared to non-family SMEs, and having a family CEO further reduces this likelihood. Family ownership, contrary to our hypothesis, positively affects the likelihood of high growth among family SMEs so that at higher (vs lower) levels of family ownership, the probability of family SMEs achieving high growth increases. Our analyses also confirm a distinctive behaviour of family SMEs in exploiting different slack resources.

Our study contributes to current understanding of high growth in general, and in family SMEs in particular. We highlight the role of governance configurations on high growth, showing that different nuances of family control and the availability and type of excess resources matter for the high growth of family SMEs. Moreover, we contribute to the literature on the organisational consequences of slack, showing the governance contexts in which different types of slack are more valuable.

Theoretical background

The high-growth phenomenon

As Demir et al. (2017) suggest, we use the OECD (2011) definition of high-growth firms, namely enterprises with average annualised growth in employees (or turnover) above 20% a year over a

three-year period, and with ten or more employees at the beginning of the observation period. High-growth firms reflect a sustained commitment to growth (De Santola and Gulati, 2017; Rasmussen et al., 2018), characterised by a dominant logic focused on intensive expansion plans, albeit facing strategic and organisational dilemmas (De Santola and Gulati, 2017; Mahoney and Pandian, 1992). The set of managerial beliefs and mental models referred to as growth logics (Mishina et al., 2004) indicate the way in which high-growth firms align their skills, strategic processes, and resources for sustained growth trajectories (Markman and Gartner, 2002; Cassia and Minola, 2012). There are different types of growth logics, with product expansion and market expansion representing the two main characterisations of organisational growth (Mishina et al., 2004). The former consists in developing new products for existing markets, the latter comprises all the efforts aimed at extending markets for existing products.

In the last decades, scholarly interest in high-growth firms has focused on the scaling-up processes of new ventures and established SMEs (Anyadike-Danes et al., 2015; Baum and Bird, 2010; Coad et al., 2017, 2021; Demir et al., 2017; De Santola and Gulati, 2017; Hart et al., 2021; Rasmussen et al., 2018). It is widely acknowledged that a relatively small proportion of firms, namely high-growth SMEs, contribute disproportionately to value creation, economic development, and net job creation (Anyadike-Danes et al., 2009, 2015, 2018; Hart et al., 2021). For instance, Henrekson and Johansson's (2010) meta-analysis of their role in job creation shows that high-growth SMEs generate a disproportionately large share of all new net jobs, a clear-cut result in the entrepreneurship literature. The net job contribution of an economic system is explained by the expansion of a few surviving firms that more than compensate for the losses of stumbling and failing firms.

At the same time, a number of studies highlight the controversy of the high-growth phenomenon, questioning the desirability of high-growth patterns from a firm and management perspective (Ben-Hafaïedh and Hamelin, 2021; Davidsson et al., 2009; Senderovitz et al., 2016; Širec and Močnik, 2016; López et al., 2019; Yadav et al., 2021). For instance, considering the fastest growing private SMEs in the US, Markman and Gartner (2002) find that high growth is not related to firm profitability, but likely strains the firm's ability to operate efficiently and effectively. Other authors focus on problems that might jeopardise the survival of firms that have shown extraordinary growth, alerting entrepreneurs experiencing high growth to its drawbacks (Hambrick and Crozier, 1985; Fombrun and Wally, 1989). Employee disaffection and skill gaps, internal turmoil due to quickly integrating new employees in the organisation, a sense of infallibility making entrepreneurs less reactive to environmental stimuli, and extraordinary resource demands are some examples of the challenges of high growth. In view of both the economic contribution that high growth offers

and the organisational dilemmas it presents, especially in small firms, the literature encourages further exploration of the circumstances under which high growth is more likely to occur so as to be able to manage it more effectively (De Santola and Gulati, 2017; Nicholls-Nixon, 2005).

The growth patterns of family SMEs

Scholars agree that the growth of SMEs depends on substantive capabilities and resources (Koryak et al., 2015; Wright and Stigliani, 2013; Wright et al., 2015). Financial slack and intellectual capital, for example, support growth, allowing for exploration, risk-taking, and the acquisition and exploitation of knowledge. Furthermore, SME growth needs to be supported by willing and motivated leaders, as their cognitions, motivations, and decisions affect high growth. Yet, the high-growth literature has paid limited attention to the role of different types of governance regimes and specifically family control (Anyadike-Danes et al., 2015; Rasmussen et al., 2018; Wright and Stigliani, 2013). Family SMEs are an intriguing context in which to explore the high-growth phenomenon and the circumstances under which their leaders are more likely to view high growth as desirable and feasible when facing both resource and cognitive constraints (Koryak et al., 2015; Wright and Stigliani, 2013).

Family firms are a popular form of organisation across the world's economies (La Porta et al., 1999; Astrachan and Shanker, 2003; Valenza et al., 2021). Researchers agree that family firms are unique due to their distinctive ownership and governance characteristics that engender particularistic family-oriented behaviour (Carney, 2005). These unique attributes of family firms affect several management processes and strategic behaviours (Gedajlovic et al., 2012), such as innovation (Duran et al., 2016), internationalisation (George at al., 2005), entrepreneurship (Minola et al., 2016; Zahra et al., 2004), financing (Chua et al., 2011), and risk-taking (Naldi et al., 2007). Moreover, the distinctive incentives, power structures, and norms of family firms (Gedajlovic and Carney, 2010; Gedajlovic et al., 2004) generate advantages and constraints that can also affect their growth patterns (Cirillo et al., 2020; Miroshnychenko et al., 2020; Stenholm et al., 2016). Indeed, the relevance of family-centred non-economic goals in family firms (Chrisman et al., 2012) may generate cognitive conflicts between different growth trajectories and processes. For instance, high growth might be conceived by family SME leaders as putting family reputation, involvement, and control at stake, a strategy that is too risky when weighed against the goal of protecting the family's affective endowment (Gomez-Mejia et al., 2011).

Investigating the high-growth phenomenon in family SMEs is thus a promising avenue as invoked by both the high-growth and family business literature (Anyadike-Danes et al., 2015; Cirillo et al., 2020; Miroshnychenko et al., 2020; Wright and Stigliani, 2013). However, existing contributions in this research stream suffer from two specific limitations. On the one hand, most

studies compare the likelihood of high growth of family vs non-family SMEs (Bjuggren et al., 2013; Ensley, 2007) by adopting accounting drivers (e.g., liquidity ratio, cash flow, pay structure) in search of statistical regularities that act as predictors of high growth. Yet, overlooking the nuances of family control has constrained our understanding of high-growth trajectories and the heterogeneous nature of family SMEs. On the other hand, these empirical studies have utilised family SMEs as a convenient context without conceptually elaborating on their distinctive elements (Bhalla et al., 2009; Megaravalli and Sampagnaro, 2018; Cucculelli, 2013; Upton et al., 2001). In this article, we do so by building on arguments from the behavioural agency model.

The behavioural agency model

The behavioural agency model (BAM), a managerial risk-taking theory (Hoskisson et al., 2017), takes a dynamic view of firm risk-bearing according to the manager's framing of situations as gains or losses with respect to a specific reference point (Wiseman and Gómez-Mejía, 1998). According to this model, the decision-making process, and hence the decision to take or avoid risk, depends on the decision-maker's reference point whereby values above are framed as gains, and values below as losses (Kahneman and Tversky, 1979). The behavioural agency model predicts that individuals will forgo the possibility of a future gain if it involves a potential loss in current wealth, avoiding such losses to the point of accepting greater uncertainty or risk (Wiseman and Gomez-Mejia, 1998).

