Is the Irish SMEs growth related to Entrepreneurial Management in Stevenson's perspective?

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Acknowledgement

I acknowledge with thanks the assistance of:

Mr. Clinton McManus

Mr. Robert McComish

Everest Language School

Dr. Anne-Marie Connolly

Everest Language School

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National College of Ireland

Submission of Thesis and Dissertation

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List of Abbreviations

CSO	Central Statistics Office
EC1	Entrepreneurial Culture 1
EC2	Entrepreneurial Culture 2
EC3	Entrepreneurial Culture 3
GO1	Growth Orientation 1
GO2	Growth Orientation 2
MS1	Management Structure 1
MS2	Management Structure 2
MS3	Management Structure 3
MS4	Management Structure 4
MS5	Management Structure 5
RO1	Resource Orientation 1
RO2	Resource Orientation 2
RP1	Reward Philosophy 1
RP2	Reward Philosophy 2
SME	Small Medium-sized Enterprise
SO1	Strategic Orientation 1
SO2	Strategic Orientation 2

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Introduction

The main purpose of the paper is to investigate the relationship between Irish Small Medium-sized Enterprises (SMEs) growth and Entrepreneurial management specifically in Stevenson's entrepreneurship notion. Irish economy enjoys a rapid growth in Europe (European Commission, 2018) and it is considered that one of the main reasons is driven by large foreign corporates that contribute to its economy. As other countries the Irish SMEs are dominant in an economy, accounts for 99.8% of all active firms (CSO, 2014). However, some critiques point out that the economy heavily relies on multinationals; while the Irish SMEs generate only 56% of total revenue in the business economy (CSO, 2014). It is apparent that a proportion of turnovers is relatively low, given the dominance of SMEs in the Irish economy.

An analysis of Small Firms Association (2018) draws attention to poor management practice in Irish domestic firms in relation to business growth, and their research shows that management score of Ireland ranked third bottom among developed countries (Appendix). This implies that Irish SMEs need better management practices, which will help enterprises be more innovative and encouraging for business growth and its productivity (Small Firms Association, 2018). Additionally, according to Zehir *et al* (2016), in the fast-moving business environment, firms are required to give emphasis on entrepreneurial activities for evolution and growth. Entrepreneurial orientation in management allows to identify potential opportunities that can create a competitive advantage, differing from other players (Shepherd and Wiklund, 2005).

Entrepreneurial management has received considerable attention as a corporate strategy because such management enables firms to achieve sustainable development along with innovative entrepreneurial activities (Hamdan, 2019). In spite of the fact that the entrepreneurial spirit was originated in a start-up of a new business; a great deal of founders of SMEs lack of theoretical understanding of entrepreneurial management (Naldi *et al*, 2015). Therefore, this research attempts to contribute to the knowledge of entrepreneurial management by conducting a regression analysis whether Stevenson's entrepreneurship (Stevenson, 1983) can empirically affect the growth of Irish SMEs. The results of the study reveal that there is a positive relationship between entrepreneurial management and the creation of the growth in Irish SMEs at some extent but not all, based on Stevenson's Entrepreneurial Management practices.

The paper consists of four sections: a literature review, methodology and analysis & findings and conclusion.

The first section overviews different aspects of SMEs, growth and entrepreneurial management examining the definition of SMEs in the European context, growth of SMEs in a transition period, growth measures, Irish SMEs' tendency for growth, entrepreneurial management and Stevenson's six dimensions of Entrepreneurial Management. The second section focuses on the methodology of this study and positivism approach has been used through quantitative data analysis. The paper entails how Stevenson's conceptualization will be answered regarding the growth of Irish SMEs, presenting the rationales of adapting Stevenson's framework to measure entrepreneurial management. It also discusses a business growth measure as revenues/sales and employment number and defines dependent variables and independent variables of this research. After identifying the sample data for the research, the statistical analysis in correlation is firstly carried out, and then a regression analysis is followed for the analysis of the study. Accordingly, in the findings and analysis section, the impact of entrepreneurial management on SMEs growth in an Irish context is assessed. Finally, the last section ends with conclusion of the study.

Literature Review

Definition of SMEs

Theoretically, the concept of SMEs was refined by Bolton (1971) who provided three characteristics - 1) a small firm possessing small market shares 2) managed by its owners or part-owners through a personalised way of management structure and 3) owners making independent decisions freely from outside controlling/liking. To be more quantitative and measurable, countries frame SMEs by a given number of employees and annual turnovers/balance sheets. The definition of SMEs is of great importance as it gives a clear legal power. For instance, states aids, funds, and research & innovation subsidiaries are available for an enterprise's financial resources in the EU (European Commission, 2017). While the criteria vary across countries depending on their social and economic development (Karadag, 2015), the most frequently used definition of SMEs is according to the European Union (OECD, 2005).

Ireland, as a member state of the European Union, determines an SME as a Small Medium-sized Enterprise that has less than 249 employees and has either an annual turnover or an annual Balance Sheet not exceeding €50m and €43m respectively (European Commission, 2018). The enterprises are again divided into micro, small and medium enterprises and the categories are classified as follows in the table:

Figure 1. The classification of SMEs

SMEs	Number of staff	Turnover/ Balance sl	heet
Micro	<10	≤€2 m	≤€2 m
Small	<50	≤€ 10 m	≤€ 10 m
Medium	<250	≤€ 50 m	≤ € 43 m

The current EU definition of SMEs was set out in the Recommendation 2003/361, which came into effect in January 2005 (European Commission, 2017). The Commission has regularly monitored the SME definition up to 2014 and concluded that there is no revision needed. However, despite the constant evaluations of the framework, a revision of the

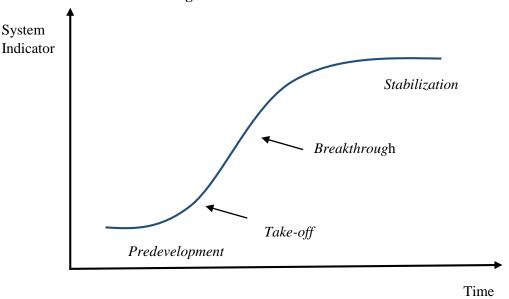
Recommendation was brought to the Commission's attention (European Commission, 2018). The fundamental reasons of re-evaluation are identified as follows. Firstly, financial weights of the EU have changed significantly since 2003. That is for the last 12 years ("e.g. inflation growth between 2003 and 2016 is 26.75%") (European Commission, 2017) but the definition has not been adapted in accordance with inflation rates (UEAPME, 2017). Secondly, a precise definition of SME has not been taken into account in legal situations. For example, a number of enterprises/ corporates used loopholes to benefit from public support over genuine SMEs taking advantage of vague definition. For equal treatment legal certainty of the SMEs definition seems to have been amended with regards to enterprises' support and finance (European Commission, 2017).

Irish SMEs growth in a transition period

The significant rationale why many small businesses fail is that they are not ready for change and/or there is little support for the change within the organisation (Kotter, 2007). Plante (2012) argues that this problem can be tackled by a management change from owners/entrepreneurs. In other words, small firms would be able to continue to grow sustainably when they understand a change in process and adapt an appropriate management style. Thus, I would like to present a change in process and strategic management in the following sections.

