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An Investigation of the Internal Influences on Firm Growth in Female Owner-Managed Established Firms

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Abstract

This research is an investigation of the internal influences on firm growth in female owner-managed firms operating in Ireland. The research contributes by providing an understanding of how a range of internal characteristics and strategic-related activities influence small firm growth specifically in female-owned firms, having previously been identified as an under-researched area.

Specifically, an in-depth investigation of how female owner-manager characteristics, firm characteristics and strategic-related activities influence firm growth is conducted, with a view to identifying if common characteristics are evident amongst high-growth female-owned firms. Three measures are used to assess firm growth - turnover, employment and turnover per employee.

The research methodology adopted is quantitative in nature, employing a structured questionnaire. In total, 176 usable responses were obtained.

This research confirms that firm growth is a complex issue, influenced by a range, rather than a single set of characteristics. The empirical findings demonstrate that specific distinguishable characteristics including age, education, and prior employment experience are prevalent amongst high growth female owner-managers. Coupled with this are firm characteristics such as firm age, industry sector and nature of ownership. Strategic-related activities, setting growth objectives, formalised strategic planning and strategy type also emerge from the research as indicators of high firm growth. Further, this research evidences the appropriateness of employing multiple rather than singular measures of firm growth, as growth may be achieved in one rather than all measures.

This research highlights that specific characteristics and factors should be recognised as key indicators of high firm growth in female-owned firms. The findings bring to the fore a number of issues for consideration which will facilitate the development of competencies and skills of female owner-managers for strategy development, enabling higher firm growth.

Declaration

The work presented in this thesis is entirely my own work and it is not copied or plagiarised from other sources. Some material has been presented at conferences and published prior to submission of the thesis. Details of the material are as follows:

Costin, Y. (2012) In pursuit of growth: an insight into the experience of female entrepreneurs, *International Journal of Gender and Entrepreneurship*, 4 (2), 108–127.

Costin, Y. (2011), *Mode rather than measurement- A more appropriate means of investigating growth*, ISBE International Entrepreneurship Conference, 8th-10th November, Sheffield.

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Signed: _____
Yvonne Costin

Date: _____

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Dedication

This thesis is dedicated to my mother and father. Thank you for your unwavering support and encouragement throughout this journey.

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Chapter One: Introduction

1.0 Introduction

As of 2012, there were 200,000 small and medium sized enterprises (SMEs) operating in Ireland, accounting for 97% of all firms, and from many points of view are the most important contributors to the economy (Singh *et al* 2008; Hart and Levie 2010; Brush and Cooper 2012; Fadahunsi 2012). The contributions of these firms are fundamental to the sustainability of the Irish economy and their multifaceted economic and fiscal contributions are increasingly recognised. SMEs provide the foundation for the Irish economy, contributing to 60% of Gross Domestic Product (GDP) and 51% of private sector employment, adding over €10 billion to the Exchequer annually, and employing over 655,000 people in their operations (The Advisory Group for Small Business, 2011). Policy makers have recognised the significant contributions of SMEs in creating sustainable growth for the economy and acknowledge their role in supporting such enterprises (Ireland, Department of Jobs, Enterprise and Innovation 2013). In May 2013, a call from the Department of Jobs, Enterprise and Innovation, echoing the Advisory Group for Small Business (2012) recommended that the Irish Government should formally adopt a national entrepreneurship policy focused on maximizing the number of firms achieving firm growth, given that firm growth is more likely to occur in established, rather than in start-up firms.

Coupled with the important role of growing firms for the economy, within the diverse population of SMEs in Ireland is the role of female owner-managers operating established small firms. Whilst there has been an increase in the number of females starting new firms and they have been identified as an essential element in a successful formula for achieving economic growth, job creation and social progress (McGowan and Henry 2004; O'Connor *et al* 2006; Acs *et al* 2011; Mitchelmore and Rowley 2013), females are also recognised as a source of untapped entrepreneurial potential in Ireland (Henry and Kennedy 2002; OECD 2012). Females in Ireland tend to be under represented in the population of established firm owners (Fitzsimons and O'Gorman 2012), a consistent trend over

the last decade. Whilst there have been positive developments and results achieved through targeted government initiatives it is evident from recent research that significant efforts are still needed to increase the level of established growth orientated female owner-managers in Ireland (Fitzsimons and O’Gorman 2012).

Despite the knowledge of policy makers of the economic contributions of female-owned firms in Ireland, common issues and challenges emerge for all SMEs, irrespective of gender, on how to achieve sustained firm growth to ensure Ireland establishes and develops a strong and robust population of growing and internationally trading firms, rather than just focusing on start-up firms. Indications from research (Blackburn and Kovaleinen 2009; Fadahunsi 2012) suggest that policy makers, in developing support mechanisms for firm growth, do not fully understand and do not consider the complexities associated with firm growth and the factors that influence it, especially in the female context (Roomi *et al* 2009), thereby implying that the current supports may not be adequate (de Bruin *et al* 2006, 2007; Fleck 2008). This brings to the fore the objective of this study which seeks to investigate firm growth in established female-owned firms, with a view to providing an understanding of how a range of internal characteristics (characteristics of female owner-managers, firm characteristics) and strategic-related activities influence it.

Through a better understanding, more appropriate policies can be implemented to support growing firms which make a significant contribution to the Irish economy (de Bruin *et al* 2007; Fleck 2008; Blackburn and Kovalainen 2009). Furthermore, given the reported lacuna of rigorous in-depth studies focusing objectively and specifically on firm growth in female-owned firms (de Bruin *et al* 2006, 2007) the need for research in this area has been highlighted as an important issue for policy, academia and practitioners (Brush *et al* 2004; Minniti *et al* 2005; Roomi *et al* 2009; Davis and Shaver 2012; Jennings and Brush 2013). This research serves to contribute to this lacuna, providing an in-depth understanding of firm growth and the factors that influence it specifically in female-owned firms.

1.1 Rationale for the Research

The rationale and need for this study is embedded in two key topics that are contemporarily debated in policy and research, firstly the factors that influence firm growth, more specifically the internal factors, and secondly that of established female-owned firms (rather than start-up, aspiring females).

Despite the substantial interest and amount of massive empirical research conducted on firm growth, the theoretical development has been slow (Davidsson and Wiklund 2000; Delmar *et al* 2003; Shepherd and Wiklund 2009; Leitch *et al* 2010; Fadahunsi 2012) with a telling illustration being that the most comprehensive, adequate and popular theory on growth was developed some fifty years ago with Penrose's (1959) publication of *The Theory of the Growth of the Firm*. Although there has been much interest in understanding small firm growth (Storey 1994; Delmar and Davidsson 1999; Delmar *et al* 2003; Dobbs and Hamilton 2007; Fadahunsi 2012), there still exists a lack of a common body of well-founded knowledge surrounding the factors that influence it and researchers are still uncertain why some firms grow and others do not when originating from similar circumstances. Several factors have been identified through the mainstream literature, centering on various owner-manager and firm characteristics along with strategic-related activities (which will be explored in further detail in the subsequent chapter three). Research to date has not come to a consensus on the influence of fundamental characteristics of owner-managers, their firms and strategic-related activities that point to firm growth (Gibb and Davies 1990; Storey 1994; Gately and Cunningham 2005; Fadahunsi 2012) - an area this research seeks to contribute to in the context of female-owned firms. Because owner-managers possess varying characteristics and different career motivations, endeavour to place any particular traits as primary influences on higher growth firm are fraught with difficulties. To complement the owner-manager characteristics many researchers have concentrated on the features of the firm itself in the hope of unearthing common features that can be replicated in potential growth firms, and these typically include industry sector, firm age, firm size and nature of firm ownership. In acknowledging that growth is dependent on

the decisions and strategies adopted by the owner-manager as a means of achieving the aspirations identified for their firm, it is necessary to identify the strategic-related activities that underpin their growth objectives (if any). Therefore, it is strongly advocated throughout the literature that strategy in the small firm should be investigated for its influence on firm growth. Indeed, the seminal study on small firm growth by Storey (1994), and more recently updated by Fadahunsi (2012) suggested there was significant merit in considering the growing small firm through a categorisation combining the following components: the owner-manager, the firm and strategic-related activities.

A further complexity associated with investigating firm growth is its measurement (Davidsson and Wiklund 2000; Leitch *et al* 2010), and indeed part of the difficulty of achieving consensus regarding what small firm growth is originates from the inability to find a common definition on how growth should be measured. Mainstream research on firm growth has concentrated on “objective” measures visible in turnover or in profit numbers. Only recently has research complemented this by subjective measures, particularly relevant in female-owned firms (de Bruin *et al* 2007; Roomi *et al* 2009). Small firm growth takes different forms, albeit not necessarily all at the same time, where growth may occur in areas such as employment, revenue, and market development (national and international markets), (Kinsella *et al* 1994; Storey 1994; Westhead and Birley 1995; Barkham *et al* 1996; Pope 2002; Cremins 2006). A review of the studies on measuring firm growth suggests growth in the small firm is multifaceted, making it difficult to define one single set of established measures, thus a challenge encountered in investigating firm growth (Roper 1998; Delmar *et al* 2003; Davidsson *et al* 2006; Dobbs and Hamilton 2007; Blackburn and Kovaleinen 2009; Achtenhagen *et al* 2010; McKelvie and Wiklund 2010). The measures utilised by female owner-managers are not explicit or different from the mainstream studies with many females replicating financial and non-financial measures, however, differing levels of emphasis are placed on each (Morris *et al* 2006; Roomi *et al* 2009; Sirec *et al* 2010).

Female owner-managers have been recognised as a research topic requiring further attention (Kelley *et al* 2011), given their significant contribution to global economies and of particular importance to this study, the Irish economy (Fitzsimons and O’Gorman 2012). They represent more than one-third of all people involved in entrepreneurial activity and are likely to play an even greater role when informal sectors are considered. Their role as employers, customers, suppliers and competitors (Greene *et al* 2003; McGowan and Henry 2004; Minniti 2010) is significant and has increased over time, prominent not only in industries where they were traditionally active, but also in less traditional sectors (European Commission 2002). Research has shown that female-led firms have strong growth aspirations, are customer-oriented, value the human capital and cultural aspects of the firm and are geared towards financial performance playing an important role in the economic development of many countries (McGowan and Henry 2004; Kelley *et al* 2011; Welter and Smallbone 2011; OECD 2012). Given the contribution and the need for female owner-managers and growing firms for the Irish economy, there is a need to develop a deeper understanding of the factors that influence firm growth in female-owned firms, especially in the Irish context as little attention has been given to this issue in recent years.

More particularly emerging from the research is the reported dearth of evidence specifically addressing firm growth in established female-owned firms (Greene *et al* 2003; Roomi *et al* 2009). This perhaps can be largely attributed to the slower progression in the development of the field of female entrepreneurship. Past studies investigating small firm female ownership dates from the mid-1970s with the pioneering studies of Schwartz (1976) (Carter and Bennett 2006; Jennings and Brush 2013). Before the 1970s, any research conducted on entrepreneurship examined it from a “masculine” perspective, not recognising the impact of gender (Valiulis *et al* 2004). In fact, the first academic paper “Entrepreneurship: A New Female Frontier”, focusing on female owner-managers appeared for publication in 1976 in the *Journal of Contemporary Business* (Greene *et al* 2003; Jennings and Brush 2013). The early research (1970s) on gender initially focused on generating descriptive and comparative analyses of male and female business

owners. Such studies portrayed the male entrepreneur as the “norm”, using gender as a variable to identify gender-specific barriers and constraints that females had to overcome in order to be credible business owners. It was only in the 1980s and the seminal work of Hisrich and Brush (1983) that the first exploratory studies of female entrepreneurship came to light, focusing on the characteristics of female entrepreneurs. The 1980s heralded the start of a new research interest in female entrepreneurship, influenced by the existing small business literature, concentrating mainly upon the motivations of female for starting a business (Goffee and Scase 1985; Hisrich and Brush 1987) and, to a lesser extent, the gender-related barriers experienced during business start-up (Watkins and Watkins 1984; Hisrich and Brush 1986; Carter and Cannon 1992). In the 1990s, researchers focused their attention on trying to establish links between motivations for female self-employment and their overall position in the labour market (Carter and Cannon 1992; Chagnanti and Parasuraman 1996; Carter and Allen 1997; Carter *et al* 1997; Cliff 1998; Carter and Rosa 1998). Research highlighted that the:

“...the aim of the majority of the studies was ... to make comparisons with male entrepreneurs and to make women entrepreneurs visible” (Berg 1997, p.259).