In the case of family firms, the reference point is the socioemotional wealth accumulated when a family pursues family-centred noneconomic goals. Families in business tend to protect their socioemotional wealth (Gomez-Mejia et al., 2007, 2011) "to preserve control in the hands of the family and resist taking risks that may jeopardize that" (Miroshnychenko et al., 2020: 3). Prior research highlights the important role of family-centred noneconomic goals in shaping family firm decisions (e.g., Chrisman et al., 2012; Kotlar et al., 2018). Family members' desire to exercise authority, enjoy family influence, maintain clan membership within the firm, appoint trusted family members to important positions, retain a strong family identity, and ensure the continuity of the family dynasty are examples of family-centred noneconomic goals driving family business decision-making and behaviour (Berrone et al., 2012; Gómez-Mejía et al., 2007). Based on these elements, BAM suggests that, ceteris paribus, family members who control the business are likely to adopt a conservative strategy and tend to be more loss averse than, for example, single-owners (Miller et al., 2011). This is consistent with the view that family members in the firm are likely to perceive themselves as 'family nurturers', conceiving the business as a source of stable and secure income for the family that has to be protected (Miller et al., 2011). Decisions in family firms are thus "driven by a desire to preserve and enhance the family's socioemotional wealth apart from

efficiency or economic instrumentality considerations" (Gómez-Mejía et al., 2011, p. 656). In sum, BAM suggests that family firms frame any decision involving the possibility of losing socioemotional wealth in the loss domain (Gomez-Mejia et al., 2007). Such negative framing in turn motivates them to minimise potential socioemotional wealth losses to the point of sacrificing financial wealth. It follows that loss-averse family firms willingly forgo the potential financial gains of high-growth as a form of insurance to reduce potential losses to their current socioemotional wealth (Gómez-Mejía et al., 2007; Miroshnychenko et al., 2020; Wiseman and Gómez-Mejía, 1998).

In line with this view, we develop our baseline hypothesis on the direct effect of family involvement on family SMEs' high growth. We then discuss two nuances of family control, i.e., degree of family ownership and presence of a family CEO, and their effect on high growth. Furthermore, our model includes the availability of two types of slack resources (HDS and LDS) as a relevant organisational contingency to investigate how family SME leaders frame high growth. The use of different family nuances and types of slack enhances our model's explanatory power.

Hypotheses development

The literature offers inconclusive evidence on the impact of family involvement on firm growth (Cirillo et al., 2020; Chen et al., 2014; Sciascia et al., 2013), and high growth in particular (Bjuggren et al., 2013; Upton et al., 2001, 2003). Strategies aimed at achieving high growth require sustained commitment and are rooted in a growth logic or a set of managerial beliefs and mental models to make sense of and align the skills, strategic processes, and resources to pursue sustained growth patterns. The literature recognises several types of growth logics, with product and market growth as the two main characterisations of organisational growth (Mishina et al., 2004). Common among all growth logics are the available resources and sustained commitment to growth, the resultant strategic and organisational dilemmas, and the high uncertainty of outcomes (Mishina et al., 2004; Porac et al., 2002). Family leaders likely consider high growth even riskier than normal growth due to the potential loss of the family's affective endowment. In fact, investing in a high-growth trajectory might require additional funds and thereby increase the firm's dependence on outsiders (e.g., banks), with implications on the family's ability to ensure continued control of the firm. Furthermore, high growth and the major strategic and organisational changes it brings, such as top management team turnover, cultural shift, and the drive for professionalisation (De Santola and Gulati, 2017), might put the identification of family members with the firm at stake, diluting the reciprocal bonds not only between family members, but also between the firm and its relevant stakeholders (Berrone et al., 2012). This is especially true for SMEs where the organisational dilemmas inherent in high-growth patterns, such as acceptance of outside control (Berggren et al.,

2000) and family-firm identification concerns, are particularly salient. As such, family SME leaders are unlikely to strive for high-growth trajectories (Wright et al., 2015). By combining the preferences of family SMEs with the risk inherent in high growth, we expect family SMEs to be less likely to engage in such high-growth trajectories compared to non-family SMEs. Therefore, we posit:

H1a: Family SMEs are less likely to achieve high growth than non-family SMEs.

Although the differences between family and non-family firms are numerous, not all family firms all alike (Daspit et al., 2021). Indeed, family and generational involvement, governance configurations, values, interpersonal exchanges, to name but a few, are some of the dimensions along which family firms differ from one another. To investigate under which circumstances family SMEs achieve high growth, we focus on two dimensions: degree of family ownership and presence of a family CEO. In the following, we discuss our rationale and formulate our hypotheses referring to family SMEs or firms with a high degree of family control.

Family ownership. For our baseline hypothesis, and in line with BAM (Wiseman and Gomez-Mejia, 1998), we argue that family leaders are averse to the loss of affective endowment associated with family control of the business (Gomez-Mejia et al., 2007, 2011), hence tending to avoid the risk inherent in high growth. We push this argument one step further by looking at the degree of family ownership. The extent to which the family is an influential shareholder likely determines the prioritisation of family- over business-centred motives when making decisions (De Massis et al., 2018). In the case of family SMEs, this prioritisation is even more pronounced, since ownermanagers are usually not monitored by the market for corporate control (Schulze et al., 2003; Miller and Le Breton-Miller, 2005), and make decisions on behalf of both the family and the firm (Koryak et al., 2015). This implies that the greater the degree of family ownership, the higher the perception of the anticipated loss associated with demanding and uncertain patterns, such as high growth. Furthermore, a higher degree of family ownership means that non-family shareholders have few or even no shares. If, in general, it is reasonable to expect that the firm's closure to external voices favours the prioritisation of family-centred goals, hence limiting the possibilities of achieving growth, the literature shows that non-family shareholders might contribute by providing alternative cognitive frames and perspectives (Gómez-Mejía et al., 2003, 2011). The presence of non-family shareholders may require family leaders to reconcile the preservation of affective endowment with other owners' desire for growth, thus limiting their loss aversion, or at least its consequences. This will likely favour the decision to engage in a high-growth pattern, while the opposite is assumed when the family has total control of the firm. Therefore:

H1b: Among family SMEs, the degree of family ownership is negatively associated with the

likelihood of achieving high growth.

Family CEO. When a family holds a large proportion of shares in the SME and a member of the owning family also serves as CEO, the family assumes entrepreneurial leadership (Koryak et al., 2015), and family-centred motives are even more dominant in the firm's decision-making (Carney, 2005; De Massis et al., 2014; Ling et al., 2008; Miller et al., 2014). In discussing the role of family CEOs in family firms, the literature highlights that they tend to make decisions that secure family control, hence likely to preserve the family's affective endowment even when doing so implies sacrificing the firm's economic prospects (Arteaga and Menéndez-Requejo, 2017; Cruz et al., 2010; Martin et al., 2017). These issues are particularly severe in family SMEs where the CEO is chosen from a rather small pool of relatives and has likely been imprinted since birth by the family business and the family's concerns over preserving its affective endowment. In sum, when the family SME has a family CEO, we expect higher concern for preserving control of the business, strengthening family-firm identification and social ties within and among the family and its stakeholders. Accordingly, the anticipated loss of affective endowment associated with high growth is greater for these family SMEs compared to family SMEs without a family CEO. Hence:

H1c: Among family SMEs, the presence of a family CEO is negatively associated with the likelihood of achieving high growth.

The moderating role of slack

In discussing how family leaders frame high growth, we also need to consider that the cognitive assessment of risky strategies, such as those related to high growth, is affected by the organisational contingencies at play when the decision is made (Cassia and Minola, 2012). Considering the resource constraints of SMEs, one specific factor that influences their decision to engage in inherently uncertain behaviours, like those leading to high growth, is the availability of excess resources, namely slack (Koryak et al., 2015; Simsek et al., 2007; Bradley et al., 2011). We refer to slack as "the pool of resources in an organisation that is in excess of the minimum necessary to produce a given level of organisational output" (Nohria and Gulati, 1996: 1246). Slack represents "currently unused resources above those necessary to meet immediate business requirements, fund ongoing tasks, or meet explicit goals" (Liu et al., 2012), or a cushion of excess resources that can be used in a discretionary way (Bourgeois, 1981). Research on growth drawing on the behavioural theory of the firm (e.g., Cyert and March, 1963) has argued that slack plays an equilibrating and adjusting role in rapidly changing business environments. In particular, the availability of slack resources will sustain an organisation's willingness to engage in risky activities and improve performance (Nohria and Gulati, 1996; Voss et al., 2008). Slack matters to high growth because it

enables experimentation, innovation, and ambitious goal setting, isolating the firm from exogenous shocks (Wiklund et al., 2009; Bradley et al., 2011; Koryak et al., 2015).