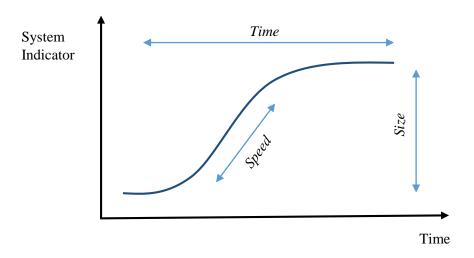
Change involves complex activities in a transitional period and companies must fit to the period to ensure better business performance through a business life cycle (Chang and Hsieh, 2011). So what processes are involved in a business life cycle? Rotmans *et al* (2001) defines a transition as 'a shift from a stable system through a period of relatively rapid change during which the system reorganizes irreversible into a new system again'. Transition is a long and structural process (Rotmans *et al*, 2001). There are four different domains - Predevelopment. Take-off, Breakthrough and Stabilization (Figure 2) (Loorbach and Rotmans, 2010); and the domains interrelate together over time, eventually reinforcing each other. Finally, it results in establishing a new system (Rotmans *et al*, 2001). Rotmans *et al* (2001) claims that a transition starts with a Predevelopment phase where a visible change does not exist and then it moves to a Take-off phase when there is a new structure/system under way. Afterwards a Breakthrough phase comes where a visible structure accelerates the change, then the phases finishes with a Stabilization where the speed of structural change reduces and a new equilibrium is reached (Rotmans *et al*, 2001).

Figure 2. Four Phases of Transition



In a transition theory, it should be noted that a transformation - from a Predevelopment phase to a Stabilization phase - is not characterized by either a quick or a linear process. There are three dimensions of speed, size and time period (Figure 3). For instance, when the time period of change is long over time, the volume of change would be relatively slow. Whereas, when the given time period of change is short, then the scale of change would be rapid. Not surprisingly, this indicates that a transition could be managed by owners/entrepreneurs depending on how fast, how big, and how long they want to change within a company excluding external environmental change.

Figure 3. Loorbach and Rotmans's Transition



Based on the theoretical knowledge, most SMEs would suffer from the Breakthrough phase in a transitional period. This is because there would be internal and external environmental uncertainty while there were lots of novel activities required for both employees and employers to be able to reach a new stabilization phase. As an owner/entrepreneur of an SME, they would need to articulate different systems for successful change, providing employees with 'learning process, diffusion and embedding process' within the organisation (Rotmans *et al*, 2001). Loorbach and Rotmans (2010) claim that the nature and speed of each transition phase is different, so modest short-term policies need to be used. Consequently, a firm at each domain will achieve gradual improvements as well as well-established adaptation in management for long-term orientation.

SMEs are susceptible to the complexity in internal and external environment due to the lack of effective management (Okręglicka *et al*, 2015). Bloom *et al* (2011) claims that Irish enterprises face challenges more in management practice compared to large multinationals. His finding also shows that Irish domestic firms have one of the lowest management practice scores ranking 20th among selected 21 countries - including Europe, the US, as well as developing countries.

In terms of a company's growth some studies show that a classical approach is to change management style from entrepreneurial management to professional management (Smith, 2003). However, given the characteristics of SMEs - small number of employees, informality, flexible culture, etc. (Flamholtz, 1986, cited in Smith, 2003), this may not always be the case that a conversion from entrepreneurial management to professional management is a right direction for its growth. Particularly, for micro and small enterprises. Although the number of workers are relatively small - less than 50, they are considered as crucial assets who possess the ability to develop competitiveness and innovation (Sartori *et al*, 2015) for business growth and success. Such characteristics are associated with entrepreneurial management rather than professional management, which deals with control programs, formal planning, and less focusing on individuals (Flamholtz, 1986).

Measures of Business Growth

Many of the academic authors have shown that entrepreneur characteristics affect the growth of SMEs (Wiklund *et al*, 2003; Wright *et al*, 2007; Unger *et al*, 2009). Such scholars, as many others, have used a growth measurement, such as sales/revenue, employees, profitability, assets, etc. However, it is noteworthy that firms growth has been viewed differently by practitioners and academic scholars. Traditionally numerous academic research studied growth

derived from financial analysis to measure accurately, which led to a positivistic approach in their literature, but Achtenhagen *et al* (2010) argues that for entrepreneurs, growth is a "more complex phenomenon—with a strong emphasis on internal development", which is 'a entrepreneurial concept' of growth. In other words, practitioners focus on more entrepreneurial plans (e.g., growth strategies and expansion planning) whereas scholars rather investigate outcome factors (e.g., revenue/turnover or employees). This is a clear indication that the gap between these measures should be filled and there is a need for qualitative growth metrics in academic research - such as innovation performance or growth intention for businesses. Having acknowledged this, some studies (Lau and Busenitz, 2001; Watson *et al*, 2003) using 'innovative' variables such as intentions/aspirations, have been criticised as to validity of such measures.

Based on literature reviews, they highlight that growth indicators must be used as multiple aspects rather than a single measure (Delmar, 1997); since the circumstances of a country differ. For instance, it is recommended to use the number of employment instead of turnovers/sales in the case of high inflation in an economy. In another case, such as when unemployment rates increase, it must be noted that an organisation which hires more is viewed positively as the firm experiences its growth (Gurbuz and Aykol, 2009). For validity of a growth measure, this study uses a common growth indicator - sales/revenues and employment numbers to identify the Irish SMEs growth.

Irish SMEs' Tendency for Growth

In the past Irish SMEs were reluctant to grow much (Irish Business Manuals Ltd, 1988), because of the failure in government expansionary fiscal policy then and the firms did not want to take risks during a problematic period (O'Hagan and O'Toole, 2017). The expansionary fiscal policy exacerbated the national debt and as a result of an unstable government, the unemployment rate substantially jumped as well as mass emigration making the economy worse off. Consequently, Irish entrepreneurial firms were hesitant to invest or expand their business in a weak economy.

During the Celtic Tiger (1994-2002) there was a big increase in manufacturing, industrial, and services enterprises. Yet, many multinationals thrived in the economy, and native small and medium-sized enterprises expanded their markets to overseas over the years (O'Hara, 2011).

Today Irish SMEs have more ambitious and positive attitude towards financial investment according to the SME Credit Demand survey in 2017 (Department of Finance,

2017). Behaviour & Attitude (2017) on behalf of the Department of Finance conducted the survey covering 1,500 SMEs over six months from October 2016 to March 2017, and finding out that the main reasons for growth were 'business expansion, working capital and new equipment' (Department of Finance, 2017).

Entrepreneurship and Entrepreneurial management

As the French word 'entrepreneur' means "starting a business", many people associate entrepreneurship with innovation and small businesses/ start-ups. It is clear that lots of start-ups appear in markets with novel resources having entrepreneurial spirit.

The context of entrepreneurship from the classical view is not much different to what we think nowadays. Entrepreneurship is to do with creating an opportunity in economic system with innovative resources (Schumpeter, 1934). Stevenson and Jarillo (1990, p.23) define entrepreneurship as "the process by which individuals - either on their own or inside organizations - pursue opportunities without regard to the resources they currently control". Today's essence of entrepreneuring is having a rapid response to dynamic market and external environment (Duit and Kleingeld, 2013). Kuratko states that "all of the macro and micro positions of entrepreneurial thought must be considered while recognizing and seizing opportunities that can be converted into marketable ideas capable of competing for implementation in today's economy" (Kuratko, 2017, p.20).

When examining these definitions, we should note that the common trait appears as an adaptability to changing conditions and entrepreneurship/ entrepreneurial orientation is not merely limited to small-sized firms or start-ups. Entrepreneurial engagement is seen by both individual and corporate conditions (Kosa and Mohammed, 2017). Some examples of successful corporates that manage their businesses with entrepreneurial culture are Starbucks, Amazon, eBay. In contrast, there are also small enterprises that do not pursue to be entrepreneurial but professional (Flamholtz and Randle, 2007).