Although female owner-managers were afforded separate recognition, their activities and experiences were compared to those of their male counterparts, embedding masculinity as the normative standard. Resulting from this it was not until the late 1990s/early 2000s that female entrepreneurship reached the milestones identified by scholars to develop the field further (Bryat and Julien 2000; Katz 2003; Welter and Smallbone 2011). As documented by Jennings and Brush (2013) the first special edition on female entrepreneurship did not appear until 1997 (*Entrepreneurship and Regional Development*). Following this was the first dedicated policy and academic oriented conferences held in 1998 and 2003 (Organisation for Economic Cooperation and Development; Diana International). Only in 2009, did a niche journal dedicated to female entrepreneurship emerge (*International Journal of Gender and Entrepreneurship*).

Despite the extant literature in female entrepreneurship, the focus has been on researching and profiling female owner-managers at the start-up, rather than the growth stage, and comparative studies of male and female owner-managers. In comparison to the volume of academic research undertaken on small firm growth, specific research surrounding firm growth in female-owned firms is under-represented (Ahl 2006; de Bruin *et al* 2007; Minniti and Naude 2010; Acs *et al* 2011; Brush and Cooper 2012), focusing on the actual growth of firms, rather than the factors that influence it. Even the language used to describe female owner-managers refers more commonly to female entrepreneurs and women entrepreneurs, irrespective of their stage of development, yet in the mainstream literature on firm growth, owner-managers is the term more frequently used. Although there is now a growing volume of theoretically informed material relating to this issue, it still remains “neglected” (Baker *et al* 1997; Marlow *et al* 2011), emerging as a research topic that requires investigation (Baker *et al* 1997; Marlow *et al* 2011; Brush and Cooper 2012; Kariv 2012). This call has been supported by numerous authors (de Bruin *et al* 2007; Martin 2008; Brush and Cooper 2012) having found few rigorous in-depth studies focusing objectively on firm growth in female-owned firms. Although many studies have alluded to it, most have not directly investigated the influential factors on firm growth using quantitative measures (McClelland 2003; Valiulis *et al* 2004; Acs *et al* 2011). Coupled with this, a further challenge is faced due to the limited information pertaining to the levels of established female-owned firms in Ireland. Overall the literature reports a lack of basic information and statistics on female owner-managers (Blackburn and Kovalainen 2009; OECD 2012). Existing databases only take into account characteristics such as the number of employees or the sector in which they trade, ignoring the issue of gender (Acs *et al* 2008; Acs *et al* 2011; OECD 2012)

This study, therefore, bridges the gap in the literature, linking two research topics which are under-researched particularly in the Irish context, contributing to the field of study on firm growth, investigating the various internal influencing factors in female-owned firms. The results will produce a more holistic and integrated

perspective of the influences on firm growth in female owner-managed established firms.

1.2 Research Aim and Objectives

The overall aim of this study is to investigate how a range of internal characteristics (female owner-manager's' and firm characteristics) and strategic-related activities influence firm growth. Three key research objectives guide this study:

Research Objective One: To investigate how a range of female owner-manager characteristics significantly influence firm growth.

Research Objective Two: To investigate how a range of female-owned firm characteristics significantly influence firm growth.

Research Objective Three: To investigate how a range of strategic-related activities significantly influence firm growth.

1.3 The Research Approach

The research methodology employed for this study is a cross-sectional, quantitative research design; applying a self-report survey methodology. Survey data was collected from a sample of 1200 female owner-managers in Ireland operating firms for more than three years across all sectors, yielding a response rate of 14.6 per cent (n=176). The research instrument relied on closed questions with a number of open-ended questions interspersed throughout. Three sets of independent variables were assessed through the survey, namely female owner-managers, firm characteristics, and strategic-related activities along with the dependent variables, the measures of growth utilised in this study, specifically turnover, turnover per employee and employment numbers. The research approach and the methods employed are discussed at length in Chapter Four, along with the hypotheses derived from the literature review. Appropriate

statistical tests were conducted to investigate whether the independent variables had a significant influence on firm growth.

1.4 The Significance of the Research

This research aims to make both empirical and theoretical contributions in a number of distinctive areas. Firstly, this research provides an important extension to current theoretical perspectives on female entrepreneurship. The work of many researchers (Henry and Kennedy 2002; Brush *et al* 2004; McGowan and Henry 2004; Carter and Bennett 2006; Marlow and McAdam 2012) highlights how female owner-managers can contribute to business, society and the overall improvement of the economy. Many studies have been conducted on gender-related barriers; motivations for start-up, as well as comparisons with male entrepreneurs, while others have concentrated on the females transition into entrepreneurship; management styles; networking; equality and empowerment; and financing strategies. In comparison, less attention has been given to the factors that influence firm growth in female-owned firms, therefore it is expected that the findings of this study will add new knowledge to contribute to informing the design of additional appropriate growth supports for female owner-managers in Ireland (de Bruin *et al* 2006, 2007; Greene *et al* 2007; Blackburn and Kovalainen 2009; Minniti and Naude 2010)

This study focuses specifically on the factors that influence firm growth in female-owned firms, investigating whether the mainstream literature on the influences on firm growth is applicable in the female context. Secondly, this study explores firm growth in Irish female-owned firms. Research to date indicates that the bulk of the available material on female entrepreneurship originates from the US while only a small proportion focuses on Europe, the UK, and Ireland (Valiulis *et al* 2004; Fitzsimons and O’Gorman 2012). Researching this area in Ireland serves to address this gap in the literature. Thus, this study aims to address this issue by investigating the underlying factors influencing firm growth in established firms, with a view to highlighting how the numbers of established female owner-managers can be increased.

Moreover this research will advance the understanding of the needs and characteristics of aspiring and existing female owner-managers, and will provide policy insights useful to developing and enhancing an environment in which the spirit of female firm ownership may flourish. By undertaking research on established female owner-managed firms, the resultant knowledge will provide an insight into the typical profile of higher growth female owner-managers in Ireland. In Ireland, there is limited evidence of dedicated support for the promotion of firm growth amongst female owner-managers. Apart from the “Going for Growth” initiative, there is no national or government-led dedicated support service for female owner-managers. This study will provide guidance to policy makers and support agencies on appropriate supports and advice that growth-orientated female owner-managers require due to the holistic and integrated perspective on the factors that influence firm growth emerging from this study.

1.5 Outline of the Thesis

The thesis is presented through seven chapters. Chapter One has provided the background to the research, introducing the key issues investigated in this study, the factors that influence firm growth in female-owned firms. Furthermore, the chapter has outlined the challenges faced in investigating firm growth, highlighting the importance of the various factors that influence it. The chapter proceeds to explain the overall research objectives of the study, along with the research approach adopted for the collection of the information to address the research objectives. The significance of this research from a policy and research perspective is also outlined briefly. The chapter concludes by outlining the structure of the thesis.

Chapter Two proceeds to initiate the discussion on the phenomenon of firm growth. A discussion surrounding the measures of growth is also presented, of critical importance to this study. The chapter then moves to introducing and discussing the influential factors on firm growth, presenting a critical approach of the previous studies related to the research objectives. Thus, the chapter builds the

foundation for a more detailed review of the literature concerning the influence of female owner and firm characteristics and strategic-related activities in the subsequent chapter.

Chapter Three establishes the research agenda in greater detail. A range of female owner-managers characteristics (age, motivation for business start-up, education, prior employment experience), firm characteristics (industry sector, firm age, firm size, nature of ownership) and strategic-related activities (setting growth objectives, strategic planning and type of strategy) are critically evaluated in light of their influence on firm growth. In light of this, the research objectives are affirmed, and a synthesis of the extant literature allows for the construction of derived hypotheses relating to the influence of female owner-manager and firms characteristics, and strategic-related activities on firm growth.

Chapter Four discusses the research approach of this study. The chapter revisits the overall aim of the research, outlining and explaining the quantitative method employed by the study, including a discussion on the ways in which variables were assessed and measured as well as the nature of the data analyses carried out. Considerations regarding the validity and limitations of the study are also outlined. In particular, the chapter highlights the choice of methodology in this study placing an emphasis on achieving methodological fit, defined as the internal consistency among elements of a research project- the research question, prior work, research design and theoretical contribution. The chapter concludes by providing a brief overview of the findings relating to the dependent and independent variables of the study, setting the stage for a more detailed discussion in Chapter Five.

Chapter Five presents the findings of the empirical study conducted with 176 female owner-managers across various industry sectors in Ireland. The chapter focuses on how the characteristics of female owner-managers and their firms, along with strategic-related activities influence firm growth, testing the hypotheses previously outlined in Chapter Four. This chapter investigates whether

each hypothesis relating to the characteristics of the female owner-managers, their firms and the strategic-related activities choices had a significant influence on firm growth, supported or rejected as a result of the rigorous data analyses employed. The chapter concludes by highlighting the distinguishing characteristics of female owner-managers, their firms and strategic-related activities that influenced higher firm growth.

Chapter Six extends the empirical research findings even further by presenting a synthesis of the combined influence of female owner-manager and firm characteristics, and strategic-related activities by profiling high-growth firms emerging from the study as defined by the Organisation for Economic Cooperation and Development (OECD). A profile of the high-growth firms is compared to the overall study of 176 firms to establish if the distinguishing characteristics emergent from the overall study are shared amongst the high-growth firms. This analysis is completed with a view to possibly arriving at a common set of distinguishable characteristics and strategic-related activities that influence firm growth. The chapter concludes with a summary of the results.

Chapter Seven concludes the research, summarising the key findings of the study, relating the influence of female-owner and firm characteristics and strategic-related activities on firm growth and how they relate to previous studies. This chapter discusses the study's contribution and implications for academia, policy makers and female owner-managers alike. The chapter concludes by highlighting opportunities for future research. A final concluding statement is then given.

Chapter Two: Investigating Firm Growth in Female-Owned Firms

2.0 Introduction

The chapter presents a comprehensive discussion on the relevant literature surrounding understanding and investigating firm growth in the small firm. Initially, the review assesses the concept of small firm growth. A critical review evaluating the measures of firm growth is also presented. The chapter proceeds, turning its attention to introducing how a range of internal characteristics related to female owner-managers, their firms, and strategic-related activities influence firm growth. It should be noted due to the lack of female specific firm growth studies (Martin 2008; Minniti and Naude 2010; Brush and Cooper 2012; Jennings and Brush 2013), the review of small firm growth and the influential factors is positioned in the general mainstream literature on firm growth. The review of the generic studies is deemed relevant as they highlight factors worthy of research in this study and further provide useful insights into the most appropriate methodologies to adopt. In addition a number of ancillary studies are referred to as deemed appropriate in the review of the literature.

2.1 Investigating Small Firm Growth

Despite the substantial interest and massive empirical research conducted on small firm growth, the theoretical development in the field has been notably slow (Davidsson and Wiklund 2000; Delmar *et al* 2003; Shepherd and Wiklund 2009; Blackburn and Kovalainen 2009; Leitch *et al* 2010). To date, a lack of a common body of well-founded knowledge still exists about the causes, effects or process (Davidsson and Wiklund 2000; Leitch *et al* 2010), with fundamental questions remaining unanswered as *“little is still known about the phenomenon, and conceptual development has been limited”* (Wiklund *et al* 2009, p. 351). A recent review by Barkham *et al* (2012) endorsed the complexities associated with small firm growth, concluding that further research is required. The need for this is even

greater in the female domain (de Bruin 2006, 2007; Leitch *et al* 2010) - a need addressed in this study.

Given the heterogeneity and complexity of small firm growth, a useful starting point in the review of the literature is its definition. Research by Majumdar (2008) and Neergaard (2008) indicates that generally there is no agreed definition of firm growth thus making it difficult to investigate growth in the small firm. This is mainly due to the conflicting nature of the understanding of firm growth and resulting from this, numerous and various definitions of firm growth in the context of SMEs have been proposed (Gibb and Davies 1990; Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Smallbone and Wyr 2000; Gibb 2000; Blackburn and Kovaleinen 2009; Fadahunsi 2012). Differing definitions of firm growth relate to the perceived optimum firm size. For instance, at policy level, when job creation and economic development is crucial (Storey 1994), large firms tend to be equated with firm growth and are perceived as desirable (Cliff 1998; Leitch *et al* 2010). The inevitable corollary is, where considerable value is placed on size, small firms are perceived as being an indicator of lower firm growth (Cliff 1998; Du Rietz and Henrekson 2000). However what is clearly evident in the literature is that firm size does not necessarily equate to firm growth (Davidsson *et al* 2006; Headd and Kirchoff 2009). Some research (Watson *et al* 1998; Beaver and Ross 2000) suggests that firm growth is associated with the achievement of meeting business objectives while other research (Sexton and Similor 1997; Jennings and Brush 2013) propose that firm growth was about evaluating the effectiveness of the owner-manager in increasing the performance of the established firm, suggesting that firm growth was the essence of entrepreneurship, whereby there is an assumption that most owner-managers actually want to grow (Cliff, 1998; Greene *et al* 2003; Manolova *et al* 2012).