In particular, Mishina et al. (2004) suggest that slack can explain why two firms with similar attributes might differ in their growth potential and rate. The effects of slack on performance depend on the type of slack considered (Bromiley, 1991; George, 2005; Sharfman et al., 1988; Singh, 1986). As Daniel et al. (2004) recall, the literature proposes several conceptual classifications of slack, such as the degree of managerial discretion in deploying these resources (George, 2005). High-discretion slack (HDS) includes cash and receivables, and given its highly discretionary nature, can be rapidly allocated to new uses. Low-discretion slack (LDS) includes debt, fixed assets, and excess capacity, which are less flexible, absorbed, and represent excess costs in specialised assets. HDS and LDS matter to high growth because they are positively correlated with the two fundamental growth logics, i.e., product and market expansion, respectively (Mishina et al., 2004). In particular, HDS allows risky experimentation, the search for breakthrough innovation (Geiger and Makri, 2006), and product expansion (Mishina et al., 2004). HDS is a highly deployable resource that relaxes organisational and financial constraints, supporting fast change, especially in dynamic environments (Liu et al., 2011). LDS is positively associated with high-growth patterns through market expansion (Mishina et al., 2004). Since LDS has been accumulated in the past, it is associated with existing routines, and induces path-dependent behaviour. LDS is therefore associated with cognitive inertia that better fits market expansion (Voss et al., 2008).

Conversely, when firms adopt market expansion as their main growth logic, the availability of HDS has a negative effect on the likelihood of achieving high growth, as this is a relatively predictable strategic option. As such, HDS may signal inefficiencies and excessive managerial relaxation in established organisational routines (Wiseman and Bromiley, 1996). On the contrary, LDS is sticky, indivisible, path-dependent, and difficult to imitate. It provides embedded resources (e.g., human capital or operational routines) that allow exploitation and efficiency, hence consistent with the simpler market expansion logic. Likewise, when firms adopt product expansion as their main growth logic, which is less predictable and more complex, the availability of HDS has a positive effect on the likelihood of achieving high growth. In fact, the specific pace of new product development is more difficult to program *ex ante* (Geiger and Makri, 2006; Liu et al., 2012). HDS provides management with flexible, easy to deploy resources that help resolve unexpected product development barriers and take advantage of emergent opportunities (Mishina et al., 2004). This makes product expansion less problematic and is expected to accelerate the high-growth pattern (Winter and Szulanski, 2002). Instead, since product expansion is less predictable, it is more

difficult to plan for LDS needs and efficient utilisation. Moreover, LDS is difficult to deploy, inertial in its allocation, and path-dependent. This impedes growth in directions that require heavy resource reconfigurations (Penrose, 1959), thereby slowing the rate of high growth (Mishina et al., 2004). In sum, there is a connection between the type of available slack and the growth logic.

Family SMEs, we argue, are not neutral with respect to the growth logic. We know from prior research that market expansion is simpler to achieve and conducive to rapid organisational growth, as it draws on the firm's past experience and routine replication (Mishina et al., 2004; Nelson and Winter, 1982). On the other hand, product expansion compels new routines, or at least a complex recombination of old ones. Due to its unpredictability, this growth logic is seen as more complex and difficult to attain in the short run (Winter and Szulanski, 2002). We argue that as family decision-makers are loss averse, they are more likely to choose a more prudent approach when aiming for high growth, like market expansion. In particular, families are likely to exercise their voice by avoiding radical changes in the firm's mission, strategic direction, culture, processes, and routines; changes that are in fact risky and resource intensive (Zahra, 2005). We argue these voices will be even louder in family SMEs with higher degrees of family ownership or the presence of a family CEO, as the entrepreneur or entrepreneurial team assumes decisions on behalf of both the family and the firm (Koryak et al., 2015).

Recalling the positive effect of LDS and the negative effect of HDS on high growth when pursuing market expansion, we propose a differential effect of HDS and LDS on the likelihood of high growth in family SMEs. In sum, we expect a negative coupling of family control with HDS, and a positive coupling of family control with LDS. Therefore:

H2a: The availability of HDS negatively moderates the relationship between being a family SME and the likelihood of achieving high growth.

H2b: Among family SMEs, the availability of HDS negatively moderates the relationship between the degree of family ownership and the likelihood of achieving high growth.

H2c: Among family SMEs, the availability of HDS negatively moderates the relationship between the presence of a family CEO and the likelihood of achieving high growth.

H3a: The availability of LDS positively moderates the relationship between being a family SME and the likelihood of achieving high growth.

H3b: Among family SMEs, the availability of LDS positively moderates the relationship between the degree of family ownership and the likelihood of achieving high growth.

H3c: Among family SMEs, the availability of LDS positively moderates the relationship between the presence of a family CEO and the likelihood of achieving high growth.

Figure 1 summarises our conceptual framework and the hypothesised relationships among family control, slack, and high growth.

(Insert Figure 1 about here)

Methodology

Sample

Our sample comprising several industries and independent privately-held SMEs located in the five largest European economies: Germany, Great Britain, France, Spain, and Italy. These countries contributed over 70% of EU gross domestic product in the study period (2004–2019). By including multiple industries, the sample presents high variation in industry and firm growth rates (Dess and Beard, 1984). We built a longitudinal dataset with financial information for the years 2004–2019 using the Orbis database provided by Bureau Van Dijk, yielding a sample of 39,631 firms (278,013 year-observations). We focus on only privately owned SMEs for empirical and theoretical reasons. Empirically, across all observed countries, SMEs are almost exclusively private firms, as indicated by the EU's recent efforts to support SME listing on public markets. Theoretically, the focus on private companies allows us to capture the entrepreneurial nature of SMEs, as suggested by the literature on scale-up firms, "Entrepreneurial ventures, typically small in size and privately held, face severe constraints in mobilising the financial and social resources needed to fuel and sustain the organisation through periods of growth" (De Santola and Gulati, 2017: 641). In addition, due to their risk profile, the family firm literature considers private firms an interesting context to study growth phenomena (Carney et al., 2015; Miroshnychenko et al., 2020).

Dependent variables

High growth is measured as the annualised growth rate in employees or turnover greater than 20% per annum over a 3-year period (Demir et al., 2017; OECD, 2011). Moreover, the firms had a minimum 10 and maximum 249 employees at the beginning of the study period (Eurostat-OECD, 2007; Hölzl, 2014), and were older than 5 years at t₀ (Rasmussen et al., 2018). Thus, as presented in Figure 2, for each cohort from 2004 to 2016, we singled out all SMEs in the first year considered (t₀) and followed them over the subsequent 3 years (t₁-t₃). Therefore, high growth is measured as a dummy variable equal to 1 in the years in which the firm recorded 3-year growth compatible with the given definition, and equal to 0 if in the last 3 years the firm underperformed compared to the given threshold. Figure 2 presents the structure of the sample.

(Insert Figure 2 about here)

Independent variables

We define *family SMEs* as those with at least 50%¹ of shares owned by a family and more than one family member on the board or in the top management team (Chrisman and Patel, 2012; Sirmon et al., 2008). Following Deephouse and Jaskiewicz (2013), family ownership is measured by the total voting rights held by the family, while we used two different approaches to measure family board presence given that board structures vary internationally. In countries with a one-tier governance system, we considered the board of directors (Anderson and Reeb, 2003), in countries with a two-tier governance system, we considered both the board of directors and the management board (Klein et al., 2005). When the family ownership and family control conditions were met, the family SME dummy variable took value 1, otherwise 0.

Family CEO. Dummy variable, calculated only for family SMEs, with value 1 when the CEO is a family member.

Family ownership. Continuous variable, calculated only for family SMEs, ranging from value 50.1% to 100% calculated as the percentage of shares controlled by the family and its members (Deephouse and Jaskiewicz, 2013). We identified family members based on their surname.

Slack. Following prior studies, we used accounting information for slack (George, 2005; Liu et al., 2011), measuring high discretion slack (HDS) as working capital, that is, current assets minus current liabilities (Liu et al. 2011), and low discretion slack (LDS) as debt-to-equity, that is, the ratio between total liabilities and total equity (Liu et al., 2011; George, 2005; Cheng and Kesner, 1997). Considering the variety of contexts, it is likely that slack differs across industries. Indeed, Nohria and Gulati (1996) posit that slack is operationally defined as the excess absolute level of resources. Thus, following in George's (2005) footsteps, we calculate slack as the deviation from the mean of the national industry subsectors the firm belongs to classified according to the 4-digit NACE code. This procedure provides a close estimate of excess resources compared to the industry norm. Thus, we consider the value of slack resources in the year before the beginning of a highgrowth period (t₀) (e.g., Stam and Wennberg, 2009).