Keeping this in mind, entrepreneurial management largely focuses on informal planning and decentralised control, innovation, 'family'-oriented culture (Flamholtz, 1986); opportunity seeking behaviour (Gurbuz and Aykol, 2009). These characteristics enable firms to give competitive advantages including high productivity of employees, increasing sales and profitability (Huselid, 1995; Becker and Gerhard, 1996). In addition, entrepreneurial orientation helps to build strong bonds with employees; as well as encourage employees' creativity and innovation (Kuratko, 2017).

Stevenson's Entrepreneurial Management

In order to measure entrepreneurial management in a firm level, past empirical studies have widely used Stevenson's (1983) entrepreneurship framework. He conceptualised entrepreneurial management behaviours along with six dimensions - *Strategic Orientation-2*, *Commitment of Opportunity, Commitment of Resources-2*, *Control of Resources, Management Structure-5*, *Reward Philosophy-2* and identified two other important dimensions - *Growth Orientation-2* and *Entrepreneurial Culture-3* later (Stevenson and Jarillo, 1990). He distinguishes two types of managerial behaviours - entrepreneurial behaviour from/by promoter businesses and administrative behaviour from/by trustee firms.

The first two dimensions are related to strategic nature (Brown et al, 2001). Strategic Orientation displays that a business is driven by formulation of strategy to exploit an existing opportunity. The strategy is created not only by opportunity but also by the resources the business has (Gurbuz and Aykol, 2009). Conversely, trustee firms focus on the current situation, so they are not willing to leap further beyond their present condition but control their resources (Stevenson, 1983). Commitment of Opportunity is another dimension that is also concerned with the resources businesses control. After creating a strategy at the Strategic Orientation, entrepreneurial focus firms (promoters) will commit to take action rapidly at this dimension. On the other hand, administrative focus firms (trustees) are more 'analysis-orientated' and negotiate strategies at every step to minimise risks (Brown et al, 2001).

In Stevenson's views, promoter firms are resource-oriented for opportunity at the *Commitment of Resources* dimension. Investments in new resources are required to pursue given opportunities. However, in trustees' firms, commitment levels to resources are a lot less than they are in promoter firms. They believe that the creation of resources makes it difficult to allocate current ones and creates pressures on managers since large commitment is required as a result of a thorough analysis in advance. (Brown *et al*, 2001). Later, Brown *et al* (2001) combined *Commitment of Opportunity* with *Commitment of Resources* and reframed to a single dimension *Resource Orientation*.

In terms of *Control of Resources* dimension, promoter businesses have an opportunistic view of resources. They tend to manage the required resources and use them to their optimum. Particularly, when they see new opportunities, promoters are skilled at renting resources owned by other firms or other people (Gurbuz and Aykol, 2009). The trustee businesses, on the other hand, prefer to utilize and control resources favouring top management's ownership.

The *Management Structure* of entrepreneurial organisations maintain flat, multiple and informal structures (Brown *et al*, 2001). This is because promoters use resources outside formal

firms, and thus they are designed to be flexible as well as to improvising to the capacities and strategy on an ad-hoc basis (Etemad and Lee, 2003). While administrative management is characterized by "defined lines of authority, highly routinized work, systems designed to measure productivity, etc." (Brown *et al*, 2001, p956).

In an entrepreneurially managed firm, *Reward Philosophy* is important. A reward system enables the organisation to compensate individuals who contribute to value (wealth) creation. The evaluation is based on one's independent performance (Stevenson, 1983). On the contrary, administratively managed firms compensate employees according to their position, hierarchy and responsibilities. To his effect, individuals get promoted and have more responsibility on the reward schemes.

Promoter firms and trustee firms also differ in relation with *Growth Orientation*. Trustee firms desire slow and steady growth whereas promoter firms aim for rapid growth. The top management in entrepreneurial firms allow all employees to recognise the company's growth objectives and encourage the workers to be creative and innovative and thus vigilant for opportunity. However, trustee organisations view a fast change as destabilization in the company and subsequently avoid risks (Naldi *et al.*, 2015).

In the *Entrepreneurial Culture* notion, promoter's organisations are more interested in ideas than resources (Gurbuz and Aykol, 2009). The starting point of creating ideas is opportunity and then the promoter firms seek new ideas, experiments and creativity. Trustee's organisation is less concerned with developing ideas. In this manner, the organisation creates ideas and activities which merely fit into the existing resources and this sometimes results in a lack of ideas (Naldi *et al*, 2015).

Classic management style categorised by Autocratic, Paternalistic, Democratic and Laissez-faire (Mansor *et al*, 2012) is commonly used by owners/leaders in businesses. However, based on a literature review of Howard Steveson's entrepreneurial management framework, it is assumed that his view of entrepreneurial management is influential on a firm's sustainable growth since his concept emphasises opportunity which is "critical to the long term vitality of an economy" (Stevenson, 1983). A recent study by Naldi *et al* (2015) also tested Stevenson's different dimensions on international corporate entrepreneurship among SMEs and has found some positive impacts.

In this study, Stevenson's framework will be taken as a measure of SMEs management style that distinguishes entrepreneurial management from administrative/ professional management. Based on a recent study's findings (Naldi *et al*, 2015), not every dimension has positive effects on a firm's performance. For instance, "entrepreneurial" *Reward Philosophy*

has a rather negative impact on SMEs' international corporate entrepreneurship. Thereby, this study will focus on certain dimensions more including *Management structure*, *Growth Orientation and Entrepreneurial Culture* in which they have greater relevance in finding the relationship between entrepreneurial management and SMEs growth among Stevenson's eight dimensions.

Given the literature reviews, the question is decided as 'Is the Irish SMEs growth related to Entrepreneurial Management in Stevenson's perspective?' and hypothesis for the study is determined as 'There is a positive relationship between entrepreneurial management and Irish SMEs growth.'

Methodology

The Survey Design

The main purpose of this research is to investigate the relationship between Irish SMEs growth and Entrepreneurial Management. To assess this, the paper follows a quantitative approach and uses a structured online questionnaire survey for data collection.

In the relevant studies, the researchers (Brown *et al*, 2001, Gurbuz and Aykol, 2009; and Naldi *et al*, 2015) use a questionnaire survey that combines with other qualitative methods such as face-to-face interviews or phone calls to receive deeper contextual data in terms of entrepreneurial management affecting firms' growth. However, adapting experimental and qualitative approaches mentioned above requires a great deal of time; and poorly designed interviews fail to capture fundamental aspects of information or result in a biased set of data (Tindell *et al*, 1994). Hence, the researcher concludes that using quantitative methods is appropriate to collect data within a limited time and Stevenson's Entrepreneurship framework is used, which is recommended by many other studies (Brown *et al*, 2001, Gurbuz and Aykol, 2009; and Naldi *et al*, 2015) as the framework provides objective outcomes, benefiting from a rapid turnaround.

Writing the items

The survey questionnaire has 25 questions and is divided into two parts - a firm's growth and entrepreneurial management.

The first part has 9 items. They are developed to identify Irish SMEs' growth in relation to the degree of revenue and employment numbers. At the start of the questionnaire, other items regarding SMEs industry, age, and current business objectives are also tested to evolve the main questionnaire towards growth.