Analysis of the literature would suggest that what constituted growth for the small firm is dependent on the owner-manager's perception, intention and motivation for firm growth (Cliff, 1998; Dobbs and Hamilton 2007). Further, firm growth is not without risks, posing a dilemma for owner-managers who recognise that both

the pursuit and achievement of it can have both desirable and undesirable consequences for them and their firms. These include the loss of the “*informal and family-like character of the small organisation*” (Davidsson *et al* 2007, p.16), a concern with losing control of the firm, and a diminution in one’s work-life balance (Carter and Shaw 2006; Martin 2008). This is consistent with Cliff’s proposition that many owner-mangers attain and then maintain a comfortable and manageable “*maximum business-size threshold*”, beyond which they do not wish to expand (Cliff 1998, p.523).

The difficulties in arriving at one specific definition as to what constitutes growth in the small firm was further encountered in research completed by Smallbone and Wyr (2000), Gibb (2000), Donohoe and Wyr (2005) and Shepherd and Wiklund (2009). They suggested that the heterogeneity that exists in the various types of small firms and also due to the range of factors that may influence firm growth, which may interact with each other in different ways in different circumstances, makes it difficult to adequately explain firm growth (Delmar *et al* 2003; Blackburn and Kovaleinen 2009; Fadahunsi 2012). It has also been proposed that it was incorrect to assume that all firms irrespective of their size (small, medium or large) wished to grow or indeed experienced the same challenges in the achievement of firm growth (Wiklund *et al* 2003; Manolova *et al* 2012). This recognition that growth is unique to each firm echoes the influential research completed by Penrose (1959). She emphasised the importance of differentiating between large and small firms, advocating that the theories of growth applied to large firms were not applicable to the heterogeneous characteristics of the small firm. Barkham *et al* (1996) reinforced the difficulties of applying generic theories of growth in the small firm context particularly in the early stages of new business development, consistent with the findings of Penrose (1959), Beaver and Ross (2000), still debated in more recent literature (Blackburn and Kovaleinen 2009; Fadahunsi 2012).

In keeping with the emphasis on understanding the concept of firm growth, but with a more specific description of what it constituted, a number of studies

(Storey 1994; Kinsella *et al* 1994; Barkham *et al* 1996; Gundry and Welsch 2001; Wiklund *et al* 2003; Manolova *et al* 2012) reported that firm growth is the most popular measure used to ascertain the success of the firm, here referred and used as an output measure. Within these studies firm growth was further defined (Brush and Vanderwerf 1992; Bhide 2000; Davidsson and Wiklund 2000; Delmar *et al* 2003; Garnsey *et al* 2006) using more specific measures of financial growth (turnover, profits) and non-financial measures, where employment growth was most frequently applied.

While many studies purport that firm growth relates to firm size, financial performance, and employment numbers, other research recognises the role of the other determinants and most notably the owner-manager in achieving such. Davidsson (1989, 1991) developed the analysis of small firms by extending the analysis of the decision to grow, contradicting the theory that all small firms display a willingness to grow. According to Liao *et al* (2003) the influence of the owner-manager is a key source of the difference in firm growth, later supported by Morris *et al* (2006) who noted that it should not be taken for granted that all owner-managers follow the same quest for firm growth. Echoing this, in more specific female research, female owner-managers place a greater emphasis on non-financial rather than financial measures as a means of measuring firm growth (Carter and Allen 1997; Cliff 1998; Gundry and Welsch 2001; Roomi *et al* 2009), highlighting differences between the different meanings of what constitutes firm growth. Therefore, in assisting on what constitutes firm growth in female-owned firms and preceding any further discussion on the determinants of firm growth, it is necessary to clarify how growth is measured to determine which one or combination capture the essence or nature of all aspects of small firm growth.

2.2 Measures of Firm Growth

For fifty years, the field of firm growth has been heavily influenced by economics and in particular, Edith Penrose's monolithic "*Theory of the Growth of the Business*" (Penrose 1959), which defines growth as both an "*internal process of development*" and an "*increase in amount*" (Leitch *et al* 2010, p. 251). Most

emphasis has been placed on the latter, which accounts for the dominant use of outcome-based quantitative indicators. In addition to the most commonly used growth measures, namely employment and turnover, profitability, market share, and physical output, (Havnes and Senneseth 2001; Dobbs and Hamilton 2007; Blackburn and Kovaleinen 2009; Roomi *et al* 2009) have also been proposed as measures for firm growth. There are several conceptual and empirical challenges in the study of measuring firm growth (Pasanen 2003; Blackburn and Kovaleinen 2009) and as a result there have been several contradictory results reported in several studies. Pasanen (2003) and Gilbert *et al* (2006) suggest that firm growth can occur in many different aspects of a firm's operations, such as its cash flow, net income, customer base, sales, employment and market share. The dilemmas associated with using such measures are well documented and have questioned the usefulness of using just one or a number of measures, given that growth is not necessarily linear, sustained, or consistent over time (Smallbone *et al* 1995; Roomi *et al* 2009; Blackburn and Kovaleinen 2009).

The challenges encountered by researchers in arriving at a common set of measures to assess small growth were addressed in research by Barkham *et al* (1996) and Blackburn and Kovalainen (2009). These studies found a lack of consistency and commonality of a definition of growth had implications for the ability to arrive at a common set of measures, further rendering it difficult to compare research findings or apply the findings to guide policy development.

Havnes and Senneseth (2001) in examining small firm growth found that the notion of "growth" presupposed that measures of size existed, where firm growth was defined as the change in firm size over any given time interval. They advocated that two aspects ought to be addressed in arriving at an effective means of measuring firm growth; the first is a change in firm size, and secondly, quantifying this change over a period of time. With regard to the change in firm size, several aspects were incorporated to measure firm growth in the literature, which were fundamentally divided into financial and non-financial measures of growth. Financial measures typically included criteria such as profitability,

turnover, and earnings per share or growth in assets. Non-financial measures included employment numbers and to a lesser degree labour productivity per employee.

The second issue advocated by Havnes and Senneseth (2001) worthy of consideration in researching small firm growth is associated with the time, specifically how small firm growth reflects a change in firm size over a period of time. There is a general consensus that firm growth is a complex process where growth is neither linear nor dependent on a limited number of factors (Smallbone *et al* 1995; Deakins and Freel 2009; Hansen and Hamilton 2011), an issue examined in numerous research studies (Delmar *et al* 2003; Kelley and Nakosteen 2005; Bruneel *et al* 2009; Storey 2011). Essentially, these studies argued that growth in the small firm can be both positive and negative, over time. Delmar *et al* (2003) suggested the issue of the regularity or irregularity of growth over time had been neglected in research studies where growth was typically measured at a one point or between time points and, thus, is given consideration in this study, a call supported in more recent studies by Blackburn and Kovalainen (2009), Hansen and Hamilton (2011) and Storey (2011).

The most frequently used growth measure has been change in a firm's turnover (Freeser and Willard 1990; Murphy *et al* 1996; Rosa *et al* 1996; Weinzimmer 2000; Edelman *et al* 2005; Gilbert *et al* 2006; Roomi *et al* 2009) as it tends to reflect the inflationary pressures of the time being studied, and is familiar to owner-managers (Neiswander and Fulton 1989; Roomi *et al* 2009). Furthermore, it reflects long-term and short-term changes in the firm and the environment in which it operates. Data on turnover is generally more easily obtained relative to profits and can indicate trends in the financial performance of the firm with respect to aggregate sales and market share. Barkham *et al* (1996) and Roomi *et al* (2009) reported turnover was the least problematic of the financial variables to use, as it was easy to measure, record and was more readily obtained from the owner-manager relative to profit figures. These studies also suggested that sales were a good indicator to measure firm growth, allowing the firm to benchmark or

compare its performance relative to competitors in the marketplace. While the use of turnover as a measure of firm growth is important, its use as the sole means is limiting as it does not reflect the range of personal, firm and strategic objectives which influence the achievement of financial growth for the small firm. Barkham *et al* (1996) suggested that the need to differentiate between firm growth and the financial performance of the firm. They specified that performance was assumed financial in nature, whereas growth had a broader interpretation to include employment, market share, and product development. Barkham *et al* 1996 indicated that a firm could be performing well financially but not growing to the same degree. Liao *et al* (2001) concurred with these conclusions, advocating that the use of financial measures to understand growth outcomes did not take into consideration intervening factors (micro or internal factors and macro or external environmental factors) which influenced the financial outcomes of firm growth. One such factor was the change in employment numbers in the firm.

Employment numbers have emerged as the most frequently used non-financial measure of firm growth in the review of the literature (Gilbert *et al* 2006; Blackburn and Kovaleinen 2009; Roomi *et al* 2009; Hansen and Hamilton 2011). This is particularly relevant for research with a policy orientation, as job creation is an important focal point for government policy. Employment numbers are easily collected and categorised, are not affected by inflation and are beneficial for cross-comparative purposes. Furthermore, employment growth figures are readily measurable and reflect more accurately the change in firm growth over time compared to other variables such as profit or turnover which are more sensitive to external changes in demand or changes in the costs of doing business (Gilbert *et al* 2006; Blackburn and Kovaleinen 2009). While such data can be useful, it is important to be mindful of the limitations of this measure as a sole means of capturing indicators of small firm growth. These limitations centre on the changing patterns of employment in the small firm where there is a move towards part-time, temporary or contract staff and as a result these data may not be captured as easily as data on full-time staff. Furthermore employment is industry sector specific and firm size dependent, thereby requiring consideration in the

interpretation and comparison of data on employment growth between firms in different industry sectors. As with financial measures, employment numbers as a sole measure of assessing firm growth does not provide a realistic reflection on growth of the firm. It is only when employment is used in conjunction with other financial measures that a more inclusive insight into the growth of the small firm is obtained. This is evident in studies completed by Storey (1994), Barkham *et al* (1996), Du Riekz and Henrekson (2000), Orser and Scott (2000), O'Gorman 2001, Havnes and Senneseth (2001) and Roomi *et al* (2009) where a combination of both financial and non-financial measures were incorporated, including sales, profitability and employment growth. The use of multiple measures to incorporate both financial and non-financial features of the small firm provides a more complete and integrated perspective of relationships between a range of assorted factors and different aspects of firm growth.

Most studies on growth use a variety of financial and non-financial growth measures due to the fact that no universal set of growth measure seems to exist (Delmar *et al* 2003). More recent research conducted by Roomi *et al* (2009) and Diaz-Garcia and Brush (2012) acknowledge that measures of growth should include both subjective and objective dimensions relying on gross revenues as a means of measuring growth, suggesting that gross revenues was the most appropriate since they are closely related to profits in the sector under study, reflecting earlier research by Collins-Dodd *et al* (2004). This measure was also employed with a view to reducing response inhibitions, a finding frequently reported in other studies (Barkham *et al* 1996; Roomi *et al* 2009).

From reviewing prior research on measuring small firm growth it is evident that a number of factors characterise this phenomenon. Failure to recognise the number of, and the interaction of such factors appears to have led to confusion and conflict in current theory and research findings (Delmar *et al* 2003; Blackburn and Kovalainen 2009; Fadahunsi 2012). There is variation in the kinds of growth measures used in previous research studies on firm growth with many studies acknowledging that not all firms grow in the same way and furthermore how

growth is measured differs among firms (Chandler *et al* 2009; Blackburn and Kovaleinen 2009). This implies that researchers should measure different forms of growth with different growth measures, a consideration that was taken into account for this study.

In choosing the most appropriate performance measure(s) to adopt for this study it is necessary to ensure the measures are meaningful and accommodate the characteristics of female-owned firms and the type of information required and so should incorporate both financial and non-financial measures. Consequently, a mixture of financial and non-financial measures should be used as a useful output measure for assessing firm growth, incorporating all elements affecting firm growth in female-owned firms, given the problems evidenced in previous studies regarding the measurement of firm growth.

Having discussed the challenges faced in understanding and investigating firm growth, a critical review of the factors influencing firm growth is now presented.

2.3 Factors Influencing Firm Growth

There are several determinants of firm growth (Kinsella *et al* 1994; Storey 1994; Delmar *et al* 2003; Dobbs and Hamilton 2007; Fadahunsi 2012), however, researchers have been unable to achieve a consensus regarding the factors leading to firm growth (Weinzimmer 2000), argued more so in the female context, compounded by this lack of consensus in the mainstream literature. Gibb and Davies (1990) reported that most of the research on firm growth fails to provide convincing evidence of the determinants of growth as a basis for informing policy makers. It has been established that the evidence is rather fragmented and based on a multitude of approaches (Dobbs and Hamilton 2007; Leitch *et al* 2010).