Control variables

We examined different firm characteristics to help control for alternative explanations of the results, lagging them for 3 years to address the condition in the year before the beginning of a potential high-growth period (t₀). Therefore, we controlled for *age* by measuring the number of years the firm has existed. Then, because firm size may also influence growth aspirations (Wiklund and Shepherd, 2003), we controlled for *size* by measuring turnover. Finally, we controlled for *performance* in terms of net income given its potential effect on firm growth (Wiklund and Shepherd, 2003). Finally, we controlled for *year* and country, computing the related dummy

¹ We ran robustness tests considering different levels of family ownership (e.g., 25% and 75%), as detailed hereafter.

variables. We constructed the dummy variables of 10 *industry* categories according to Eurostat's 'high-level aggregation' (Eurostat, 2008). All variables are summarised in Table 1.

(Insert Table 1 about here)

Results

The commonly adopted statistical procedures for binary regressions, such as logistic regression, can sharply underestimate the probability of rare events (King and Zeng, 2001). Therefore, we adopted a sampling procedure to correct for potential estimation bias that might arise in rare events data, as in our case where high-growth events account for 8.25% of observations (King and Zeng, 2001). The chosen method is a pooled rare event logistic regression model (RELR) with year dummies for hypothesis testing². The RELR procedure differs from logit in that it employs a weighted exogenous sampling maximum-likelihood estimator to correct for selection bias on the dependent variable (Manski and Lerman, 1977). The dependence between some observations among the different cohorts is accounted for by using the cluster option available in STATA.

The descriptive statistics regarding the structure of the sample are presented in Table 2, while the mean, standard deviation, and correlations of our variables are presented in Table 3. Inspection of the variance inflation factors (VIFs) shows that multicollinearity is not a concern. All VIF coefficients are lower than 1.89 (Belsley et al., 1980; Kutner et al., 2004).

(Insert Tables 2 and 3 about here)

We tested H1a, H2a, and H3a in Table 4. The interpretation of the results of a rare event logistic regression does not differ from the interpretation of the results of a simple logistic regression. Model 1 presents the control variables. In Model 2, we added the independent variables family SME, HDS, and LDS. Finally, Model 3 shows the full model presenting family SMEs and the interaction with HDS and LDS.

Then, we tested H1b-c, H2b-c and H3b-c in Table 5 considering a subsample of only family SMEs. Also in this case, Model 1 presents the control variables. The subsequent two models present the effect of family ownership on high growth (Model 2), and the effect of the interaction of family ownership with HDS and LDS (Model 3), respectively. Finally, the last two models present the effect of family CEO on high growth (Model 4), and the effect of the interaction of family CEO with HDS and LDS (Model 5), respectively.

(Insert Tables 4 and 5 about here)

² To perform the rare events logistic regression, we used the 'relogit' command in Stata 17 developed by King and Zeng (2001).

H1a posits that family SMEs are less likely to achieve high growth than their non-family counterparts. The analytical results support this hypothesis, as the value of family SMEs is negative and significant (coeff= -.041, p<.005; see Table 3, Model 2). This result is also in line with the literature on family SMEs and high-growth (Bjuggren et al., 2013; Upton et al., 2001, 2003), confirming the BAM prediction that family SME decision-makers will likely perceive high-growth as undesirable due to the related loss of socioemotional wealth. Considering the distinctive characteristics of family SMEs and exploring their heterogeneous configurations, H1b argues that among family SMEs, the degree of family ownership is negatively associated with the likelihood of achieving high growth. The analytical results do not support this hypothesis, providing opposite findings. Indeed, the value of family ownership is positive and significant (*coeff*= .509, p<.001; see Table 4, Model 2), indicating that family SMEs with a higher degree of family ownership are more likely to achieve high growth than family SMEs with a higher percentage of shares controlled by non-family owners. We elaborate on this unexpected result in the discussion section. H1c argues that among family SMEs, the presence of a family CEO is negatively associated with the likelihood of achieving high growth. The analytical results support this hypothesis in line with the debate on the role of a family CEO in family firms and the tendency to prioritise family over business motives (Miller et al., 2014). Indeed, the value of the family CEO variable is negative and significant (coeff= -.692, p<.001; see Table 4, Model 4), meaning that if the family takes entrepreneurial leadership in the SME (Koryak et al., 2015), high-growth patterns are perceived as even less desirable.

Moving to the role of HDS, H2a suggests that the availability of HDS negatively moderates the relationship between being a family SME and the likelihood of achieving high growth. Our results support this hypothesis, showing that the interaction between family SME and HDS is significant and negative (*coeff=-.360*, *p*<.001; see Table 3, Model 3). To fully interpret our empirical findings, we plotted the results in Figure 3a. We observe that when HDS is high, a family SME's probability of high growth decreases significantly. H2b suggests that among family SMEs, the availability of HDS negatively moderates the relationship between degree of family ownership and the likelihood of achieving high growth. The analytical results do not support this hypothesis, as the interaction between family ownership and HDS is not significant (see Table 4, Model 3). H2c suggests that among family SMEs, the availability of HDS negatively moderates the relationship between the presence of a family CEO and the likelihood of achieving high growth. The analytical results do not support this hypothesis. Indeed, while the interaction between family CEO and HDS is significant and positive (*coeff=.313*, *p*<.001; see Table 4, model 5), the greater availability of HDS substantially weakens the negative relationship proposed in H1c between family CEO and the

likelihood of achieving high growth for family SMEs. To support the interpretation of our empirical findings, we present the margins plot of the interaction between family CEO and HDS in Figure 4a, showing that a family SME's probability of high growth decreases substantially in the presence of high HDS. We elaborate on these results in the discussion section and provide preliminary explanations for the non-supported hypotheses (i.e., H2b, H2c) based on prior literature.

Finally, focusing on the role of LDS, H3a proposes that the availability of LDS positively moderates the relationship between being a family SME and the likelihood of achieving high growth. Our results support this hypothesis, showing that the interaction between family SME and LDS is significant and positive (coeff=0.143, p<.001; see Table 3, Model 4). To fully interpret our empirical findings, we plotted the results in Figure 3b. In particular, when LDS is high, the family SME's probability of high growth increases significantly, surpassing non-family SMEs. H3b suggests that among family SMEs, the availability of LDS positively moderates the relationship between degree of family ownership and the likelihood of achieving high growth. The analytical results do not support this hypothesis. Indeed, the interaction between family ownership and LDS is not significant (see Table 4, Model 3). H3c suggests that among family SMEs, the availability of LDS positively moderates the relationship between the presence of a family CEO and the likelihood of achieving high growth. The analytical results do not support this hypothesis. Indeed, the interaction between family CEO and LDS is significant and negative (coeff=-0.229, p<.001; see Table 4, Model 5). In particular, the greater availability of LDS strengthens the negative relationship proposed in H1c between family CEO and the likelihood of achieving high growth in family SMEs. To further support the interpretation of our empirical findings, we present the margins plot of the interaction between family CEO and LDS in Figure 4b, showing that a family SME's probability of high growth decreases in the presence of high LDS. We further comment on these results in the discussion section.

(Insert Figures 3a, 3b, 4a, and 4b about here)

Robustness tests

To check the robustness of our results, we ran several tests. First, we ran the analysis using conventional logistic regressions, and all results confirm the signs and significance of the models proposed in this study based on the rare event logistic regressions models. Second, we used an alternative measure to capture high-growth events. We identified those firms with the highest level of employees and sales growth in the previous three-year period by considering the top 10th percentile per country per year (Delmar et al., 2003; Coad et al., 2017). The results are substantially consistent with our main analyses. Third, we enlarged the sample by also considering firms with

fewer than 10 employees at t₀ (for a comprehensive discussion of the implications of this choice, see Demir et al., 2017). Again, the results confirm all the hypotheses. Finally, we used different levels of family ownership at 25% and 75% (Berrone et al., 2010; Sirmon et al., 2008). Again, the results are consistent for all our hypotheses.