The second part includes 16 items that measure entrepreneurial management conceptualised by Stevenson (1983). The items are followed by six dimensions - *Strategic Orientation, Resource Orientation, Management Structure, Reward Philosophy, Growth Orientation* and *Entrepreneurial Culture*. Due to the relevance of this study not every item of Stevenson's conceptualisation of entrepreneurship is included in the survey. In other words, some scales of the six dimensions are excluded in the questionnaires. Particularly, certain scales have greater measurement reliability than others (Brown *et al*, 2001). Considering the findings of Brown *et al* (2001), the indices of *Resource Orientation* and *Reward Philosophy* show quite less relevance in 'Corrected Item-total Correlation' compared to other indices - *Strategic*

Orientation and Management Structure, etc. in terms of Cronbach's Alpha value. Therefore, in this study it is concluded that the whole items, i.e., under the scale of Management Structure, Growth Orientation and Entrepreneurial Culture are necessary to include in the survey whereas 1 or 2 items are dropped under the scale of the Resource Orientation and Reward Philosophy from the original Stevenson's Entrepreneurial Management scales since they are not crucially meaningful to measure an entrepreneurial management of SMEs growth. Stevenson's Entrepreneurial Management conceptualization can be found in the Appendix. According to Stevenson's measurement, the items are a choice type scaling one to ten and two different statements are both arranged in the paper on the right and left side in order to avoid biased response (Robinson et al, 1991).

The sample

Unfortunately, directories of Irish SMEs are unavailable on private directory websites without one being a member of the company, subscribing monthly or annually. A national list from 'Enterprise Ireland' is used as a directory of Irish SMEs to collect contacts of the Irish companies. 'Enterprise Ireland' is a government agency that supports Irish businesses in different sectors and lists a large number of sector profiles on its website (Enterprise Ireland, 2019).

Based on the 2017 Small Business Act Fact Sheet, the number of the Irish SMEs stood at 250,143 (European Commission, 2017). In a social statistical analysis, a 5% margin of error is normally acceptable (Taherdoost, 2018) and the ideal sample size is calculated by 385, given a 5% of marginal error and 95% of the confidence level from the population size. Although the construction, distribution and service industry has a great importance in contributing to Gross Value Added proportion in the Irish business economy (CSO, 2014), different sectors available in the national list (Enterprise Ireland) are randomly selected as sample industries including engineering, construction, consultancy, distribution, energy, finance, health & beauty, manufacturing, pharma, printing, service, software, telecom and so on. This aims to produce a large sample within the given time, which provides a decrease in the probable sampling errors (Babbie, 1998) and therefore the industrial sector is not stratified based on an equal number. Consequently, it should be noted that the findings of this research may have limitations when applied to a particular industry.

Survey Process and Data Collection

The online email survey was sent to a random sample of the Irish SMEs based in Ireland. The target respondents were owner/top managers aged over 18 as they would be the most informed regarding the questions in the company. The email initially stated the aim of the research, what the research entailed and who to contact if participants were to have any inquiries in the beginning including the research survey. The participants of the survey were assured that their involvement was entirely voluntary, and responses were completely anonymous. The email also clearly outlined the length of the survey.

Data was collected in three steps. Firstly, 200 firms received the email including an online survey link, yielding only 8 responses (4%). It was assumed that the response rate was significantly low even considering the returns of 14 emails resulting from delivery failure (i.e. the address could not be found, or the receiver was on leave). Later it was determined to include a potential participant's name, a more detailed introduction, as well as a brief statement as to how the researcher acquired the recipient's email addresses before launching into an introduction responding to one previous participant's feedback. Secondly, a reminder email was sent to the potential participants two weeks after the first email was sent, yielding 13 additional responses (10.5%) out of the 200 companies. The response rate became closer to the typical average rate when there was no prior links to the respondents, which was 10% (Becherer and Helms, 2014). Thirdly, the remaining of 185 sample companies were emailed, yielding 27 responses in total. The reason for the time lap sending the online survey, between the first group and second group, was the restriction on the number of emails per day from the online survey form used. The survey took place from the beginning of June to mid-July in 2019.

The original sample was reduced to 341 from 385 as some email addresses had not existed anymore, potential respondents were on annual leave or emails had full inboxes. Data was collected from 27 companies that operate in Ireland, but one organisation was not categorized as an SME due to the excess of the number of employees (>250) and thus the researcher had 26 samples of small and medium sized enterprises for the main analysis.

In this study, the sample sectors were classified by construction, distribution, finance, service, and other industries. For the purpose of simplification in data analysis, the industries that are not grouped in construction, distribution, or finance are categorised by a service industry. As Figure 4 shows, in the sample, the industry that answered most was manufacturing (30.8%) followed by service (26.9%), other (15.4%), construction (11.5%), finance (11.5%) and distribution (3.8%).

Figure 4. Sample Frequency and Percent by Industry

Industry	Frequency	Percent
Manufacturing	8	30.8
Service	7	26.9
Other	4	15.4
Construction	3	11.5
Finance	3	11.5
Distribution	1	3.8
Total	26	100.0

Based on the relevant literature review (Quartey, 2003; Kachlami and Yazdanfar, 2016), the size and age of SME are related to its growth and thus the researcher gathered such data as an important value. The European Union's definition of SMEs is used (European Commission, 2018). The results show that the data was collected the most (69.2%) by small-sized enterprises (employee 10 - 50) and the firms that were founded more than five years ago were dominant in the sample. Interestingly, the data was not collected from younger firms that are less than either one or three years old. It is possible that younger businesses have not been registered in a directory on the Enterprise Ireland website or there are more mature SMEs in the Irish economy. Therefore, it is essential to review this factor in later research when using a directory of the national list. Figure 5 demonstrates the summary of the information.

Figure 5. Sample Frequency and Percent by firm size and firm age

Firm Size			
Frequency	Percent		
2	7.7		
18	69.2		
6	23.1		
26	100.0		
	Frequency 2 18 6		

Firm Age

Years	Frequency	Percent
Less than 1	0	0
1-3	0	0
3-5	2	7.7

More than 5	24	92.3
Total	26	100.0

Figure 6 shows that almost half of the Irish SMEs (46.2%) in the sample have grown over the past year compared to previous years considering revenue. 19.2 percent of firms have performed much better to a degree and the rest of the firms claimed that their revenue was 'About the same' or 'Much lower', 26.9% and 7.7% respectively. In relation to growth in employment, more than half of Irish firms (57.7%) in the sample have experienced the extent of somewhat higher compared to previous years, and 19.2 percent of enterprises have not experienced growth as their number in employment is about the same. Only 11.5% of the firms have a much higher number of employees or somewhat lower.

Figure 6. Sample Frequency and percent by Revenue and Employment

Revenue	Frequency	Percent
Somewhat higher	12	46.2
About the same	7	26.9
much higher	5	19.2
Much lower	2	7.7
Total	26	100.0
Employment		
Somewhat higher	15	57.7
About the same	5	19.2
Much higher	3	11.5
Somewhat lower	3	11.5
Total	26	100.0

Variables and Measures

Dependent Variables

Two dependent variables were separately set to assess the Irish SMEs growth: (1) revenues and (2) the number of workers employed. These two measurements have been used the most and considered objectively as growth indicators (Delmar, 1997; Delmar and Davidson, 1998) rather than 'innovative' concepts of other entrepreneurial measures (i.e., venture size intentions,

aspirations, or plans) that have not been established yet in an academic field. Gurbuz and Aykol (2009) state that the fundamental reason of measuring the number of employees along with business turnover/sales is that firms are likely to employ more workers when sales increase.