From what is known about the growth phenomenon, the literature has evidenced that the study of firm growth can be categorised into two schools of thought (Papadaki and Chami 2002). The first school of thought sees growth as a natural phenomenon in the evolution of the firm (the models of growth approach), while

the second sees growth as a consequence of a range of internal characteristics and strategic-related activities adopted by owner-managers. The first school of thought, i.e. the models of growth approach, has been criticised because of its extreme simplification of reality (Papadaki and Chami 2002). In some cases not all stages of development were found in small firms whereby in some cases stages of development may occur several times, and in other firms the stage may occur in an irregular order, thus there is a lack of empirical evidence to support the theories (Gibb and Davies 1990; Bridge *et al* 1998). Due to the limitations and criticisms evidenced throughout the literature on the growth models approach, it is deemed more appropriate to investigate growth in female-owned firms not through the growth models approach, but according to the second school of thought demonstrating that firm growth is influenced by a range of internal factors, interdependent and interrelated, namely the characteristics of the owner-manager, firm characteristics and strategic-related activities, as initially proposed by Storey (1994), and subsequently and frequently advocated in other research studies (Dobbs and Hamilton 2007; Roomi *et al* 2009; Fadahunsi 2012).

Research to date has not discovered the fundamental characteristics of firms or their owner-managers that point to firm growth (Gibb and Davies 1990; Leitch *et al* 2010; Fadahunsi 2012) and according to Allen and Stearns (2002), Gately and Cunningham (2005), and Leitch *et al* (2010) little is yet known about the early efforts to start a growth-orientated firm. Thus, it is suggested that what constitutes firm growth for the female-owned firm is dependent on what constitutes firm growth for female owner-managers, thus, deeming this important for inclusion in this study. As Achtenhagen *et al* (2010, p.309) note, despite the fact that owner-managers are “*the enactors of business growth*”, ultimately deciding whether or not to grow their firms, they are not given the central role they deserve. This is not only the case in the generic studies conducted on firm growth, but of significance to this particular study, with its focus on the central role of the female owner-manager.

Furthermore, in understanding firm growth and the central role the owner-manager plays, or female owner-manager in this case, in its achievement, it is also necessary to investigate differences that may exist between firms in the same size category. It is suggested that firms with common profile characteristics (firm age, firm size, or industry sector) can display differences in firm growth (Wiklund *et al* 2009; Henrekson and Johansson 2008). Additionally, the literature promotes that firm growth is manifested in a variety of objectives, both personal and commercial. Thus, it is argued that the perception of growth is closely aligned with the type of objectives for firm growth which drive strategic-related activities, resulting, in turn, in a variety of growth outcomes in female-owned firms, each of which are deemed appropriate for inclusion in this study.

The interest in small firm growth and the role of internal factors is evident in the increasing number of studies (Fadahunsi 2012). Previous studies vary in their findings and research approaches however, consistent features are the role of the owner-manager, firm characteristics and strategic-related activities, firstly proposed by Storey (1994), and strongly reinforced in numerous subsequent studies (Kinsella *et al* 1994; Barkham *et al* 1996; Dobbs and Hamilton 2007; Roomi *et al* 2009; Fadahunsi 2012).

2.4 Firm Growth: The Influence of Female Owner-Manager & Firm Characteristics, and Strategic-Related Activities.

The conceptual and seminal study by Storey (1994), depicted in Figure 2.1, is regarded as a critical base point to guide the review of the literature on this topic, deemed as one of the more comprehensive studies completed on small firm growth (Smallbone *et al* 1995; Dobbs and Hamilton 2007; Roomi *et al* 2009; Fadahunsi 2012). Storey (1994), in his review of the factors influencing small firm growth reported that certain characteristics related to the owner-manager, the firm and strategic-related activities influence firm growth, incorporating both the role of internal and external factors, a widely debated topic in the literature.

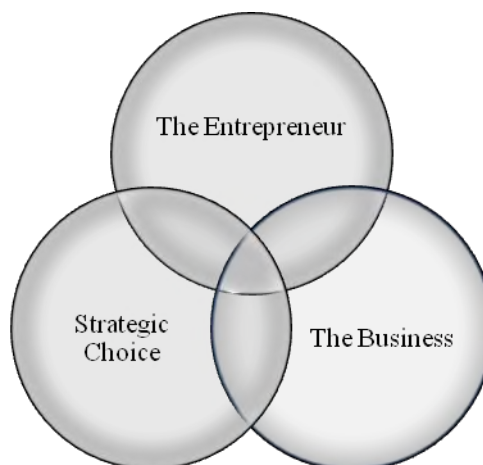


Figure 2.1: Growth in Small Firms (Storey, 1994: p.124)

Whilst the role of external factors is acknowledged, they are not investigated as part of this study for various reasons. A review of the previous studies on firm growth suggests that the growth effects of these external factors are less well established. Furthermore, the external factors are outside the control of the owner-manager; however, an understanding of their possible impact is necessary to guide the strategic direction of the firm. Additionally, the range and contribution of previous studies on the impact of internal factors is more significant. Therefore, examining internal factors is deemed more appropriate as it gives consideration to the heterogeneity of the small firm and will highlight how and if those internal factors are associated with firm growth in female-owned firms.

The emergent range of internal factors influencing growth, from Storey's study (1994), act as a guide to reviewing the extant literature regarding how a range of internal characteristics of the person and the firm, along with the strategic-related activities influence firm growth.

Storey (1994), in his assessment of the literature on small firm growth suggested that a broad range of internal factors influence firm growth in small firms, identifying fifteen characteristics of the owner-manager, six firm characteristics and eight elements relating to strategic-related activities. Figure 2.2 depicted below highlights the internal factors emerging from the study:

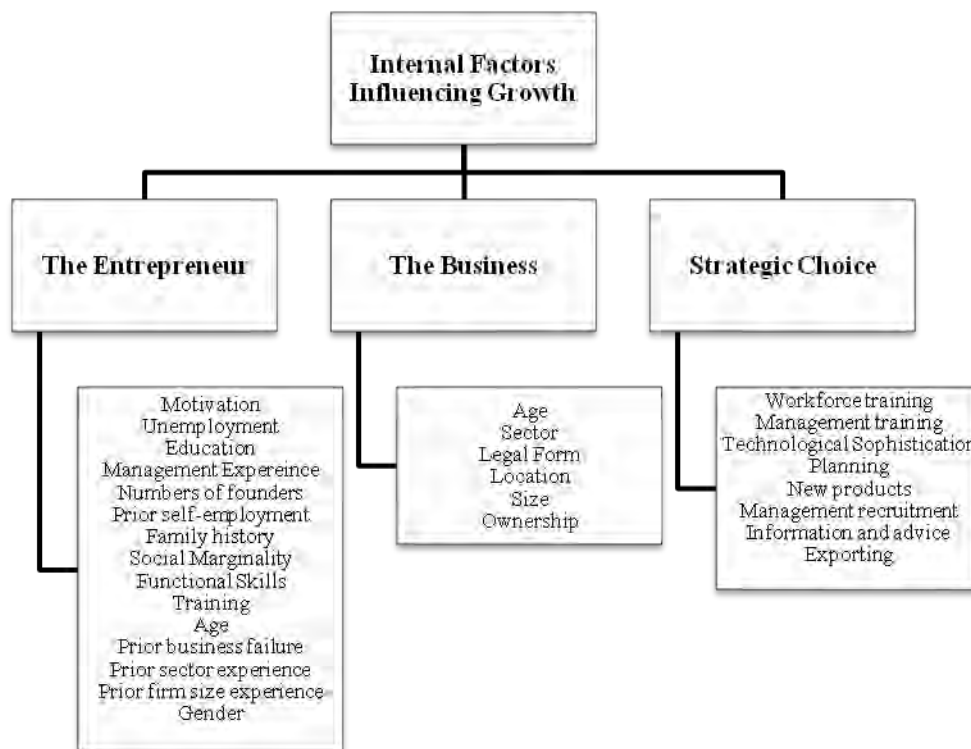


Figure 2.2: Internal Factors Influencing Growth
Adapted from Source: Storey (1994), p.123

This research, evidenced as the most comprehensive compilation of results of previous studies focusing on small firm growth is applied in the female context due to the robustness and rigorous research completed, and for its continued recognition in the field of study on small firm growth (Smallbone *et al* 1995; Fadahunsi 2012). This study divided internal factors into three groups, namely the characteristics of the owner-manager, firm characteristics, and strategic-related activities, suggesting that it was only when all three sets of factors combined and linked together that firm growth was achieved, as each set of factors provided a contribution to, and influenced firm growth.

Storey (1994) examined the association between personal characteristics of the owner-manager such as the motivation for business start-up, family background, age, education, prior employment experience (either in paid employment or in self-employment) with small firm growth. Furthermore he stated that certain firm characteristics should also be investigated when researching firm growth, more

specifically industry sector, firm age, firm size, and location. The final category examined how strategic-related activities, including products and markets; production processes; employment and the use of labour; changes in ownership and organisation and management changes were related to firm growth. Storey (1994) concluded the characteristics of the owner-manager and the firm, and strategic-related activities were the key factors to be investigated when analysing small firm growth due to the interplay of these three categories and their combined influence on firm growth. Therefore, this seminal study is used as a foundation and starting point to review the relevant studies on small firm growth for this research. Storey (1994) and other studies most referenced are used to guide the review of the literature and are presented in Table 2.1. The studies encompass both general and gender-specific studies on small firm growth, deemed appropriate for inclusion with a view to identifying which internal factors are relevant for inclusion in the empirical study of this research.

Table 2.1: Firm Growth- Previous Studies on Firm Growth

| Author | Study Description | Nature of Study | Methodology |
|------------------------------|--|---------------------|-------------------------------------|
| Storey (1994) | A review of studies examining how three sets of internal factors- owner-manager; firm specific and business strategy factors influenced small firm growth. | Non-gender specific | Review of 18 studies on firm growth |
| Kinsella <i>et al</i> (1994) | An examination of the characteristics of fast growth firms with an emphasis on owner-manager characteristics such as their age, education, work experience, ownership in another firm, and their managerial practices | Non-gender specific | Quantitative Study |
| Barkham <i>et al</i> (1996) | An investigation of how the nature of firm, owner-manager characteristics and business development strategies determined small firm growth. | Non-gender specific | Quantitative Study |
| Rosa <i>et al</i> (1996) | A study of gender and ownership in U.K. small firms | Gender specific | Quantitative Study |
| Carter and Allen (1997) | An examination of the determinants that effect the size of female-owned businesses | Gender specific | Quantitative Study |
| Cliff (1998) | An exploration of the relationship between attitudes towards growth, gender and business size | Gender specific | Quantitative Study |
| Roper (1998) | An evaluation of the linkages between strategic actions of the owner-manager and small firm growth, with specific emphasis on the process of strategy development and how the owner-manager characteristics influenced the management of growth in the small firm. | Non-gender specific | Quantitative Study |
| Du Rietz and | An examination into the underperformance of female owned businesses | Gender specific | Quantitative Study |

| | | | |
|-------------------------------|---|---------------------|---------------------------------------|
| Henrekson (2000) | | | |
| Gundry and Welsch (2001) | An investigation into the high growth strategies utilised by female business owners | Gender specific | Quantitative Study |
| O' Gorman (2001) | A review of how both internal and external factors influence small firm growth with an emphasis on the role of strategy development and its relationship with small firm growth | Non-gender specific | Qualitative Study |
| Brush <i>et al</i> (2004) | An investigation of women entrepreneurs, growth and implications for the classroom | Gender specific | Review of studies completed on growth |
| Davidsson <i>et al</i> (2006) | An empirical analysis of business growth factors | Non-gender specific | Quantitative Study |
| Morris <i>et al</i> (2006) | An examination of the dilemma of growth in understanding the venture size choice of women entrepreneurs | Gender specific | Mixed method approach |
| Dobbs and Hamilton (2007) | A review of the empirical contributions to the small business growth since mid-1990s | Non-gender specific | Review of studies completed on growth |
| Roomi <i>et al</i> (2009) | A study of women-owned small and medium enterprises in England- an analysis of factors influencing the growth process | Gender specific | Quantitative Study |
| Fadahnsi (2012) | A review conducted to develop a framework for researching growth in small firms, specifically examining the central tenets of Storey's conceptual framework | Non-gender specific | Review of studies completed on growth |

Source: Compiled by the author

Aligning with Storey (1994), Kinsella *et al* (1994) researched the characteristics of fast growth firms with an emphasis on how internal factors were associated with small firm growth. The study was conducted by examining again how three sets of internal factors, namely the characteristics of the owner-manager and the firm along with the choice of strategy were associated with small firm growth. Regarding the owner-manager characteristics, factors such as the education, employment experience and management experience were researched to test their association with small firm growth. Secondly, research on how the characteristics of the firm were associated with small business growth included the product/service range, the firm industry sector, and firm age. Finally, the research examined how the management of growth and the general business strategies were associated with small firm growth. The common findings emerging from Kinsella *et al*'s (1994) study were that age of the owner-manager, prior

employment experience and experience gained in the ownership of another firm, along with firm age influenced firm growth.