Discussion

In this article, we investigate under which circumstances family SMEs achieve high growth. Applying the rare event logistic regression estimation technique to a unique sample of European SMEs, we argue and demonstrate that being a family SME negatively affects the likelihood of experiencing high growth. Moreover, among family SMEs, the presence of a family CEO reduces the probability of high growth, whereas the higher the family's control through increased ownership, the higher the probability of achieving high growth. These results are only partly in line with the BAM predictions and hence with our hypotheses, according to which family decisionmakers tend to adopt a conservative strategy to preserve and enhance the family's affective endowment. Furthermore, the more they control the business, the more they are concerned about the potential loss of this endowment (Wiseman and Gomez-Mejia, 1998; Gomez-Mejia et al., 2011). Indeed, it appears that loss aversion is mitigated when ownership is mostly or entirely in the hands of the family. One possible explanation is that the more the ownership is in the hands of the family, the more the family will seek to preserve its affective endowment through transgenerational control, namely "to preserve the firm for the family and its later generations" and "ensure continuity across generations" (Miroshnychenko et al., 2020: 3-4). When the family SME pursues a futureorientation, family SMEs are more likely to "embrace a more growth-oriented culture" (Miroshnychenko et al., 2020: 4), hence the sustained commitment in the whole organisation to achieve high growth. That said, our results indicate that it might be interesting to further explore the facets of family ownership (i.e., beyond shareholding) to fully understand the cognitive processes underlying high-growth patterns. Some interesting factors to examine are the number of generations involved in ownership, the degree to which family owners are active in the business, and their household structure (Aldrich et al., 2021; Campopiano et al., 2020).

Furthermore, we consider that the cognitive assessment of high-growth patterns of family SME decision-makers may vary depending on the organisational contingencies at play when the decision is made, and thus include in our model one such contingencies, namely the availability of slack. We hypothesise and find that the availability of HDS(LDS) strengthens(weakens) the negative relationship between being a family SME and the likelihood of high growth. We argue the same for family SMEs with higher levels of family ownership or with a family CEO. The results support our hypotheses for the overall sample. In particular, we observe that the moderating effect of LDS

reverses the relationship between family control and the probability of achieving high growth, so that when LDS is available, family SMEs are more likely to achieve high growth than non-family SMEs. Recalling that LDS is here measured as the ratio between total liabilities and total equity, we argue that bringing in other voices or involving external stakeholders in the decision-making process could lead to revisiting family- vs business-centred goals, hence a highly beneficial effect on the likelihood of high growth. We find a different role of slack when looking at the subsample of family SMEs. First, the availability of slack does not significantly moderate the family ownership effect. This might imply that slack does not necessarily affect the cognitive assessment of high-growth patterns in family SMEs with higher levels of family ownership. These results further support our intuition that in family SMEs, the degree of family ownership per se is not enough to fully capture how decisions are made (Daily and Thompson, 1994; De Massis et al., 2018). Second, in the case of family SMEs with a family CEO, the moderating role of slack is the opposite than for the overall sample. These results might indicate additional nuances related to family CEOs. In fact, the appointment of a family member to the CEO position, often seen as a nepotistic promotion (Miller et al., 2014), is likely to enact unity and consistency of purpose, together with the security inherent in family affiliation (Ireland and Webb, 2007; Webb et al., 2010). This result is in line with Rasmussen et al. (2018) showing that family involvement in the board together with the presence of a family CEO generate loyalty and trust, which might encourage family decision-makers to embrace explorative high-growth patterns. Notwithstanding the negative family CEO effect mentioned above, family SMEs with a family CEO might benefit more from the availability of HDS, as it induces a more explorative growth logic (product expansion) than LDS. Other typologies of slack beyond HDS and LDS, as well as different organisational contingencies, such as social or historical performance feedback, should be considered to more deeply explore this relationship.

Overall, our results suggest that further investigation is needed to better understand how the configurations of family control in terms of ownership, governance, management, and related nuances, affect family SME engagement in high-growth patterns, and hence their likelihood of achieving high-growth.

The originality of our work with respect to the slack debate is that while other studies address the role of family control and slack exploitation on firm performance, such as profitability (Liu et al., 2011; Ju and Zhao, 2009), we investigate high growth as a particular organisational outcome. Given their beneficial effects, high-growth patterns are promising for firms and the overall economic system, but are also demanding and uncertain (Demir et al., 2017; De Santola and Gulati, 2017; Beaver, 2002; Markman and Gartner, 2002). This is why family decision-makers associate

high growth with a loss of affective endowment and hence avoid it, especially when in the CEO position. Furthermore, other studies have connected slack to high-growth patterns (e.g., Moreno and Casillas, 2007) by emphasising the role of idle resources (measured by asset turnover) on growth trajectories. Our work embraces and extends these studies by considering HDS and LDS, and their idiosyncratic effects as predictors of high growth in family SMEs.

Contributions to literature

We believe this article offers several contributions to the debate on high growth in family and nonfamily SMEs. First, we respond to the call for research on the role of different governance regimes for high growth in family and non-family SMEs (O'Regan et al., 2006; Wright and Stigliani, 2013; Cruz and Nordqvist, 2012; Rasmussen et al., 2018). Our approach moves beyond the scarce and inconclusive evidence of the impact of family control on high growth. On the one hand, complementing recent studies on high growth in family firms and building on the family firm heterogeneity debate (Daspit et al., 2021), we provide evidence of the role of two nuances of family control, namely degree of family involvement in ownership and presence of a family CEO, to explain under which circumstances family SMEs frame high growth as both feasible and desirable. On the other hand, the role of slack in moderating the main relationship emphasises the need to consider the organisational contingencies at play when the decision is made, besides the governance configuration, to understand how family SMEs cognitively assess high-growth patterns. The fact that being a family SME positively interacts with LDS indicates that there are conditions under which family control is not necessarily detrimental to high growth. Overall, our results suggest that the governance configuration and the availability of slack resources play a key role in family SMEs' high growth (Koryak et al., 2015; Wright and Stigliani, 2013).

Second, our work speaks to the literature on the organisational consequences of slack in small or private firms. This literature has recently focused on the internal and external contingencies that determine when slack is associated with positive or negative outcomes (Deb et al., 2017), including growth (Sheppard, 2020). In particular, the internal perspective refers to some governance configuration that facilitate value creation with slack, while others do not, and research is needed to shed light on such "context of value creation" (Kim and Bettis, 2014). By observing the joint effect of slack and our governance variables (i.e., family ownership and family CEO), we contribute to this literature. In particular, our results suggest that HDS amplifies the negative effect of family control, while LDS, when coupled with family control, yields positive effects. The view that family control is good with LDS and bad with HDS offers a novel perspective on the interrelation of resource discretion, managerial preferences (in this case, growth logics), and governance, suggesting situations where family control can be an asset rather than a liability.

Third, whereas prior studies on high growth predominantly focus on young firms (i.e., new ventures) (Demir et al., 2017), we complement the high-growth and scale-up debate by focusing on SMEs operating for at least five years at the start of the observation period. We believe that studying more established small and private firms might elucidate the organisational and strategic dilemmas of high growth, such as top management team turnover, cultural shift, and professionalisation (De Santola and Gulati, 2017).

Fourth, by using a pan-European sample of firms, we extend studies analysing high growth in a dominant US-centric approach (Demir et al., 2017; Teal et al., 2003), as well as the scarce studies using European samples, such Rasmussen et al. (2018) on Norwegian firms, Bjuggren et al. (2013) on Swedish firms, Barbero et al. (2011) on Spanish entrepreneurial firms, and Moreno and Casillas (2007) on a similar sample from Andalusia. We show that high growth is a non-negotiable phenomenon in Europe and in family SMEs, offering a robust illustration of the conditions under which high growth in Europe occurs. Given the contribution of high-growth firms to job creation, our work is particularly timely and appropriate to the scholarly debate. In particular, European research has the potential to provide fresh contributions to high-growth research and practice, even in the United States (Welter and Latsch, 2008). The distinctiveness of the European configuration of institutional factors, such as labour market development, risk perception, culture, and bankruptcy laws, act as contingencies to entrepreneurial processes (Armour and Cumming, 2008), hence likely to alter the antecedents and consequences of high-growth patterns. Research on entrepreneurship and family business in a European perspective might therefore be particularly relevant, enhancing our understanding of the phenomena, such as high growth, and leading to important policy considerations (Bravo-Biosca, 2011).