In this study the revenues and employment levels were collected from the Irish SMEs and both dependent variables were asked in relation to the degree compared to previous years than the current year. Since the exact figures of sales and employment were not collected, it should be noted that inflation adjustments were not taken into account in this research.

Independent Variables

Stevenson's six dimensions (opportunity-based view) were used as independent variables to measure entrepreneurial behaviour affecting the growth of the firm. Brown *et al* (2001) revealed that Stevenson's conceptualization of entrepreneurship was positively related and well-constructed to the theoretical factors. The owners or top managers in Irish SMEs were required to rate their degree of agreement with items along a 10-point continuum. Using a bipolar rating scale, two different stances were arranged on the left side being 1 (administrative behaviour) up to 10 (entrepreneurial behaviour) on the right side. There were 16 items and each dimension consisted of different amount of scales; *Strategic Orientation* - two items (SO1, SO2), *Resource Orientation* - two items (RO1, RO2), *Management Structure* - five items (MS1, MS, MS3, MS4, MS5), *Reward Philosophy* - two items (RP1, RP2), *Growth Orientation* - two items (GO1, GO2), and *Entrepreneurial Culture* -three items (EC1, EC2, EC3). The full list of questionnaires is attached in the Appendix.

It must be noted that six of the scales (RO2, GO1, GO2, EC1, EC2 and EC3) are reversed for analysis since such items are reversely situated according to Stevenson's entrepreneurship measure unlike other items, meaning higher scores represent administrative behaviour (i.e. statement of entrepreneurial behaviour near a point of 1 on the left side and administrative behaviour near the point of 10 on the right side).

In order to measure reliability, the researcher used Cronbach's alpha score for entrepreneurial management. The value resulted in 0.72, which was significant for validation of a measure exceeding Nunnally's (1967) stringent point (0.7). The respondents tended to score high in relation to entrepreneurial management overall, and the mean value of some specific items was greater than the average specifically in Strategic Orientation 2 scoring (6.9), Reward Philosophy 2 (6.7), Entrepreneurial Culture 1 (7.2), and Entrepreneurial Culture 3 (7.0). Figure 7 shows the reliability of the 16 items. These items were highlighted in Figure 7.

Figure 7. Reliability and Item Statistics

	Reliability Statistics		
Cronbach's Alpha		N of Items	
0.72		16	
	Independent variables	Mean	Std. Deviation
	As we define our strategies, we are driven by our		
	perception of opportunity. We are not constrained by		
SO1	the resources at (or not at) hand.	5.8846	2.42201
	Our fundamental task is to pursue opportunities we		
	perceive as valuable and then to acquire the resources		
SO2 (R)	to exploit them.	6.8846	2.16013
	Because our objective is to use our resources, we will		
RO1	usually invest heavily and rapidly.	4.8846	2.73243
	We prefer to totally control and own the resources we		
RO2	use.	5.2308	2.77572
	We prefer loose, informal control. There is a		
MS1	dependence on informal relations.	5.0769	2.48069
	We strongly emphasize getting things done even if this		
MS2	means disregarding formal procedures.	4.8077	2.36676
	We strongly emphasize adapting freely to changing		
MS3	circumstances without much concern for past practices.	6	2.52982
	Managers' operating styles are allowed to range freely		
MS4	from very formal to very informal.	6.3462	2.43216
	There is a strong tendency to let the requirements of		
	the situation and the personality of the individual		
MS5	dictate proper job behaviour.	5.8846	2.56635
	We try to compensate our employees by devising ways		
	so they can benefit from the increased value of the		
RP1	firm.	4.6923	2.82516
	An employee's standing is based on the value he/she		
RP2	adds.	6.6538	2.26172
	It is generally known throughout the firm that growth		
GO1 (R)	1 0	5.9615	3.0263
	It is generally known throughout the firm that our		
GO2 (R)	intention is to grow as large and as fast as possible.	4.1154	2.58189
	We have many more promising ideas than we have		
EC1 (R)	time and the resources to pursue.	7.2308	2.37163
	Changes in society at large often give us ideas for new		
EC2 (R)	products and services.	6.1538	2.72312
	We never experience a lack of ideas that we can		
EC3 (R)	convert into profitable products/services.	7	2.4

To assess whether a correlation relationship is strong between entrepreneurial management and the growth indicators (revenue and employment), firstly, I correlated the

degree of revenues with Stevenson's entrepreneurial dimensions. In consequence, a positive correlation showed in EC1 and EC3 (0.6, p < 0.01). Secondly, the number of employment was correlated with the entrepreneurial dimensions. Pearson's correlation was significant ($p \le 0.05$) more than revenue in the dimension of MS2, GO1, GO2, and EC 3. The results provide the validity of the measures and are shown in Figure 8.

Figure 8. Correlation Matrix

		Revenue	Employment
Revenue	Pearson Correlation	1	1
	Sig. (2-tailed)	-	-
SO1	Pearson Correlation	0.14	0.137
	Sig. (2-tailed)	0.49	0.506
SO2	Pearson Correlation	0.14	0.065
	Sig. (2-tailed)	0.50	0.754
RO1	Pearson Correlation	-0.04	0.016
	Sig. (2-tailed)	0.84	0.938
RO2	Pearson Correlation	-0.27	-0.359
	Sig. (2-tailed)	0.18	0.072
MS1	Pearson Correlation	0.18	0.161
	Sig. (2-tailed)	0.39	0.431
MS2	Pearson Correlation	-0.23	413*
	Sig. (2-tailed)	0.25	0.036
MS3	Pearson Correlation	0.00	-0.151
	Sig. (2-tailed)	1.00	0.461
MS4	Pearson Correlation	-0.09	-0.192
	Sig. (2-tailed)	0.66	0.348
MS5	Pearson Correlation	-0.061	-0.336
	Sig. (2-tailed)	0.769	0.093
RP1	Pearson Correlation	0.006	0.075
	Sig. (2-tailed)	0.976	0.714
RP2	Pearson Correlation	-0.156	-0.153
	Sig. (2-tailed)	0.448	0.457
GO1	Pearson Correlation	-0.374	421*
	Sig. (2-tailed)	0.06	0.032
GO2	Pearson Correlation	-0.338	461*
	Sig. (2-tailed)	0.091	0.018
EC1	Pearson Correlation	544**	-0.239
	Sig. (2-tailed)	0.004	0.241
EC2	Pearson Correlation	-0.241	-0.092
	Sig. (2-tailed)	0.235	0.656
EC3	Pearson Correlation	603**	537**

0.001 Sig. (2-tailed) 0.005

N = 26

Consequently, the correlation analysis did not show much strength of the relationship between independent and dependent variables and thus the researcher attempted to run a regression analysis to examine an overall influence of entrepreneurial management on Irish SMEs growth. For purpose of comparison, growth indicators - revenues and employment numbers - were multi-regressed separately and the linear regression equation is shown as follows:

Growth $revenue \ or \ employment = a + b1.SO1 + b2.SO2 + b3.RO1 + b4.RO2 + b5.MS1 + b5.MS1 + b4.RO2 + b5.MS1 + b5.MS1$ b6.MS2 + b7.MS3 + b8.MS4 + b9.MS5 + b10.RP1 + b11.RP2 + b12.GO1 + b13.GO2 + b14EC1 + b15.EC2 + b16.EC3

Growth = Revenues/Employment number

= constant (Value of Growth when all the Entrepreneurial Management scales = 0) a

sample estimate of the coefficient of Stevenson's Entrepreneurial Management b

SO₁ = Strategic Orientation 1 MS5 Management Structure 5 = Strategic Orientation 2 SO2 RP1 Reward Philosophy 1 RO1 Resource Orientation 1 RP2 Reward Philosophy 2 RO2 Resource Orientation 2 GO1 Growth Orientation 1 MS1 Management Structure 1 GO2 Growth Orientation 2 MS2 Management Structure 2 EC1 Entrepreneurial Culture 1 MS3 Management Structure 3 EC2 Entrepreneurial Culture 2

MS4 EC3 Management Structure 4 = Entrepreneurial Culture 3

=

Figure 9 shows that independent variables explain the variance in growth in revenue by 85%, resulting R square as 0.85 but we cannot predict the other 15% (0.15) that we have no control over. In the growth in employment, Figure 10 shows a slight improvement in validity that the independent variables explain the variance for 90%. In other words, only 10% of data has no control.