The importance of the characteristics of the owner-manager and other related internal factors were further endorsed in research completed by Barkham *et al* (1996). Their study on the factors that impact small firm growth examined the extent to which three sets of factors namely the characteristics of the entrepreneur, the characteristics of the business and the strategies adopted by the entrepreneur influenced small business growth. With regard to the internal factors studied, Barkham *et al* (1996) chose similar factors to those examined by Storey (1994) and Kinsella *et al* (1994). Such factors incorporated an examination of the impact of gender, age, education, career history, management experience and involvement by the entrepreneur in another business. Firm-specific factors analysed how factors such as firm age, firm size, location, industry sector and the legal structure of the firm influenced growth. The third group, business strategy researched how the use of business planning, product and process development, marketing activities, management practices and the reliance on external advice impacted on small firm growth. The research study completed by Barkham *et al* (1996) was similar to that of Kinsella *et al* (1994) in adopting a regional focus in the UK, which included four regions compared to two regions in the Kinsella *et al* (1994) study. Barkham *et al* (1996) researched a broad range of internal factors with a more detailed and extended focus on both entrepreneur factors and strategic choice factors than in studies by Storey (1994) or Kinsella *et al* (1994). Finally Barkham *et al* (1996), similar to Storey (1994), argued that for the development of an explanatory small firm growth framework it is necessary to incorporate how a range of entrepreneurial characteristics influence small business growth, a consideration that was taken into account for this study. While gender as a variable was investigated in Barkham *et al*'s (1996) study, the study did not focus specifically on the factors influencing firm growth in female-owned firms.

One of the first large-scale studies focusing on gender and firm growth was conducted by Rosa *et al* (1996), specifically designed to investigate the impact of

gender on small business management, concluding that there are a number of internal factors (similar to the previous studies discussed) such as industrial sector, prior experience, founding strategy, firm age and presence of co-owners which influence small firm growth (Rosa *et al* 1996). Rosa *et al* (1996) argued these internal factors were important for consideration when investigating growth in female-owned firms, aligning with the findings of Storey (1994) and Kinsella *et al* (1994). However, the analyses also suggested that the relationship between gender and small business performance is complex, with gender being a significant determinant of firm growth. Female owner managers were found to be less likely to own multiple businesses and their strategies for growth were different from males given their domestic responsibilities, and they were less likely to expand their firms as a result (Rosa *et al* 1996).

Carter and Allen (1997) conducted a subsequent large-scale study of female owner-managers examining the size of female-owned firms and the role of the female owner-managers in determining this. A range of internal factors, echoing those of previous studies (Kinsella *et al* 1994; Storey 1994; Rosa *et al* 1996) were also examined in that study- the characteristics of the female owner-manager (motivation for business start-up, age of female owner-managers, family demands and educational levels) and firm characteristics (firm size and nature of ownership) and suggested that if female-owned firms remain small in terms of firm growth, they do so out of choice, reflecting earlier research (Kalleberg and Leicht 1991) and proposed that other variables supersede “choice” in growing the firm. These included having access to finance and a focus on profit objectives all contributing significantly to the growth of female-owned firms. These findings were reflected in subsequent research by Wickham (2004) who suggested that central to understanding small firm growth was an understanding of the characteristics and attitudes of the owner-manager and what firm growth meant for them.

Cliff (1998) explored the relationship between attitudes towards firm growth and firm size, investigating a range of five variables amongst both male and female

owner-managers as indicators of factors impacting on firm growth. The variables examined again were similar to previous studies and included education, previous work and management experience as well as industry sector experience. This study was conducted to explain the typically smaller size of female-owned firms, by investigating their attitudes to growth. The study evidenced differences with respect to how both male and females wished to expand and established that female owner-managers were more likely to establish maximum size thresholds beyond which they would prefer not to expand. Female entrepreneurs maintain a threshold that they are comfortable with; allowing them to maintain control of the firm, devote a reasonable amount of time and energy to the business, and balance work and personal life, similar to research by Chell and Baines (1998). The attainment of size thresholds appears to be a key trigger in the no growth decision in female-owned firms. Female owner-managers also emerged in this study as being more concerned about the risks associated with fast-paced growth and tend to deliberately adopt a slow and steady rate of expansion as part of their strategy. Thus, the role of the female owner-manager again dominated this study as a primary influencing factor on firm growth. However, what was not clear from the findings was the defined size threshold and how females can be facilitated to develop higher size thresholds or develop enhanced managerial competencies to allow them to achieve higher growth without diminishing the work-life balance.

The importance of including how a range of factors (as opposed to a single factor) influenced small firm growth was also promoted by Roper (1998) who suggested the majority of research focused on the influence of only certain individual sets of characteristics or factors and did not sufficiently explain how these factors interacted with each other to explain firm growth, consistent with later research conducted (Dobbs and Hamilton 2007; Roomi *et al* 2009; Fadahunsi 2012), and advocated the need to link and integrate the relationship between small firm growth and a range of factors, not just on a single factor. Indeed, a common theme emanating from the studies reviewed is the inability to isolate a particular factor, rather growth is determined by a range of internal factors across three areas related to the owner-manager, the firm itself, and the strategies adopted to achieve

firm objectives or the objectives the owner manager has for the firm. Fischer *et al* (1993) concluded that determinants of gender differences in business performance were far more complex, and should be examined by investigating multiple rather than individual determinants, mirroring other research (Kinsella *et al* 1994; Storey 1994; Delmar *et al* 2003; Barkham *et al* 1996; Roper 1998; Davidsson and Wiklund 2000; O’Gorman 2001; Liao *et al* 2001; Poutziouris 2003; Wiklund *et al* 2003).

Du Rietz and Henrekson (2000) conducted a large-scale of study female owner-managers to test the female “underperformance hypothesis” having previously emerged (Fischer 1992; Rosa *et al* 1996) reporting on the key measurements of firm growth in female-owned firms including sales, profitability, employment numbers and order numbers. Various firm characteristics were examined in relation to these measures, including firm size, industry sector, and markets served with the study confirming the aforementioned firm specific characteristics impact on firm growth. These findings echo Fischer *et al*’s (1993) study which concluded that determinants of gender differences in small firm growth were far more complex, and should be examined by investigating multiple rather than individual determinants, again reflecting previous research (Kinsella *et al* 1994; Storey 1994; Delmar *et al* 2003; Barkham *et al* 1996; Roper 1998; Davidsson and Wiklund 2000; O’Gorman 2001; Liao *et al* 2001; Poutziouris 2003; Wiklund *et al* 2003).

Gundry and Welsch (2001) conducted a study amongst female owner-managers, with a view to comparing the characteristics of high and low-growth female-owned firms with a view to providing a better comprehension of firm growth. This study examined how a range of factors relating to the owner-manager, the firm but more specifically strategy influenced firm growth, echoing Storey (1994). The results indicated that the strategy adopted was the key distinguishing feature between lower and higher growth female-owned firms, echoing previous studies which have determined strategy as influential on small firm growth.

Brush *et al* (2004) conducted a critical review of studies conducted on female entrepreneurship with firm growth being examined as part of this review, investigating both internal and external factors that influence firm growth in female-owned firms. Of note to this particular research, a range of internal factors relating to the characteristics of female owner-managers, their firms and the strategic-related activities were again highlighted as influencing firm growth. These factors included education, human capital, financial capital, and strategic choice, growth choice, and institutional and cultural barriers.

Davidsson *et al* (2006) also conducted a critical review focusing on small firm growth, attempting to summarise the key themes emerging from previous studies. The study initially focused on the phenomenon of firm growth, with a view to understanding what constitutes firm growth, then proceeding to discuss the how firm growth should be measured. This review also focused on the internal (choice for growth, industry sector, team ownership, gender, firm age and size, and strategic actions) and external determinants (the economic environment) that influence firm growth. The study concluded that growth is a heterogeneous phenomenon and thus presents challenges for its investigation, reporting that firms grow at a different pace and with different regularity, also concluding the owner-managers willingness to grow, education and experience and firms run by teams achieve higher firm growth.

Morris *et al* (2006) researched growth in female-owned firms and considered how a range of characteristics relating to female owner-managers and their firms impacted on growth. Characteristics examined included the motivations for business start-up, aspirations for growth, age, and educational levels of female owner-managers along with firm characteristics such as the nature of ownership, firm age and size. This study again concluded that a range of factors both personal and firm specific impact on firm growth, advocating that the factors are not independent but rather interrelated. This study advocated that future research should develop models of growth that capture different growth paths of female owner-managers, considering the types of, rates of, and patterns of growth over

time. Such patterns can then be linked to the attitudes, experiences, and characteristics of female owner-managers as well as firm characteristics. The findings relating to firm specific characteristics such as firm age, size and sector were more recently reaffirmed by Diaz-Garcia and Brush (2012). This study explored the effects of gender on firm performance investigating firm characteristics including sector, age and firm size, reflecting previous studies (Storey 1994; Dobbs and Hamilton 2007; Roomi *et al* 2009), concluding a range of interrelated factors impact on growth in female-owned firms. Of critical importance, this study concluded that gender *per se* did not have an effect on firm performance, explaining away gender differences caused by situational factors.

In addition, Dobbs and Hamilton (2007) conducted a review of the empirical contributions to small firm growth literature since the mid-1990s, using the factors adopted in previous studies including characteristics of the owner-manager; environment/industry factors; firm characteristics and management strategies. The owner-manager and firm characteristics investigated included motivation, education, prior experience, and firm age and size, while management strategies similar to Storey's (1994) study included setting growth objectives, and product and market development (including international markets). The study concluded linear growth is very rare for most small firms, occurring in one period of time but not the next, echoing previous research (Davidsson *et al* 2006). The growth profiles of firms are continually changing based on the factors and characteristics that influence them. Furthermore the major recommendation made by the study is that researchers should adopt longitudinal research design that enables them to trace the growth path of small firms.

Research conducted by Roomi *et al* (2009) analysed the main factors affecting firm growth in female-owned firms. This study once more investigated a range of factors, related to personal and firm characteristics and strategy. Similar to the findings of previous studies (Storey 1994; Morris *et al* 2006; Dobbs and Hamilton 2007) this study concluded that a range of factors (both internal and external) affect growth, and not just a single factor.

A recent study by Fadahunsi (2012) revisited the conceptual tenets of Storey's (1994) study justified by the extent to which this study has been used in a variety of empirical studies with a view to providing a research agenda for growth in small firms. Fadahunsi (2012), based on Storey's study (1994), used a three pronged analysis, drawn from the characteristics of the owner-manager, the firm and the strategies pursued by the firm. The owner-manager characteristics examined for their influence on firm growth included motivation for business start-up, education, ownership and management experience, number of founders, gender and age, consistent with Storey's study (1994). Firm characteristics examined included firm age, industry sector, location, and firm size. Strategic activities reviewed included training, marketing strategy, internationalisation, strategic planning and the use of external advice and support. The review concluded that distinguishing characteristics of owner-managers, centring on growth motivation, education, prior experience and team ownership influence firm growth. Coupled with this is the industry in which the firm operates. While industry sector had a positive influence on firm growth, less clear cut influence was evident for firm age. Regarding strategic-related activities, the most influential on firm growth included the ability to leverage external support and the ability to engage in strategic planning. This review, echoing Dobbs and Hamilton (2007), evidenced the temporal nature of firm growth and advocated that to identify a typical growth pattern, small firm growth should be investigated over a period of time - a consideration accounted for in this study.

The review of the previous studies conducted on firm growth, both general and gender specific, bring to the fore a number of considerations for this study. Firstly, a number of key internal factors relating to the characteristics of the owner-manager, in this case female owner-managers, female-owned firm characteristics and strategic-related activities have emerged, aligning with Storey's (1994) study. This review of the literature has highlighted the centrality of the owner-manager on firm growth (Wiklund *et al* 2003), with the most commonly researched characteristics being age, motivation for business start-up, education, and prior employment experience. Firm characteristics commonly linked with firm growth

include industry sector, firm age, firm size and the nature of ownership. Strategic-related activities also emerge as a factor influencing firm growth. As a result, it is deemed significantly important to investigate each of these factors being commonly linked with higher firm growth in further detail to consider their influence in the context of female-owned firms. The subsequent chapter will discuss in greater detail these factors with a view to determining their relevance for investigation in the empirical study of this research.