Limitations and future research directions

Our study is not without limitations, which we believe open avenues for future research. First, future studies could capture family control along multiple dimensions (cf. the F-PEC scale of Klein et al., 2005), including family management, board and board chair presence (Banerjee et al., 2020), generational involvement (Kellermanns and Eddleston, 2004), and ownership dispersion (Gersick et al., 1997; Schulze et al., 2003). Second, future studies could draw more explicitly on the willingness-ability perspective of family firm distinctiveness (De Massis et al., 2014), specifically measuring the personalism, particularism, and parsimony attributes accompanying family control to further assess the family firm and high-growth pattern relation. Third, in this article, we focus on the effect of family control on the probability of achieving high growth measured by sales and employment. However, it would be interesting to explore other outcomes considered in the growth literature, such as growth modality, accounting for organic vs. acquisition-based growth (McKelvie

and Wiklund, 2010), or different growth logics (Porac et al., 2002). Fourth, to generate a richer and more in-depth understanding of high-growth trajectories, future research could rely on alternative methods. Indeed, qualitative methods might allow further examining how and why different types of family SMEs diverge in the anatomy of their high-growth behaviour. Instead, a longitudinal dataset tracking the growth performance of cohorts of firms over their lifecycle might ease the investigation of growth paths (Anyadike-Danes and Hart, 2018; Anyadike-Danes et al., 2015; Hart et al., 2021). Finally, this study has provided theoretical reasons for the relationship between family control and high-growth patterns by combining behavioural perspectives of the internal dynamics of family SMEs. We encourage future scholars to extend our theoretical interpretation by studying the effects of firm context (e.g., heterogeneity of competitive environments; Aldrich, 1979) on the relationships posited (Wright and Stigliani, 2013). To this end, we encourage scholars to include the contingent effect of environmental (Casillas et al., 2010) and institutional dimensions (Chen et al., 2013) on family SMEs' high growth. In fact, recent contributions have argued that Europe is a favourable context to advance entrepreneurship and family business research due to the diversity of cultural settings and the prevalence of the cultural influence on socio-economic processes (Welter and Lasch, 2008; Strike, 2012).

Contributions to practice

With increasing awareness in the business and scholarly domain of the key role that family SMEs play in the economic system and in society at large, our results also have practical implications. For instance, the positive coupling between family ownership and LDS might inform family business practitioners on accumulating and exploiting LDS, which is more likely to enable high growth in this type of firm. Family business practitioners should also be more cautious about HDS, as it might facilitate family-centred preferences, induce inefficiencies, and alter the natural growth preference of family firms. Looking at family SMEs more in depth, our results show that family owners and advisors should consider some aspects of family control, eventually acting upon these to favour or impede high growth. For example, appointing a non-family CEO might be the right choice when willing to pursue high-growth patterns.

Conclusion

While the contribution of high-growth SMEs to economic development is not under dispute, knowledge of the conditions under which such growth patterns occur in SMEs is limited and inconclusive. The role of governance configurations and family control merit further inquiry. The model we propose assumes that: (i) family SME leaders are averse to the loss of their affective

endowment; (ii) the sustained commitment and related organisational dilemmas and uncertainty inherent in high growth lead family SMEs to refrain from high growth due the potential loss of the family's affective endowment (H1a); (iii) the perceived loss associated with high growth is even stronger for family SMEs with higher levels of family control (H1b and H1c); and (iv) family leaders frame high growth according to the organisational contingencies at play when the decision is made, namely type of slack resources and their availability (H2a-c and H3a-c). Observing a sample of 39,631 European family SMEs over a 13-year period, we find that family SMEs are less likely to achieve high growth compared to their non-family counterparts, while HDS and LDS moderate this relationship in a negative and positive way, respectively. We also show that the nuances of family control matter in explaining the circumstances under which some family SMEs achieve high growth while others do not. Finally, this work contributes to our understanding of high growth SMEs, shedding light on the circumstances under which family SMEs can leverage their governance configuration and slack resources to achieve high growth.

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 Table 1. Summary of the variables.

Variable	Description					
High growth	Dummy variable equal to 1 if the annualised growth rate in employees or turnover is greater than 20% per annum over a 3-year period (t ₁ -t ₃).					
Family SME	Dummy variable indicating SMEs with at least 50% of shares owned by a family and more than one family member on the board or in the top management team.					
Family CEO	Dummy variable, calculated only for family SMEs, with value 1 when the CEO is a family member.					
Family ownership	Continuous variable, calculated only for family SMEs, ranging from value 50.1% to 100% calculated as the percentage of shares controlled by the family and its members.					
High discretion slack (HDS)	Continuous variable calculated as the working capital of the firm in year t ₀ (i.e., current assets - current liabilities), centred by industry at 4 digits (i.e., HDS firm - industry average HDS).					
Low discretion slack (LDS)	Continuous variable calculated as the debt-to-equity ratio in year t ₀ (i.e., total liabilities/total equity), centred by industry average at 4 digits (i.e., LDS firm - industry average LDS).					
Firm age	Continuous variable calculated as the number of years the firm has existed at t ₀ .					
Firm size	Continuous variable calculated as turnover at t ₀ .					
Firm performance	Continuous variable calculated as net income at t ₀ .					
Country	5 dummy variables indicating the country in which the firm is established. Spain is the reference category.					
Year	13 dummy variables indicating the year in which the high-growth event is observed (t ₃). The year 2007 is the reference category.					
Industry	10 dummy variables indicating the macro-industry in which the firm operates. Agriculture, forestry and industry is the reference category.					

 Table 2. Descriptive statistics.

		Total firms	Family SMEs	Family SMEs (%)	High-growth firms	High-growth firms (%)	High-growth family SMEs	
Full set	DE	39 676	18 538	46.72%	2 515	6.34%	1 286	
	ES	67 184	22 202	33.05%	6 686	9.95%	2 008	9.04%
	FR	47 660	15 644	32.82%	3 204	6.72%	1 033	6.60%
	GB	68 929	28 591	41.48%	6 328	9.18%	2 813	9.84%
	IT	54 564	20 302	37.21%	4 195	7.69%	1 461	7.20%
	Total	278 013	105 277	38.26%	22 928	7.98%	8 601	7.92%
2007	DE	10	3	30.00%	10	0.00%	0	0.00%
	ES	4 537	1 900	41.88%	4 537	16.69%	295	15.53%
	FR	2 764	839	30.35%	2 764	10.46%	75	8.94%
	GB	3 448	436	12.65%	3 448	13.46%	51	11.70%
	IT	2 936	1 290	43.94%	2 936	14.82%	177	13.72%
2008	DE	99	26	26.26%	99	17.17%	3	11.54%
	ES	4 882	2 033	41.64%	4 882	15.06%	294	14.46%
	FR	2 988	906	30.32%	2 988	10.07%	72	7.95%
	GB	3 789	494	13.04%	3 789	10.64%	38	7.69%
	IT	3 182	1 433	45.03%	3 182	15.34%	214	14.93%
2009	DE	1 116	359	32.17%	1 116	8.33%	% 1 286 % 2 008 % 1 033 % 2 813 % 1 461 % 8 601 % 295 % 51 % 177 % 3 % 294 % 214 % 214 % 216 % 37 % 157 % 157 % 163 % 39 % 167 % 145 % 147 % 147 % 147 % 147 % 147 % 147 % 158 % 158 % 158 % 158 % 105 % 105 % 105 %	6.13%
	ES	6 107	2 489	40.76%	6 107	9.04%	216	8.68%
	FR	4 038	1 165	28.85%	4 038	6.76%	70	6.01%
	GB	5 932	868	14.63%	5 932	6.36%	37	4.26%
	IT	4 247	1 913	45.04%	4 247	9.80%	157	8.21%
2010	DE	3 717	1 553	41.78%	3 717	8.18%	128	8.24%
	ES	5 971	2 468	41.33%	5 971	6.72%	163	6.60%
	FR	4 200	1 220	29.05%		5.69%	63	5.16%
	GB	6 279	940	14.97%	6 279	5.84%	39	4.15%
	IT	4 540	2 036	44.85%	4 540	10.20%	167	8.20%
2011	DE	5 000	2 182	43.64%	5 000	8.32%	192	8.80%
	ES	6 373	2 614	41.02%		5.21%	145	5.55%
	FR	4 437	1 297	29.23%		5.90%		6.32%
	GB	6 650	1 038	15.61%		6.60%		5.20%
	IT	5 068	2 297	45.32%	5 068	7.99%	147	6.40%
2012	DE	5 585	2 432	43.55%		8.16%	2 008 % 1 033 % 2 813 % 1 461 % 8 601 % 295 % 75 % 51 % 72 % 38 % 214 % 22 % 216 % 70 % 157 % 163 % 39 % 167 % 145 % 145 % 147 % 147 % 147 % 147 % 158 % 158 % 158 % 105 % 105 % 105 % 107 % 107 % 107 % 107 % 108 % 109 % 100	7.85%
	ES	6 220	2 522	40.55%		5.39%		
	FR	4 443	1 317	29.64%		5.99%		
	GB	6 662	1 047	15.72%		7.67%		
	IT	5 079	2 286	45.01%		7.72%		
2013	DE	4 523	2 527	55.87%		6.35%		
	ES	5 022	1 565	31.16%		5.28%		
	FR	3 681	1 818	49.39%		5.57%		
	GB	5 510	3 990	72.41%		7.46%		7.39%
	IT	6 159	1 908	33.07%	6 159	6.51%		
2014	DE	4 863	1 871	38.47%		3.99%		
	ES	5 137	1 625	31.63%		7.98%		7.82%
	FR	3 583	1 058	29.53%		6.61%		6.71%
	GB	5 471	3 967	72.51%	5 471	14.26%		
	IT	7 238	1 530	21.14%	7 238	5.31%		4.05%
2015	DE	4 571	1 832	40.08%	4 571	3.26%	99	5.40%