^{**} Correlation is significant at the 0.01 level (2-tailed)

^{*} Correlation is significant at the 0.05 level (2-tailed).

Figure 9. Model Summary of Regression Analysis (Revenue)

Model Summary

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.922ª	.85	.581	.67919

a. Independent variables: (Constant), EC3, SO1, MS5, GO2, MS1, MS2, SO2, MS4, RO2, RP1, EC1, EC2, GO1, RP2, RO1, MS3

Figure 10. Model Summary of f Analysis (Employment number)

Model Summary

			•	Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.947ª	.90	.715	.44676

a. Independent variables: (Constant), EC3, SO1, MS5, GO2, MS1, MS2, SO2, MS4, RO2, RP1, EC1, EC2, GO1, RP2, RO1, MS3

Anova table (Figure 11) shows p-value is significant which indicates that independent variables count for revenue of Irish SMEs (p < 0.05), as well as employment numbers (p < 0.01) when entrepreneurial behaviours are considered as a whole (Figure 12).

Figure 11. Impact of Entrepreneurial Management on Irish SMEs growth (Revenue)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.387	16	1.462	3.169	.042 ^b
	Residual	4.152	9	.461		
	Total	27.538	25			

a. Dependent Variable: Revenue

b. Independent Variables: (Constant), EC3, SO1, MS5, GO2, MS1, MS2, SO2, MS4, RO2, RP1, EC1, EC2, GO1, RP2, RO1, MS3

Figure 12. Impact of Entrepreneurial Management on Irish SMEs growth (Employment)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.742	16	.984	4.929	.010 ^b
	Residual	1.796	9	.200		
	Total	17.538	25			

a. Dependent Variable: Employment

b. Independent Variables: (Constant), EC3, SO1, MS5, GO2, MS1, MS2, SO2, MS4, RO2, RP1, EC1, EC2, GO1, RP2, RO1, MS3

Analysis and Findings

The purpose of this research was to identify whether or not there is a positive relationship in Irish SME growth and entrepreneurial management by using Stevenson's entrepreneurship measure. The results were expected that the samples of the Irish SMEs have been experiencing some extent of revenue/employment growth at the degree of either 'somewhat higher' or 'much higher' as a result of the entrepreneurial management behaviour within the sample firms. The researcher therefore carried out bivariate correlations in the analysis. Although the results presented that a few independent variables were more committed to the dependent variables in an enterprise, on reflection it is considered that the results did not show sufficient evidence to answer the overall relationship between Irish SMEs growth and entrepreneurial management in that entrepreneurial management is not derived from a single behaviour but from a whole. This suggests that multi-collinearity analysis should be a better measure to find a significant relationship (Lind *et al*, 2015) between dependent and independent variables for the future study as entrepreneurial behaviours are conducted with each other. However, the researcher conducted a linear regression analysis, which was suggested by the past literature reviews to validate the data and was used for the findings of this research.

It was found that entrepreneurial management has partial impacts on the growth of Irish SMEs. Particularly, after switching analysis from correlation to regression, the overall relationship became stronger. The p-values of a regression analysis are remarkably significant (p < 0.05), leading to 0.42 in revenue and 0.01 in employment based on the ANOVA model (see Figure 11). When Stevenson's entrepreneurial management was included in the model, the R^2 value also increased to 0.85 in revenues and 0.90 in employment, which reveals a significant relationship ($r^2 > 0.7$). This result indicates that whether a growth indication is revenue or employment numbers, entrepreneurial management has an impact on Irish SMEs. When comparing the two indicators, there was a slightly more positive contribution to the growth of the Irish SMEs when employment numbers increase rather than when revenues do. In line with the literature review from Gurbuz and Aykol (2009), one can note that the number of employment as a growth measure provides a better indicator when an economy is inflated. Given the fact that the Irish economy has rapidly grown (European Commission, 2018), such results are considered to be expected.

The regression analysis shows that conducting Resource Orientation, Growth Orientation, and Entrepreneurial Culture (opportunity-based view) makes it possible for the Irish SMEs to achieve a financial performance in accordance with revenue (Figure 13).

In addition, having an Entrepreneurial Culture is positively related to the growth of Irish SMEs (Figure 13 & Figuare14), where an enterprise tends to have abundant ideas that can be converted into profitable goods/services. Surprisingly, based on a regression analysis, there was no relationship between entrepreneurial behaviours in relation to Management Structure and Irish SMEs growth (Figure 13 & Figure 14). It appears that an entrepreneurial management structure does not exist, which is characterised by a flat hierarchy and informal networks (Naldi *et al*, 2015); in the sample Irish SMEs.

Figure 13. Results of Regression Analysis (Revenue)

Coefficients^a

				Standardized		
Unstandardized Coe		Coefficients	Coefficients			
Mod	lel	В	Std. Error	Beta	t	Sig.
1	(Constant)	3.739	1.124		3.326	.009
	SO1	066	.143	152	459	.657
	SO2	.154	.126	.318	1.224	.252
	RO1	220	.119	573	-1.844	.098
	RO2	310	.110	821	-2.810	.020
	MS1	.096	.095	.227	1.018	.335
	MS2	106	.095	238	-1.118	.292
	MS3	.146	.169	.353	.865	.410
	MS4	.067	.123	.155	.541	.601
	MS5	.188	.113	.459	1.661	.131
	RP1	094	.098	254	960	.362
	RP2	.170	.156	.366	1.089	.304
	GO1	231	.101	667	-2.285	.048
	GO2	.008	.101	.019	.077	.940
	EC1	236	.096	534	-2.461	.036
	EC2	.276	.105	.717	2.621	.028
	EC3	161	.091	368	-1.779	.109

a. Dependent Variable: Revenue

Figuare 14. Results of Regression Analysis (Employment)

Coefficients^a

				Standardized		
	Unstandardized Coefficients		Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3.661	.739		4.952	.001
	SO1	.119	.094	.344	1.263	.238
	SO2	107	.083	275	-1.286	.231
	RO1	045	.079	146	568	.584
	RO2	142	.073	469	-1.950	.083
	MS1	.118	.062	.350	1.900	.090
	MS2	095	.062	268	-1.528	.161
	MS3	100	.111	302	898	.393
	MS4	044	.081	127	539	.603
	MS5	.028	.074	.087	.381	.712
	RP1	.094	.065	.318	1.460	.178
	RP2	.179	.103	.484	1.747	.115
	GO1	048	.067	173	720	.490
	GO2	147	.066	452	-2.207	.055
	EC1	.033	.063	.093	.520	.616
	EC2	.108	.069	.352	1.559	.154
	EC3	206	.060	591	-3.460	.007

a. Dependent Variable: Employment

Due to the time constraints of the research, the control variables were not evaluated with the dependent variables in this paper but there are useful results of the study. With respect to an enterprise's objectives, as many as 82.1 percent of SMEs claimed that the main goal of the enterprise at the moment was generation of profit. Because the researcher anticipated that small and medium-sized businesses would have more sensitivity to local community (Becherer and Helms, 2014), their goals would be more associated with social/environmental concerns, company awareness, or survival rather than profit creation. However, contrary to the researcher's belief, the responses regarding green goals such as social/environmental responsibility had none (Figure 15). This result supported Baden and Harwood's findings (2011) that SMEs engaged in social responsibility less than large businesses did due to the burden of imposed bureaucracy and costs.