It is important to note that generally studies on firm growth are positioned in the mainstream literature and for the most part are non-gender specific in nature, thus highlighting the need to investigate whether the mainstream firm growth findings are applicable in the female context. The critical review has depicted the majority as quantitative studies, a trend that is notable in the study of firm growth (Davidson *et al* 2001; Blackburn and Kovalainen 2009; Jennings and Brush 2013) and accordingly an issue to be considered for the empirical study, along with the recommendations that in capturing patterns in firm growth it should be studied over a period of time, rather than at one point, using multiple measures.

2.5 Conclusion

This chapter depicts firm growth as a broad and multidimensional phenomenon in nature and its study further compounded by the variety of measures adopted. Key to this preliminary analysis is the lack of research pertaining specifically to female-owned firms. The chapter has investigated mainstream and gender-specific studies (where possible) on small firm growth, with a view to identifying common internal factors that influence small firm growth. This chapter has reviewed the literature pertaining to the phenomenon of firm growth and the challenges associated with understanding small firm growth. The chapter has presented challenges associated with measuring firm growth, leading to a conclusion that multiple rather than singular measures should be adopted so as to provide a more holistic view of small firm growth, considering both financial and non-financial aspects. Of critical importance to this particular study, the internal factors commonly linked with higher firm growth in the extant literature have been

introduced, highlighting owner-manager and firm characteristics, and strategic-related activities, each of which will be discussed in significant detail in the subsequent chapter.

Chapter Three: The Influence of Female Owner-Manager, Firm Characteristics and Strategic-Related Activities on Small Firm Growth

3.0 Introduction

The intention of this chapter is to review the most pertinent literature on a range of internal factors influencing firm growth, namely female owner-manager and firm characteristics and strategic-related activities. The chapter firstly critically appraises seminal and more contemporary research on the central internal characteristics of female owner-managers, specifically age, motivation for business start-up, education, and prior employment experience for their influence on firm growth. The focus then shifts to female-owned firm characteristics by specifically evaluating industry sector, firm age, firm size, and the nature of ownership. The chapter proceeds to evaluate the literature on how strategic-related activities influence firm growth in female-owned firms, exploring growth objectives, strategic planning, and type of strategy and strategic activities. The chapter concludes by presenting a range of female owner-manager and firm characteristics and strategic-related activities deemed worthy of empirical investigation in this study.

3.1 Firm Growth- The Role of Female Owner-Manager Characteristics

It is apparent that the owner-manager plays a central role in the determination of firm growth due to the close relationship between the owner-manager and the firm (Davidson 1991; Storey 1994; Barkham *et al* 1996; Montserrat 2002; Barringer and Jones 2004; Majumdar 2008; Smallbone and Wyr 2012; Mitchelmore and Rowley 2013). Indeed, Gilbert *et al* (2006) proposed that the firm is an extension of the owner-manager and, thus, their characteristics are deemed worthy of investigation for their influence on firm growth.

3.1.1 Age

The age of the owner-manager and its impact on firm growth is an area that has been carefully researched in the past (Hisrich and Peters 1984; Davidson 1991; Storey 1994; Barkham *et al* 1996; Persson 2004; Coleman 2007; Storey and

Greene 2010; Storey 2011) with three main findings emerging. The first is that only younger owner-managers will have the energy and the commitment to work the long hours which are necessary for the firm to be successful (Davidsson 1991; Autere and Autio 2000; Barkham *et al* 2004; Storey and Greene 2010; Storey 2011) and furthermore the willingness of younger owner-managers to assume business risks compared to older owner-managers (Orser *et al* 2000; Welter 2001; Bullock *et al* 2004) is greater. A study by Davidsson (1991) and Storey (1994) suggested that younger owner-managers may have a higher need for additional income attributed to the burden of supporting a family and meeting payments. This burden declines with age and, thus, the older owner-manager may not be as motivated as the younger. It is also argued that older owner-managers not only lack the physical energy for such hard work but also, if they are getting close to retirement, may have much more modest objectives or ambitions for firm growth (Storey and Greene 2010). Younger owner-managers are also recognised as being “closer” to new emerging technologies that are likely to take off and grow (Storey and Greene 2011). Thus, it is suggested that the age of the owner-manager has an influence on firm growth where younger individuals display higher firm growth (Autere and Autio 2000; Barkham *et al* 2004; Bosma *et al* 2007).

The second argument emerging (Storey 1994; Storey 2011) is that whilst younger owner-managers may have more energy, they may lack credibility as well as the requisite business experience. Moreover, they lack the essential social and professional contacts as well as capital limitations to grow a firm successfully (Cooper *et al* 1994; Bosma *et al* 2004; Persson 2004; Storey and Greene 2010). For these reasons, it has been proposed older owner-managers are more likely to have growing firms. The third argument combines the previous two arguments, suggesting that middle-aged owner-managers are more likely to have the experience, credibility, energy and access to resources and so are mostly likely to operate a growing firm (Storey 2011).

Evidently there are variations in the findings relating to the influence of age on firm growth, with studies (Storey 1994; Mata 1996; Bosma *et al* 2004; Persson

2004; Coleman 2007; Storey and Greene 2010; Storey 2011) positively linking younger, middle aged and older owner-managers with firm growth. Furthermore, it is apparent that age is treated in a generic manner with few studies (Rosa *et al* 1996; Carter and Allen 1997; Cliff 1998; Roomi *et al* 2009) focusing solely on how particular age cohorts of female owner-managers relates to firm growth. To date there is no conclusion as to what is the ideal age of female-owners achieving firm growth. Instead, the literature pertaining to age has focused on profiling the age of female owner-managers starting a business, reporting that early stage entrepreneurial activity occurs among females aged 25-34 and established firm ownership among women aged 35-54 years old, evidencing in general, female owner-managers are older than their male counterparts in starting new firms and in operating more established firms (Madsen *et al* 2003; Morris *et al* 2006; Aylward, 2007; Fitzsimons and O' Gorman 2012). Thus, consideration should be given to the age of female owner-managers and its relationship to firm growth, given that females start firms at a later stage, and of more importance to this particular study, operate established firms at an older age. The evidence on the relationship between age and firm growth to date is general in nature and does not address whether it is younger, middle-aged or older female owner-managers that achieve higher firm growth.

3.1.2 Motivations for Business Start-Up

A number of authors argue that an owner-manager's motivation for starting a firm can influence firm growth with previous studies (Dobbs and Hamilton 2007; Delmar and Wiklund 2008; Doern 2009) attempting to categorise why the firm was established and relate that motivation to whether or not the firm grows. At its most simplistic, a crude distinction is made between positive and negative motivations with the preposition being that individuals starting a firm with positive motivations are more likely to establish a firm which subsequently grows more than those with negatives motivations. The chief theory in the research on entrepreneurial motivation is that of "push"/pull" factors, (Segal *et al* 2005; O' Gorman and Cunningham 2007) proposed by Gilad and Levine (1986) (Buttner and Moore 1997; Deakins *et al* 2000; Ducheneaut and Orhan 2000; Orhan and

Scott 2001). To date the research conducted with regard to push and pull factors is contradictory in its findings. Some studies (Keeble *et al* 1992; Orhan and Scott 2001) suggest that individuals become entrepreneurs primarily due to pull, rather than push factors, while others state the reverse (Storey 1994; Earle and Sakova 2000, Moore and Muller 2002; Ritsila and Tervo 2006). Other studies show motivations are a combination of push and pull factors rather than a single factor (Ducheneaut and Orhan 2000; Deakins *et al* 2000; Orhan and Scott 2001; Kelley *et al* 2011; Coleman and Robb 2012), thus, conflicting findings emerge.

A central focus of research pertaining to female owner-managers is their motivation to develop their own firm (McKay 2001), and similar to the mainstream literature pull and push factors emerge as the most common motivations (Brush 1990; Buttner and Moore 1997; Orhan and Scott, 2001; Carter and Shaw 2006; Sullivan and Meek, 2012). Studies on female entrepreneurship report that females start a firm due to pull factors- desire for autonomy and independence, personal satisfaction and achievement (Goffee and Scase 1985; Carter and Cannon 1992; Marlow 1997; Moore and Buttner 1997; Carter 2000; Ducheneaut and Orhan 2000; Valiulis *et al* 2004; Carter and Bennett 2006; Walker and Webster 2007; McGowan *et al* 2012). In contrast, there is some conflicting evidence that push factors may be more influential (Sarri and Trihoupolou 2005). Dissatisfaction in the labour market is more prevalent amongst females due to gender-specific circumstances, i.e. reaching the “glass ceiling”, seeking more control over their careers (Marlow 1997; Carter *et al* 2004; Orhan and Scott 2001; Valiulis *et al* 2004; Martin 2008) and the need for increased flexibility arising from the fact that society assign the primary care of the young, elderly and the sick to females (Cromie 1987; Birley 1989; Olson and Currie 1992; Ducheneaut 1997; Marlow 1997; Chell and Baines 1998; Orhan and Scott 2001; Valiuis *et al* 2004; McClelland *et al* 2005; Morris *et al* 2006; Carter and Shaw 2006; Fairlie and Robb 2009; Thompson *et al* 2009).

Extending the discussion on the role of motivation beyond start-up to their influence on firm growth, some studies evidence a positive relationship between

positive (pull factors) motivations and firm growth (Barkham 1992; Kinsella *et al* 1994; Wynarczyk 2008). A firm that has been set up to exploit an opportunity in the market is expected to have a higher propensity to grow than a firm for which the drivers are push factors (Smallbone *et al* 1995; Smallbone and Wyer 2000; Hamilton and Lawrence 2001). However, in contrast, the lack of supportive evidence between motivation and firm growth has been endorsed by a number of other studies (Liao *et al* 2001; Papadaki and Chami 2002; Dobbs and Hamilton 2007). Dobbs and Hamilton (2007) caution that it is important to consider that an owner-managers motivation to grow will be tempered by personal trade-offs between the prospect of improved financial results and concerns for the well-being of employees, especially true in the context of female owner-manager's (Wiklund *et al* 2003; Carter and Bennett 2006). Furthermore, Liao *et al* (2000) commented that the studies investigating the influence of motivation on firm growth were difficult to compare due to different research approaches and varying interpretations applied to the term motivation, thus presenting difficulties in obtaining a clear consensus on its relationship with firm growth. This lack of a clear consensus regarding motivation has been reinforced in a more recent study (McGowan *et al* 2012) whereby it is acknowledged motivation is likely to be influenced by a combination of pull and push factors; however, which exerts the greatest influence is unclear (Carter and Shaw 2006; Dobbs and Hamilton 2007; Doern 2009). In investigating the influence of motivation and firm growth specifically in female-owned firms, the evidence is inconclusive, similar to the mainstream literature; with some studies (Lerner *et al* 1997) reporting that females who are pushed achieved higher levels of firm growth while in contrast Hughes (2003) reports pull factors.

Evidently, what is emerging is a combination of “pull” and “push” motivational factors amongst female owner-managers for business start-up (Carter and Shaw 2006; Walker and Webster 2007), however, in evaluating their influence on firm growth in the female context, the evidence is less clear. A review of the general studies on firm growth confirmed that while motivation to start a firm might be a strong indicator of firm growth it may not necessarily convert into actual growth

(Dobbs and Hamilton 2007; Doern 2009). Therefore, in a study on the factors that influence firm growth it is important to examine both sets of factors to consider not only the impact of motivations for business start-up on firm growth but also to contribute to gender-specific research on how the motivations for business start-up in female-owned firms influences firm growth, given this is a highly debated and sometimes contentious issue.

3.1.3 Education Profile

Education is among the most commonly studied characteristics of entrepreneurs where previous research (Hisrich 1990; Storey 1994; O’Gorman and Cunningham 1997; Van der Sluis *et al* 2005; Dobbs and Hamilton 2007; Storey 2011) has shown a clear and distinct relationship between the level of education and firm growth for various reasons. For instance, Storey (1994; 2011) reported educated individuals have higher earnings expectations so are less likely to become an entrepreneur unless he/she expects earnings will at least be equal to those which could be obtained in alternative employment. Furthermore, Storey (1994; 2011) found higher-educated owner-managers were more likely to establish a faster growing firm since earnings from business ownership are likely to be broadly related to firm size, implying that educated individuals are more likely to establish larger firms.

In extending the concept of education and firm growth, Barkham *et al* (1996) highlighted that graduate entrepreneurs were more likely to make positive and proactive strategic decisions in terms of the strategies adopted for firm growth. Roper (1998) also found owner-managers’ educational background had an influence on the type of strategies adopted. He found where entrepreneurs had higher levels of education they devised more creative strategies and also sought external assistance in growing their firms. Similarly, a positive relationship between education and firm growth was found by Wiklund and Shepherd (2003) and Bosma *et al* (2004) where firm growth increased at a faster pace with individuals who had higher levels of education, reflected in more recent studies

(Fadahunsi 2012) reporting that having a degree had a positive influence on firm growth.