	ES	4 841	1 587	32.78%	4 841	11.80%	168	10.59%
	FR	3 570	1 107	31.01%	3 570	6.55%	70	6.32%
	GB	5 094	3 881	76.19%	5 094	15.00%	586	15.10%
	IT	7 320	1 543	21.08%	7 320	6.04%	74	4.80%
2016	DE	4 404	1 848	41.96%	4 404	4.65%	125	6.76%
	ES	4 547	1 587	33.86%	4 547	13.55%	26	12.50%
	FR	3 546	1 134	31.98%	3 546	6.20%	90	7.94%
	GB	5 087	3 334	65.54%	5 087	11.48%	364	10.92%
	IT	2 685	1 488	55.42%	2 685	5.88%	81	5.44%
2017	DE	1 979	1 347	68.06%	1 979	7.28%	102	7.57%
	ES	4 488	1 586	34.40%	4 488	14.55%	12	14.81%
	FR	3 528	1 139	32.28%	3 528	6.80%	76	6.67%
	GB	5 023	3 178	63.27%	5 023	8.60%	264	8.31%
	IT	2 684	1 494	55.66%	2 684	5.81%	93	6.22%
2018	DE	2 064	1 386	67.15%	2 064	7.85%	114	8.23%
	ES	4 540	1 586	34.93%	4 540	11.72%	163	10.28%
	FR	3 495	1 152	32.96%	3 495	6.81%	91	7.90%
	GB	5 016	3 112	62.04%	5 016	7.22%	239	7.68%
	IT	2 628	1 502	57.15%	2 628	4.64%	71	4.73%
2019	DE	1 745	1 172	67.16%	1 745	5.04%	69	5.89%
	ES	4 519	1 524	33.72%	4 5 1 9	11.66%	169	11.09%
	FR	3 387	1 492	44.05%	3 387	5.90%	94	6.30%
	GB	4 968	2 306	46.42%	4 968	8.74%	208	9.02%
	IT	2 573	1 490	57.91%	2 573	4.39%	60	4.03%

Table 3. Mean, standard deviations, and correlations.

	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8
1. High growth	.082	.275	0	1	.082							
2. Family SME (dummy)	.379	.485	0	1	.379							
3. Family ownership (%) ^a	.936	.132	.5001	1	.936	٠						
4. Family CEO (dummy) ^a	.123	.329	0	1	.123	·	-0.007					
5. High Discretion Slack (t ₀)	476	8.506	-34.36	68.916	476	-0.005	0.029	-0.001				
6. Low Discretion Slack $(t_0)^b$	145.933	1106.6	-3138.05	6761.68	145.93	-0.011	0.012	0.045	0.022			
7. Turnover $(t_0)^b$.084	1.297	712	399.840	.084	0.028	0.014	0.022	0.009	0.094		
8. Net Income $(t_0)^b$.0016	.745	-22.980	174.878	-0.102	0.009	0.002	0.012	-0.007	0.013	0.094	
9. Firm Age (t ₀)	22.295	17.338	5	368	22.295	0.055	-0.035	0.131	-0.067	0.099	0.037	0.004

Notes: Correlations with values of |.011| or greater are significant at p < 0.05. ^a Family SME sub-sample only; ^b Thousand Euro.

 Table 4. Rare event logistic regression. Full-sample analyses.

High growth	1	2	3
Family SME		-0.041*	-0.054**
		(0.020)	(0.020)
ligh Discretion Slack (t ₀) (HDS)		-0.143***	-0.212***
		(0.012)	(0.012)
ow Discretion Slack (t ₀) (LDS)		0.040***	0.055***
		(0.008)	(0.008)
amily SME * HDS			-0.360***
•			(0.022)
family SME * LDS			0.143***
			(0.016)
Curnover (t ₀)	-0.084*	0.011	0.009
	(0.038)	(0.014)	(0.006)
Net Income (t ₀)	-0.127**	-0.121**	-0.119**
	(0.042)	(0.039)	(0.038)
Firm Age (t ₀)	-0.032***	-0.030***	-0.031***
5 (4)	(0.001)	(0.001)	(0.001)
taly	-0.142***	-0.197***	-0.211***
	(0.032)	(0.032)	(0.032)
Germany	-0.354***	-0.401***	-0.405***
5 -11	(0.039)	(0.038)	(0.038)
France	-0.406***	-0.452***	-0.450***
	(0.037)	(0.037)	(0.037)
Great Britain	-0.215***	-0.254***	-0.252***
Sieur Britain	(0.033)	(0.032)	(0.032)
Year 2008	-0.091***	-0.087***	-0.088***
2000	(0.026)	(0.026)	(0.026)
Year 2009	-0.574***	-0.564***	-0.570***
	(0.032)	(0.032)	(0.032)
Year 2010	-0.655***	-0.647***	-0.656***
Cui 2010	(0.034)	(0.034)	(0.034)
Year 2011	-0.712***	-0.708***	-0.715***
- Cul 2011	(0.034)	(0.034)	(0.034)
Year 2012	-0.642***	-0.639***	-0.642***
Cui 2012	(0.034)	(0.034)	(0.034)
Vear 2013	-0.640***	-0.634***	-0.630***
Cui 2015	(0.037)	(0.038)	(0.038)
Vear 2014	-0.333***	-0.331***	-0.326***
cai 2014	(0.035)	(0.035)	(0.035)
Year 2015	-0.181***	-0.179***	-0.173***
- Cui 2013	(0.035)	(0.035)	(0.035)
Year 2016	-0.188***	-0.193***	-0.193***
1 Cui 2010	(0.037)	(0.037)	(0.037)
Year 2017	-0.155***	-0.163***	-0.165***
. Cui 201/	(0.037)	(0.037)	(0.037)
Vear 2018	-0.268***	-0.277***	-0.274***
Cai 2010	(0.038)	(0.039)	(0.039)
Year 2019	-0.225***	-0.237***	-0.235***
1 Cai 2019			
Zamatant	(0.039)	(0.039)	(0.040)
Constant			-1.868***
N7	(0.053)	(0.054)	(0.054)
V	278,013	278,013	278,013

Notes: +p<0.1; *p<0.05; **p<0.01; *** p<0.001; the 10 industry dummies are not reported but are available upon request.

 Table 5. Rare event logistic regression. Family SME sub-sample.