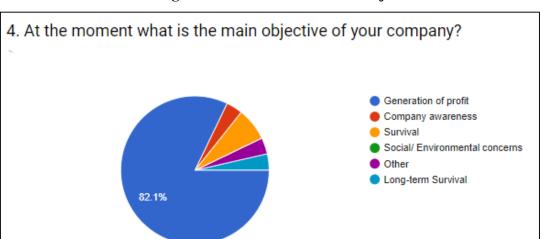


Figure 15. Irish SMEs' Main Objectives

Having discussed not receiving any samples of young firms that are aged less than three years this may affect the findings regarding control variables (firm age) in the study being unable to compare the two different control variables to investigate whether Irish SMEs' age impacts its growth. Kachlami and Yazdanfar (2016) claim that a SME's age is positively associated with its growth in a Swedish context. The younger SMEs are less successful in acquiring external assistance for its resourses (Kumar and Rao, 2015; Berger and Udell, 1998) while older SMEs established more than five years ago have access to external resources (Fatoki and Asah, 2011), which is the same manner of *Strategic* and *Resource Orientation* in Stevenson's six dimensions.

One challenge of the methodology arose from a sample size. Although it was anticipated that the sample size would result in approximately 10% of the initial sample calculation (Becherer and Helms, 2014), 26 of respondents could be viewed as significantly small.

Conclusion

In this paper the past studies were discussed in terms of the characteristics of Irish SMEs, Irish SME's ambitions to grow, different views of growth measures, and Stevenson's Entrepreneurial Management. These were important areas for the analysis of the relationship between Irish SMEs growth and Entrepreneurial management. To assess reliability of the research, Cronbach's alpha value was applied and resulted and then correlation and regression analysis were conducted separately. Regression analysis demonstrated the best results by supporting p-value with respect to Stevenson's entrepreneurial management affecting the Irish SMEs growth.

The findings of this study have a significant contribution to the Irish SMEs that suffer from management practices. The research has shown that entrepreneurial management has a crucial impact on a business' growth in terms of both revenue and employment. The results have presented that the latter factor (employment number) has a greater relationship with entrepreneurial management in an Irish context, which indicates that even considering the inflation of the Irish economy, the Irish firms have grown through an increased number of employees. Owners/top managers must be aware that by adapting entrepreneurial management practice in an organisation, the firm will facilitate future growth, generating financial profits. They should also note that as mentioned in the findings when managers focus on resources (Resource Orientation), growth (Growth Orientation) and entrepreneurial culture (Entrepreneurial Culture) rather than controlling the management structure (Management Structure) of the organisation itself, the firms tend to succeed in growth. In addition, based on the result of the study, the results may have an important role in a business setting, where an enterprise pursues an opportunity to grow by practising entrepreneurial culture that is rooted in Stevenson's opportunity-based Entrepreneurial Management. Owners/managers would benefit from a business growth by gaining the theoretical knowledge.

On the other hand, the study has some limitations. Firstly, as outlined in the analysis and finding section, the researcher has not found a co-relationship as a result of conducting a correlation and regression analysis only. Therefore, for future research, multicollinearity analysis is suggested to investigate each individual independent variable's relationship with the dependent variables (Lind *et al*, 2015). Secondly, a small sample size of this study should be advisable, as well as that more quantitative research along with qualitative research is needed.

Consequently, a large and quality sample is essential to generalize the results. Thirdly, the sample industries are cross-sectors for the purpose of providing a broad view of Irish SMEs. However, the research outcomes of future study may be more meaningful to practitioners if the industries are divided into more categories rather than grouping service and other industries as a single industry. Finally, the context would differ depending on a country's economic situation. This research aimed at getting data from Irish SMEs that operate in Ireland. At the moment, Ireland is viewed as a leading economy in Europe, and thus the results may be difficult to apply to an economy that has different socio/economic circumstances, for instance, to a developing country.

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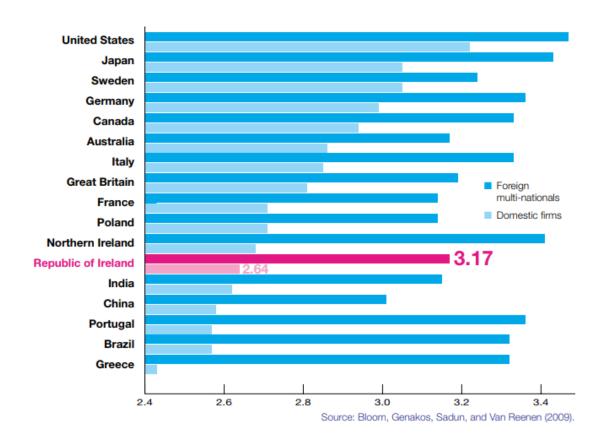
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Appendix

Appendix 1. Management scores (0-5) in domestic and multinational companies



Appendix 2. Survey Email

To whom it may concern,

I have acquired your email address from 'Enterprise Ireland' website and I would kindly ask you to take the time (5 minutes) to consider helping me with this important research.

I am a final year Business undergraduate at National College of Ireland and I am conducting research as part of the requirements of my degree. I have chosen to investigate the relationship between Irish SMEs growth and Management.

Please note that for the purpose of this study all respondents must be owners/ top managers over the age of 18.

This study has been approved by the Ethical Guidelines by the National College of Ireland and your responses are completely anonymous. I would be very grateful if you would consider helping me with my research.

Please click on the web link below to begin the questionnaire. https://docs.google.com/forms/d/1Ce5GqXRVFCDXF66toMWHQ6ZOXG0taAFL-hy3sJIhBQ/viewform?edit_requested=true

Thank you very much for giving your time to help me with my research.

If you have any queries or comments about the questionnaire or the research study, please contact me: x15045102@student.ncirl.ie

Kind regards,

Areum Ahn

Appendix 3. Survey Questionnaires

Irish SMEs Growth

All the participants' information will be kept private and answers will not be shared.	<u>^</u>
This is in line with National College of Ireland Ethics Guidelines and the researcher will only use the information f development of the thesis. This is a study about Management and Small Medium-sized Enterprises.	or the
The survey includes 25 questions.	Ţ
1. What industry is your company in?	*
Construction	
O Distribution	
Finance	
Manufacturing	
Service	
Other	
2. How many employees/staff are there in your company?	*
<10	
○ <50	
<250	
omore than 250	
3. How old is your company?	*
Cless than 1 year	
1 - 3 year	
3 - 5 year	
More than 5 year	

4. At the moment what is the main objective of your company?	*
Generation of profit	
Company awareness	
O Survival	
O Social/ Environmental concerns	
Other	
5. How would you best describe the revenue over the past year compared to previous years?	*
Much higher	
Somewhat higher	
About the same	
Somewhat lower	
Much lower	
6. How would you best describe the number of workers employed by your company over the past year compared to previous years?	*
Much higher	
Somewhat higher	
About the same	
O Somewhat lower	
Much lower	
7. Has your company introduced new managerial structures in the past?	*
○ Yes	
○ No	

8. If yes, how had direction of you			the mana	geria	l structure in	fluenced the
	1	2	3	4	5	
Positive	\circ	\circ	\circ	0	0	Negative
9. Does this ma		ructure sti	ill exist?			
Managem	nent					
Now, as you read each qu	estion, please nu	umber the state	ment which is cl	lose to	your company.	
10. Strategic Ori	entation					*
As we define ou our major concern i utilize the resource	s how to best	0000	5 6 7 8 9	0 10	are driven by o opportunit constrained by	our strategies, we our perception of y. We are not the resources at at) hand.
11. Strategic Ori	entation					*
2) We limit the opp pursue based on resource	our current	1 2 3 4	5 6 7 8 9) 10	pursue opportu as valuable an	ental task is to nities we perceive d then to acquire to exploit them.