Coupled with educational levels, specific educational disciplines such as engineering, computer science, and biochemistry, provide recipients with an advantage if they start a firm related to their area of expertise, (Barringer *et al* 2004) in industries perceived as high-tech, high-growth sectors. High educational levels are common among owner-managers operating in high tech, high-growth sectors (Roberts 1991; Storey and Tether 1998; Colombo and Delmastro 2001; Madsen *et al* 2003; Harpaz and Meshoulam 2004) with a Master's degree being the norm. Owner-managers operating firms in science and engineering sectors (Boussoura and Deakins 1999; Madsen *et al* 2003; Aylward 2007) reflect their educational disciplines, exposing them to business start-up in high-growth sectors such as ICT, engineering and natural sciences.

More recent research by Storey (2011) and Storey and Greene (2010) provide further arguments on how education enhances small firm growth. Several of the arguments echo Storey's (1994) previous studies while also making other observations. Storey (2011) proposes education enhances the skill base, enabling owner-managers to address and overcome the problems associated with running a rapidly growing firm. Moreover, educated individuals are more likely to be able to access resources from a financial institution than those with low educational attainment (Van der Sluis *et al* 2005; Verheul and Van Stel 2007; Storey and Greene 2010). Furthermore, Storey and Greene (2010, p.257) advocated that education may be a "*selection mechanism*" which sorts the able from the less able, and if it is the ability of the owner-manager that influences firm growth, then education is likely to be associated positively with it. Despite the many studies supporting the relationship between education and firm growth (Cooper *et al* 1994; Storey 1994; Mata 1996; Bruderl and Preisendorfer 1998; Roper 1999; Bosma *et al* 2004; Honig 2004; Storey 2011), a number of studies show contrasting findings. Barkham *et al* (1996) and Bullock *et al* (2004) suggested the relationship between education and firm growth was not as clear cut.

Regarding the educational profile of female owner-managers, studies have indicated that their educational level is equal if not better than that of men (Birley *et al* 1987; Fischer *et al* 1993; Naser *et al* 2009; Huarng *et al* 2012), although the disciplines pursued are usually very different, with men tending to have more production-related education (Birley *et al* 1987; Fischer *et al* 1993; Brush *et al* 2004; Aylward 2007; Nissan *et al* 2012). Various authors (Watkins and Watkins 1984; Hisrich and Brush 1991; Correll 2001; Zafar 2009) have reported that females traditionally shy away from math and quantitative types of subjects, such as business, engineering, computing or technical subjects instead pursuing undergraduate degrees in liberal arts, education, nursing and social work (Menzies *et al* 2004; McClelland *et al* 2005, Coleman *et al* 2012). Consequently, research (Menzies *et al* 2004; Munoz and Perez 2007) has argued that female owner-managers do not actually possess the relevant education to enter traditionally male-dominated industries or high growth potential industry sectors such as manufacturing, construction, or biomedical industries. It is argued by Menzies *et al* (2004) and McClelland *et al* (2005) that industry sector choice is a reflection of the educational discipline pursued by females whereby only a small number hold degrees in business, engineering or other technical subjects. Furthermore, Coleman and Robb (2012) argued the education of female owner-managers does not provide them with encouragement or advice to enter high technology industry sectors and resulting from this is a barrier for females who may attempt to enter such industries. In recent years, females have been encouraged to pursue educational disciplines in technical subjects, and increased efforts have been made to engage girls and young women more fully in the STEM (science, technology, engineering, and math) fields, however, even though progress has been made, females continue to be underrepresented in these subjects areas (Coleman and Robb (2012) .

Begley and Boyd (1985), Bates *et al* (1992) and Brush *et al* (2004) reported a positive relationship between the education of females and firm growth. Similarly Boden and Nucci (2000) found that firm growth in female-owned firms is higher for those that have at least four years of third level education, echoed in research

by Gatewood *et al* (2009). However, Coleman *et al* (2012) suggests females are significantly less likely than men to have advanced degrees which could lead to specialised knowledge in highly skilled, growth-orientated fields.

Research (Fitzsimons and O’Gorman 2012) highlights that as educational attainment rises, there is a significant increase in the proportion of females involved in entrepreneurial activity and those with postgraduate experience are as entrepreneurial as men with this level of educational attainment. Higher educational attainment of females is clearly linked with a higher incidence of entrepreneurial engagement (Forfás 2007). In the Irish context, it is reported that the number of females with third level qualifications in the most entrepreneurial age groups is increasing very rapidly and is now well ahead of men in the same age group (Fitzsimons and O’Gorman 2012). Furthermore, in the younger age group (18-24) there is a significantly higher percentage of female students than there are men (41% compared to 30%), suggesting there will be a larger pool of educated females within the population in future years that may have the ability and the entrepreneurial spirit to become entrepreneurs (Forfás 2007; Fitzsimons and O’Gorman 2012).

Given the positive influence of education on both start-up levels and small firm growth, and the lack of evidence on its influence in female-owned firms, it would be useful to ascertain how educational levels of females influence firm growth as well as investigating if their educational disciplines are related to industry sector given that their educational levels are similar if not higher than their male counterparts, prior to start-up.

3.1.4 Prior Employment Experience

Previous studies evidence a positive relationship between various elements of prior employment experience and firm growth. The various elements emerging through the review of the literature relate to having gained sector experience, managerial experience and experience in starting other firms, influential not only the firm started but also on firm growth (Hofer and Charan 1984; Bosworth and Jacobs 1989; Cooper *et al* 1994; Storey 1994; Perren 2000; Dobbs and Hamilton 2007; Fadahunsi 2012).

Research (Singh 1995; Storey 1994; Dobbs and Hamilton 2007) advocated that knowledge and experience gained in previous roles influences firm growth. Shane (2000) suggested that general employment experience provides tacit knowledge and competencies which facilitated individuals in recognising and exploiting market opportunities. O’Gorman (2007), reflecting the study of Shane (2000), extended the role of previous employment roles and proposed that an important element of the knowledge base of the owner-manager was the expertise gained through work experience providing knowledge and skills in a specific functional/technical area or in a more general/commercial business area.

Dobbs and Hamilton (2007) and Storey (1994, 2011) narrowed the focus from general experience gained to focus on aspects of the experience gained, suggesting prior employment experience may influence the choice of sector and size of the firm created, as familiarity with the industry sector allows the owner-manager to make use of product and market knowledge and contacts. This was found to be the case in research completed by a number of authors (Venkataraman 1997; Perren 2000; Aldrich and Martinez 2001; Shane 2000; Bellamy *et al* 2003). Bellamy *et al*’s study (2003) established that work experience and prior knowledge of markets, customers, and technological requirements of the firm assisted the owner-manager in managing a new firm. This type of same experience and prior knowledge of the industry were also viewed as important in reducing the learning curve of the owner-manager and enhanced the ability of the

owner-manager to develop relationships and goodwill with specific customers, suppliers and other stakeholders.

Additionally, firm growth may be related to the breadth of experience, from functional experience to the highest level of managerial experience of the owner-manager (Bosma *et al* 2004). Storey (1994) found managerial experience increased the potential for firm growth, reinforcing his 1994 findings in 2011 (Storey 2011). The owner-manager's experience in starting other firms has also emerged through the literature as an important determinant of firm growth, with research (Storey 1994; Baum *et al* 2001; Dobbs and Hamilton 2007; Fadahunsi 2012) suggesting that prior entrepreneurial experience has a direct effect on firm growth.

With regard to prior employment experience of female owner-managers, it is reported that in general females face more disadvantages than men, however there are conflicting findings. (Brush *et al* 1992; Rosa *et al* 1996; Huarng *et al* 2012). Some studies suggest female owner-managers have less prior employment experience than their male counterparts (Loscocco *et al* 1991; Fischer *et al* 1993; Carter *et al* 1997; Hundley 2001; Fairlie and Robb 2009; Minniti and Naude 2010; Quader 2012), due in part to the fact that females interrupt their professional careers more times than men due to family demands and as a consequence their prior employment experience may be affected (Kaplan 1998; Anderson *et al* 2012). However, other research has found no significant difference in the employment experience of female owner-managers (Birley *et al* 1987; Bourne 2011). Brush and Hisrich (1991) and Buttner and Moore (1993) suggested that female owner-managers with previous experience in the sector in which the firm is started, will be far more likely to achieve firm growth than females without direct experience (Fischer *et al* 1993; Menzies *et al* 2003; Roomi *et al* 2009), clearly echoing the findings of Storey (1994, 2011). In the female context, lower levels of sector experience is evident in some studies (Birley *et al* 1987; Bourne 2011), in conflict with other studies (Boden and Nucci 2000; Brush *et al* 2004).

With regard to the influence of managerial experience on firm growth, Menzies *et al* (2003) reported no differences between male and female entrepreneurs in relation to managerial experience. However of note, Tai and Simms (2005) and Cross and Linehan (2006) suggest that although there is a high percentage of females in the workforce, few rise beyond the ranks of middle managers, thus fewer have the opportunity to acquire managerial experience at the most senior levels. Studies surrounding the managerial experience of female owner-managers is inconclusive to date and has not addressed in sufficient detail how it influences firm growth. Concerning experience gained through starting other firms, much of the literature on female owner-managers point towards only a small number of females as having experience in starting other firms (Watkins and Watkins 1984; Bowen and Hisrich 1986; Fischer *et al* 1993; Audretsch 2012), however recognising that it has a positive influence on business start-up (Lerner *et al* 1997; Marlow 1997; Singh *et al* 2001).

While the mainstream literature evidences a positive relationship between firm growth and prior employment experience, a less clear-cut relationship is evident in the female context. Findings to date have focused on profiling and comparing the prior employment experience of female owner-managers to their male counterparts (Hisrich and Brush 1983, 1988; Kalleberg and Leicht 1991; Cooper and Gimeno-Gascon 1992; Carter and Allen 1997; Gundry and Welsch 2001) rather than assessing the influence of their prior employment experience on firm growth.

In the absence of investigative studies on the role of prior employment experience, specifically relating to same sector experience, managerial positions held, and experience in starting other firms, this study proposes to identify if such a relationship exists and will be useful to determine if these issues influence firm growth of female owner-managers. It is of interest to delve behind the prior work experience of female owner-managers as it may have an influence on the reason why so many females start the type of firms they do, i.e. the educational disciplines pursued prior to start-up and the industry sectors they are exposed to

through their education. It is when these factors are examined together that a more informed explanation of the role of prior employment experience on female-owned firm growth will emerge. This further highlights the need to extend beyond investigating the discrete impact of previous work experience to unearth other aspects such as the age of the female owner-manager, given that females start firms at an older age, their nature of experience in terms of managerial experience, and the prior sector experience, given the educational disciplines pursued.

The review of the literature to date has brought to the fore various characteristics relating to the female-owner that should be investigated with a view to evaluating how specific characteristics influence firm growth. Of note, although these characteristics have been commonly researched and identified as determinants of firm growth in previous studies, much of the literature is general and does not focus explicitly on the growth determining characteristics of female owner-managers, thus, presenting a gap in the gender-specific literature which this study aims to fill. In summary, the female owner-manager characteristics deemed important to investigate in this research study include age, motivation for start-up, education and prior employment experience. The discussion now turns its attention to reviewing how specific firm characteristics influence firm growth.

3.2 Firm Growth- The Role of Firm Characteristics

Firm characteristics, proposed by Storey's (1994) seminal study and reinforced by other studies (Davidsson 1991; Barkham *et al* 1996; Lin 1998; Kangasharju 2000, Montserrat 2002; Barringer and Jones 2006; Gilbert *et al* 2006; Majumdar 2008; Storey 2011; Smallbone and Wyer 2012) have a significant influence on firm growth, with the most commonly researched in the mainstream literature including industry sector, firm age, firm size and the nature of ownership (Davidsson 1991, Storey 1994; Dobbs and Hamilton 2007, Hansen and Hamilton 2011; Fadahunsi 2012). Although, these firm characteristics have been commonly researched and identified as determinants of firm growth in the general studies, only limited evidence has been placed on their influence in female-owned firms, presenting a gap in the gender-specific literature which this study aims to address.

3.2.1 Industry Sector

The characteristics of the industry in which a firm operates has far-reaching implications for firm growth (Eisenhardt and Schoonhoven 1990; Chandler and Hanks 1993; McDougall *et al* 1996; Robinson and Dougall 2001; Gilbert *et al* 2006; Quader 2012), with some sectors outperforming others, i.e. feminised industries (i.e. retail, health and wellbeing) achieve lower levels of firm growth (Reynolds 1993; Cooper *et al* 1994; Honig 2004; McGowan *et al* 2012) in comparison to non-feminised sectors (manufacturing, construction, transportation).