High growth	1	2	3	4	5
Family ownership (%)		0.509***	0.526***		
P. 11 CPO		(0.137)	(0.137)	0. 600 totals	0.000
Family CEO				-0.692***	-0.686***
High Discretion Slack (t ₀) (HDS)		-0.423***	-0.526**	(0.065) -0.418***	(0.065) -0.291***
High Discretion Stack (ti) (HDS)		(0.019)	(0.164)	(0.019)	(0.023)
Low Discretion Slack (t ₀) (LDS)		0.134***	0.302**	0.134***	0.023)
(0) ()			****	(0.012)	(0.029)
Family ownership * HDS			0.108	, ,	,
			(0.171)		
Family ownership * LDS			-0.176		
F '1 CEO * HDC			(0.107)		0.212444
Family CEO * HDS					0.313***
Family CEO * LDS					(0.045) -0.229***
Talling CLO LDS					(0.058)
Turnover (t ₀)	-0.099+	0.005	0.005	0.005	0.005
	(0.052)	(0.003)	(0.003)	(0.003)	(0.003)
Net Income (t ₀)	-0.150**	-0.113**	-0.113**	-0.110**	-0.111**
	(0.053)	(0.037)	(0.037)	(0.037)	(0.037)
Firm Age (t ₀)	-0.028***	-0.024***	-0.024***	-0.023***	-0.023***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Italy	-0.153**	-0.332***	-0.334***	-0.314***	-0.321***
	(0.051)	(0.053)	(0.053)	(0.053)	(0.053)
Germany	-0.123*	-0.259***	-0.258***	-0.152**	-0.157**
Emanaa	(0.057) -0.276***	(0.056) -0.364***	(0.056) -0.363***	(0.056) -0.388***	(0.056) -0.395***
France	(0.059)	(0.060)	(0.060)	(0.060)	(0.060)
Great Britain	0.046	-0.044	-0.044	-0.019	-0.025
Great Birtain	(0.050)	(0.049)	(0.049)	(0.049)	(0.049)
Year 2008	-0.055	-0.054	-0.055	-0.055	-0.056
	(0.047)	(0.047)	(0.047)	(0.047)	(0.047)
Year 2009	-0.617***	-0.609***	-0.608***	-0.615***	-0.616***
	(0.059)	(0.059)	(0.059)	(0.059)	(0.059)
Year 2010	-0.678***	-0.687***	-0.687***	-0.708***	-0.709***
	(0.060)	(0.061)	(0.061)	(0.061)	(0.061)
Year 2011	-0.706***	-0.721***	-0.720***	-0.745***	-0.747***
W 2012	(0.059)	(0.059)	(0.059)	(0.059)	(0.060)
Year 2012	-0.688*** (0.060)	-0.696*** (0.060)	-0.695*** (0.060)	-0.722*** (0.060)	-0.723*** (0.060)
Year 2013	-0.821***	-0.838***	-0.838***	-0.751***	-0.748***
1 car 2015	(0.063)	(0.063)	(0.063)	(0.063)	(0.063)
Year 2014	-0.345***	-0.358***	-0.357***	-0.285***	-0.285***
	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)
Year 2015	-0.238***	-0.253***	-0.253***	-0.180**	-0.180**
	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)
Year 2016	-0.373***	-0.392***	-0.391***	-0.313***	-0.312***
	(0.063)	(0.064)	(0.064)	(0.064)	(0.064)
Year 2017	-0.479***	-0.509***	-0.508***	-0.440***	-0.440***
Voor 2018	(0.066)	(0.067)	(0.067)	(0.067)	(0.067)
Year 2018	-0.424***	-0.464*** (0.064)	-0.464*** (0.064)	-0.396***	-0.397*** (0.064)
Year 2019	(0.063) -0.396***	(0.064) -0.442***	(0.064) -0.442***	(0.064) -0.376***	(0.064) -0.376***
1 Cat 2017	(0.065)	(0.065)	(0.065)	(0.065)	(0.065)
Constant	-5.174***	-5.677***	-5.694***	-5.572***	-5.571***
Consum	(0.710)	(0.722)	(0.722)	(0.710)	(0.710)
N	105,277	105,277	105,277	105,277	105,277

Notes: +p<0.1; *p<0.05; **p<0.01; *** p<0.001; the 10 industry dummies are not reported but are available upon request.

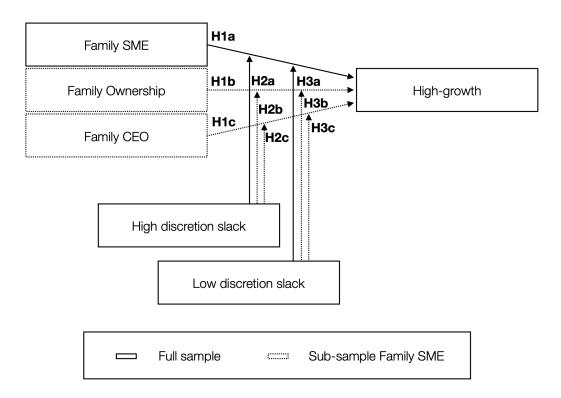


Figure 1. The conceptual framework

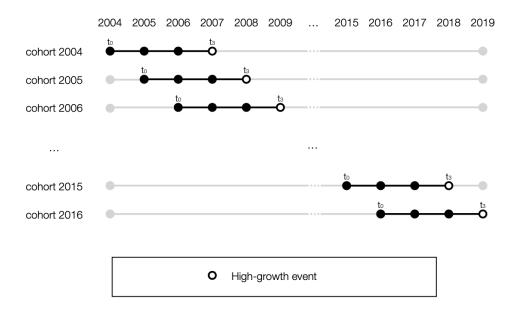


Figure 2. Data structure

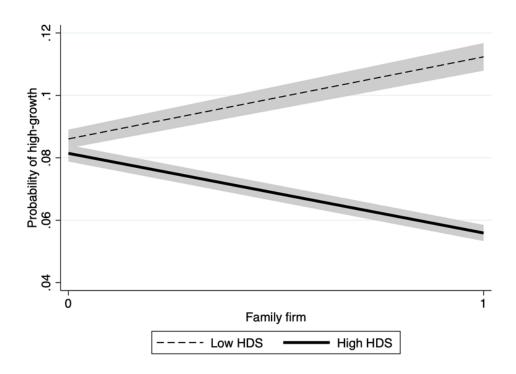


Figure 3a. Effect of family control and high discretion slack on high-growth probability.

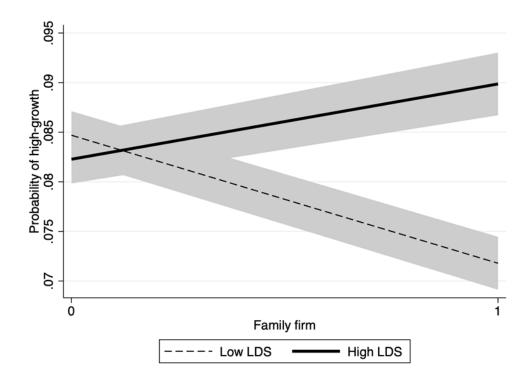


Figure 3b. Effect of family control and low discretion slack high-growth probability.

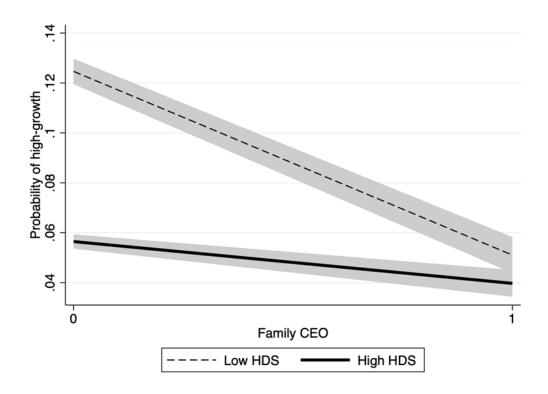


Figure 4a. Effect of family CEO and high discretion slack on high-growth probability.

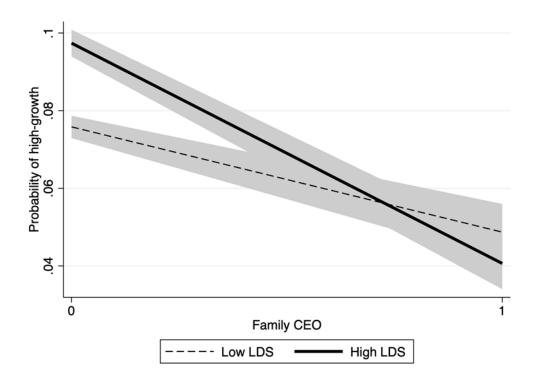


Figure 4b. Effect of family CEO and low discretion slack on high-growth probability.