12. Resource Orientation

1 2 3 4 5 6 7 8 9 10

 Because we do not need to have all resources available to commence the pursuit of an opportunity, our commitment of resources may be in stages



Because our objective is to use our resources, we will usually invest heavily and rapidly.

13. Resource Orientation

1 2 3 4 5 6 7 8 9 10

All we need from resources is the ability to use them.



We prefer to totally control and own the resources we use.

14. Management Structure

1 2 3 4 5 6 7 8 9 10

 We prefer tight control of funds and operations by means of sophisticated control and information systems.



We prefer loose, informal control.

There is a dependence on informal relations.

Management Structure

1 2 3 4 5 6 7 8 9 10

 We strongly emphasize getting things done by following formal processes and procedures



We strongly emphasize getting things done even if this means disregarding formal procedures.

16. Management Structure

1 2 3 4 5 6 7 8 9 10

 We strongly emphasize holding to tried and tested management principles and industry norms.



We strongly emphasize adapting freely to changing circumstances without much concern for past practices.

17. Management Structure

1 2 3 4 5 6 7 8 9 10

 There is a strong insistence on a uniform management style throughout the firm.



Managers' operating styles are allowed to range freely from very formal to very informal.

18. Management Structure

1 2 3 4 5 6 7 8 9 10

 There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions.



There is strong a tendency to let the requirements of the situation and the personality of the individual dictate proper job behavior.

19. Reward Philosophy

1 2 3 4 5 6 7 8 9 10

 Our employees are usually rewarded by promotion and annual raises.



We try to compensate our employees by devising ways so they can benefit from the increased value of the firm.

20. Reward Philosophy

1 2 3 4 5 6 7 8 9 10

 An employee's standing is based on the amount of responsibility he/she has.



An employee's standing is based on the value he/she adds.

21. Growth Orientation

1 2 3 4 5 6 7 8 9 10

 It is generally known throughout the firm that growth is our top objective.



Growth is not necessarily our top objective. Long-term survival may be at least as important

22. Growth Orientation

1 2 3 4 5 6 7 8 9 10

 It is generally known throughout the firm that our intention is to grow as large and as fast as possible.



It is generally known throughout the firm that steady and sure growth is the best way to expand.

23. Entrepreneurial Culture

1 2 3 4 5 6 7 8 9 10

We have many more promising ideas than we have time and the resources to pursue.



We find it difficult to find a sufficient number of promising ideas to utilize all of our resources.

24. Entrepreneurial Culture

1 2 3 4 5 6 7 8 9 10

 Changes in society at large often give us ideas for new products and services



Changes in society at large seldom lead to commercially promising ideas for our firm.

25. Entrepreneurial Culture

1 2 3 4 5 6 7 8 9 10

 We never experience a lack of ideas that we can convert into profitable products/services.



It is difficult for our firm to find ideas that can be converted into profitable products/services

Appendix 4. Stevenson's Conceptualization of Entrepreneurship

As we define our strategies, our major concern is how to best	Strategic Orientation 1 2 3 4 5 6 7 8 9 10	As we define our strategies, we are driven by our perception of
utilize the resources we control.		opportunity. We are not con- strained by the resources at (or not at) hand.
We limit the opportunities we pursue on the basis of our current resources.	1 2 3 4 5 6 7 8 9 10	Our fundamental task is to pursue opportunities we perceive as valuable and then to acquire the resources to exploit them.
The resources we have signifi- cantly influence our business strategies.	1 2 3 4 5 6 7 8 9 10	Opportunities control our busi- ness strategies.
_	Resource Orientation	
Since we do not need resources to commence the pursuit of an opportunity, our commitment of resources may be in stages.	1 2 3 4 5 6 7 8 9 10	Since our objective is to use our resources, we will usually invest heavily and rapidly. (R)
All we need from resources is the ability to use it.	1 2 3 4 5 6 7 8 9 10	We prefer to totally control and own the resources we use. (R)
We like to employ resources that we borrow or rent.	1 2 3 4 5 6 7 8 9 10	We prefer to only use our own resources in our ventures. (R)
 In exploiting opportunities, having the idea is more important 	1 2 3 4 5 6 7 8 9 10	In exploiting opportunities, ac- cess to money is more important
than just having the money.		than just having the idea. (R)
	Management Structure	
We prefer tight control of funds and operations by means of sophisticated control and infor- mation systems.	12345678910	We prefer loose, informal con- trol. There is a dependence on informal relations.
We strongly emphasize getting things done by following formal processes and procedures.	1 2 3 4 5 6 7 8 9 10	We strongly emphasize getting things done even if this means disregarding formal procedure.
We strongly emphasize hold- ing to tried and true management principles and industry norms.	1 2 3 4 5 6 7 8 9 10	We strongly emphasize adapting freely to changing circumstances without much concern for past practices.
There is a strong insistence on a uniform management style throughout the firm.	1 2 3 4 5 6 7 8 9 10	Managers' operating styles are allowed to range freely from very formal to very informal.
 There is a strong emphasis on getting line and staff personnel to adhere closely to their formal job descriptions. 	1 2 3 4 5 6 7 8 9 10	There is strong tendency to let the requirements of the situation and the personality of the individual dictate proper job behavior.

	Reward Philosophy	
Our employees are evaluated and compensated based on their	1 2 3 4 5 6 7 8 9 10	Our employees are evaluated and compensated based on the value
responsibilities.		they add to the firm.
Our employees are usually rewarded by promotion and an- nual raises.	12345678910	We try to compensate our em- ployees by devising ways so they can benefit from the increased value of the firm.
 An employee's standing is based on the amount of responsi- bility s/he has. 	12345678910	An employee's standing is based on the value s/he adds.
•	Growth Orientation	
 It is generally know throughout the firm that growth is our top objective. 	1 2 3 4 5 6 7 8 9 10	Growth is not necessarily our top objective. Long term survival may be at least as important. (R)
 It is generally known through- out the firm that our intention is to grow as big and as fast as pos- sible. 	1 2 3 4 5 6 7 8 9 10	It is generally known throughout the firm that steady and sure growth is the best way to expand. (R)
	Entrepreneurial Culture	
 We have many more promising ideas than we have time and the resources to pursue. 	12345678910	We find it difficult to find a suf- ficient number of promising ideas to utilize all of our resources. (R)
Changes in the society-at-large often give us ideas for new products and services.	1 2 3 4 5 6 7 8 9 10	Changes in the society-at-large seldom lead to commercially promising ideas for our firm. (R)
 We never experience a lack of ideas that we can convert into profitable products/services. 	1 2 3 4 5 6 7 8 9 10	It is difficult for our firm to find ideas that can be converted into profitable products/services. (R)