As previously alluded to in the discussion on education, research has shown male and female owner-managers have different preferences for the sector in which they operate (Aylward 2007; Diaz-Garcia and Brush 2013). Female-owned firms are overrepresented in feminised industry sectors such as retail and personal services and underrepresented in non-feminised sectors such as manufacturing, extraction and business service sectors, a trend consistent over time (Coleman 2000; Henry and Johnston 2003; Carter and Bennett 2006; Browne *et al* 2007; Marlow *et al* 2008; Fairlie and Robb 2009; McGowan *et al* 2012; Jennings and Brush 2013). In addition, female owner-managers tend to operate in locally traded, lower order services, with fewer prospects for firm growth (Henry and Johnston 2003; Collins-Dodd *et al* 2004; Marlow and Carter 2004; Carter and Bennett 2006; Browne *et al* 2007; Hampton *et al* 2009; McGowan *et al* 2012; Marlow and McAdam 2013). Moreover, the service industry in particular has always ranked highly in females' self-employment choice due to their prior employment experience and lower amounts of start-up capital required (Aylward 2007). Bruni *et al* (2004) reported various reasons why females start firms in the service area- it is the sector in which they have the most knowledge and experience; females lack technical skills due to the educational disciplines pursued discouraging them from entering manufacturing and high technology sectors; females have difficulty in obtaining the necessary capital so they may choose sectors requiring lower capital. In fact, a number of researchers have pointed out that female-owned firms are over-represented in the service sector and underrepresented in the manufacturing sector (Hisrich and Brush 1983; Neider

1987; Anna *et al* 2000; Du Rietz and Henrekson 2000; Bruni *et al* 2004). According to Watkins and Watkins (1984), it is not surprising that females are found in these feminised sectors as they may be forced into stereotypically female sectors due to their educational background in non-technical disciplines and previous experience in these sectors. Turk and Shelton (2004) support this view but suggest that it is out of necessity due to the lack of capital requirements, social capital, and experience in the high-tech, high growth industry sectors. A further explanation for females' choice of smaller retail and service (feminised) firms rather than firms in science, engineering and technology, construction, and manufacturing (non-feminised) may be that females select these industries because they are more accessible to them (Anna *et al* 2000; Allen *et al* 2008; Hampton *et al* 2009; McGowan *et al* 2012).

It is reported that female owner-managers are beginning to move towards non-feminised sectors (Pihkala *et al* 2000; Coleman and Robb 2012) where female-owned firms are high profile, growth and export-orientated. These new generations of female owner-managers are very different from the older generation. They are more highly educated and have gained increased managerial experience (Buttner 1993; Minniti and Naude 2010; Coleman *et al* 2012). Research has evidenced that more female owner-managers are choosing to start firms scalable in growth sectors such as technology, food and drink, manufacturing, communication and transportation (Langowitz 2001; Bates 2002, McClelland *et al* 2005; Knorr 2011; Coleman and Robb 2012), with Henry and Kennedy (2002) and Davis and Shaver (2012) reporting females are in fact setting up firms in high-technology, professional services and construction, sectors where female were traditionally underrepresented. It should be noted that these sectors are still considered to be male-dominated, with females being underrepresented (Roberts 1991; Turk and Shelton 2004; Aylward 2007; European Commission 2009; Fitzsimons and O' Gorman 2012; Marlow and McAdam 2012). The industry sector female-owned firms operate in (feminised or non-feminised) is deemed important for inclusion in this study for a number of reasons; however, its investigation raises issues regarding the multiple phrases used to describe sectors

as advances in sectors where female owner-managers were traditionally active have now moved into less traditional, high-growth sectors e.g. food and drink.

Given the high educational levels of female owner-managers, albeit not in technical disciplines, and acknowledging this is a trend forecasted to continue in the future (Forfás 2007; Fitzsimons and O’Gorman 2012), it is important to investigate whether this high level of education is influential on female owner-managers industry sector choice. Are the educational disciplines pursued by females encouraging them to enter growth industry sectors or are highly educated female entrepreneurs continuing to start firms in traditional sectors? Furthermore it is necessary to examine not only firm growth in sectors recognised as high-growth sectors, e.g. science and engineering, ICT, food and drink but also in traditional sectors, e.g. retail, due to the prevalence of female owner-managers operating in such sectors.

3.2.2 Firm Age

Firm age is a widely investigated variable in examining firm growth (Glancey 1998; Kangasharju 2000; Watson 2002; Headd and Kirchoff 2009). Kangasharju (2000), echoing Birch (1987) reports that among small firms, older firms grow faster than younger ones, while among larger firms there is a tendency for growth to decline with age. This was also echoed in the findings of Brock and Evans (1989) who found firm growth decreases with firm age for firms with fewer than 25 employees, but increases for firms with 25 or more employees. According to Glancey (1998) a positive relationship between firm age and growth may exist as one may expect that older firms benefit from dynamic economies of scale by learning from experience. Older firms may also benefit from reputation effects allowing them to earn a higher margin on sales. However, Glancey (1998) also noted an inverse relationship between firm age and firm growth, suggesting older firms may have developed routines out of touch with changes in market conditions. Moreover, one of the primary reasons attributed to the findings was that over the years the owner-manager became streamlined in their thinking and

more conservative in their approaches to strategy development, opting for lower and more conservative growth strategies.

Studies (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Lotti *et al* 2001, 2003, 2009; Bullock *et al* 2004; Minniti 2010; Fadahunsi 2012) suggest younger firms displayed faster rates of growth than older firms. Research by Dobbs and Hamilton (2007), echoing the research of Davidsson and Wiklund (2000), suggest that firms in existence for less than ten years grew more rapidly than older firms in employment and turnover. This was echoed in more recent research by Coad and Tamvada (2012) again advocating that younger firms achieve higher growth due to their ability to respond to change more effectively.

While there is strong evidence to support a positive relationship between younger firms and higher firm growth, it is argued that the interpretation of these findings needs deliberation. The first issue lies in the ability to ascertain from the studies what age cohort respondent firms fell within. Additionally, it is advocated that firm age should be qualified and defined in the context of other firm characteristics such industry sector, alluded to previously as raising issues in how industry sectors are classified. For example, the average age of a firm will vary by industry sector (firms in the Information Technology /Software sector will have a greater number of younger firms compared to Engineering). Given that female owner-managers are frequently reported as operating in “older” industries, e.g. retail and service sector, it may be the case that their firms will achieve lower firm growth in comparison to younger firms operating in sectors such as ICT; however, in contrast, other research has indicated that female-owned firms are younger (Carter *et al* 1997; Du Rietz and Henrekson 2000; Hill *et al* 2006; Coleman 2007; Roomi *et al* 2009; Minniti and Naude 2010), thus, research findings are inconclusive and have not related the firm age of female-owned firms to firm growth.

This brings to the fore a requirement to research firm age, in conjunction with other firm and owner-manager characteristics for their influence on firm growth.

This issue was in some way addressed in research completed by North (1996) and Orser *et al* (2000). Both research studies indicated that firm age was not a reliable predictor of firm growth and suggested the examination of firm age in conjunction with other firm characteristics. Likewise research completed by Storey (1994), Barkham *et al* (1996), Orser *et al* (2000) and O’Gorman (2001) reinforced this suggestion to include in the relationship the potential influence of a number of owner-manager and firm-specific characteristics as a determinant of firm growth, reiterated in recent research by Inmyxai and Takahashi (2010). In summary, as was promoted by various authors (Storey 1994; O’Gorman 2001; Watson 2002) as firm age was not determined by the profile and characteristics of the owner-manager, it was a useful variable and is deemed important for inclusion when investigating how the age of female-owned firms influences firm growth.

3.2.3 Firm Size

Firm size is generally measured by assessing the number of employees, particularly from a government policy perspective and is deemed the most widely studied factor for its contribution to firm growth (Davidson *et al* 2000; Muktar 2002; Headd and Kirchoff 2009; Roomi *et al* 2009; Inmyxai and Takahashi 2010). The characteristics of firm size follow similar principles to those discussed in the previous section regarding firm age. Essentially, smaller firms similar to younger firms grow more rapidly where they endeavour to achieve efficiencies in production and markets as quickly as possible. In researching the influence of firm size on firm growth (where the emphasis was on employment growth), Barkham *et al* (1996) found that faster growth was achieved by smaller firms as they were more flexible in decision making due to the dominance of the owner-manager as the primary decision maker. Additionally, they suggested as many small firms operated in niche markets they had a distinct competitive advantage allowing them to achieve growth for a period of time. These findings were consistent with other studies (Kinsella *et al* 1994; Storey 1994; Orser *et al* 2000; Storey 2011) which established that the ability of the owner-manager to operate close to their customers and suppliers allowed the opportunity to develop personal

relationships providing the firm with a competitive advantage, and hence greater likelihood of firm growth.

Numerous studies indicate that female-owned firms tend to be smaller when compared to male-owned firms (Cooper *et al* 1989; Kalleberg and Leicht 1991; Fisher *et al* 1993; Rosa *et al* 1996; Cliff 1998; Collins-Dodd *et al* 2004; Fairlie and Robb 2009; Coleman and Robb, 2012; Jennings and Brush 2013) and based on the review of the mainstream literature that smaller firms achieve higher firm growth it could be assumed this would be the case in female-owned firms; however, it is not, with many studies indicating that they underperform (Carter *et al* 1997; Du Rietz and Henrekson 2000; Hill *et al* 2006). The literature has attributed this to various reasons. Chell and Baines (1998) propose female owners face challenges in raising capital, leading to undercapitalisation in turn impacting on firm growth capital, a sentiment resonating in research by Ruane and Sutherland (2007) which indicated that female-owned firms face capital constraints that impact on firm growth. The smaller size of female-owned firms may also be attributed to reasons proposed by Barkham *et al* (1996) in the mainstream literature who found firm size was not the only characteristic which should be considered when researching firm growth, as firm size was a function of the broader characteristics of the industry sector in which the firm operates. Differences in firm growth could be dependent on the choice of industry sector which female owner-managers self-select with weaker growth potential (e.g. retail, professional services) (Holmquist and Sundin 1990; Kalleberg and Leicht 1991; Carter *et al* 1997; Hill *et al* 2006). In contrast, other research has shown that although female-owned firms are smaller in terms of employee numbers they do not underperform and may well outperform male-owned firms in terms of growth in turnover and profits (Watson 2002). Thus, research has argued that firm size should not be considered in isolation when studying firm growth (Kalleberg and Leicht 1991; Perry 2002; Kepler and Shane 2007), echoing the recommendations by Barkham *et al* (1996).

On another note, research to date investigating the relationship between firm size and firm growth in female-owned firms has for the most part compared firm size between male and female-owned firms, with some scholars investigating the “female-underperformance hypothesis” (Du Rietz and Henrekson 2000) comparing the size and performance of female-owned firms to those owned by men (Cooper and Artz 1995; Powell and Eddleston 2008). To extend and develop research in a non-gender comparative manner on female entrepreneurship and in this case how the firm size of female-owned firms influence firm growth, research by Roomi *et al* (2009), Ahl and Marlow (2012) and James (2012) recommend the necessity to discontinue comparing firm size of female and male-owned firms and instead look to how females compare with other females with a view to developing the understanding of firm growth specifically in female-owned firms, discontinuing the focus on the male/female binary (Jennings and Brush 2013) - an area this research aims to contribute to, within gender.

Previous general studies conducted on the influence of firm size on firm growth are inconclusive and in the context of female-owned firms are limited, focusing in the main on comparative studies. For the most part, studies have only paid attention to firm size in relation to the performance of female-owned firms when compared to male-owned firms. Thus, there is a lack of specific knowledge in the literature on firm size of female-owned firms, hence a need to capture information on both of these issues. One way of capturing data on the size of female-owned firms is to apply commonly used size classifications of micro, small and medium firms (European Commission 2012) to investigate if differences exist between the three size thresholds in female-owned firms. Bearing in mind the focus of this particular study is on firm growth in established, female-owned firms, investigating those that have survived the first three years is deemed critical. If these parameters are applied then it allows for more equitable comparisons to be made within a sample of female-owned firms in operation for this time period of time.

3.2.4 Nature of Ownership

Firms may be established either by one individual or by a team (Storey 1994; Davidsson *et al* 2006; Stam and Schutjens 2005; Morris *et al* 2006; O'Connor *et al* 2006; Dobbs and Hamilton 2007; Bruneel *et al* 2009), whereby those started by teams are associated with higher firm growth (Birley and Stockley 2000; Lechler 2001; Schjoedt and Kraus 2009; Brinckmann *et al* 2011). This is attributed to the increased human and social capital a team has relative to an individual in dealing with the complexities and challenges associated with developing sustainable firms (West 2007; Schjoedt and Kraus 2009). Moreover, this factor is derived as a natural consequence of the prior employment experience and education of owner-managers previously discussed. Storey (1994; 2011) and Kinsella *et al* (1994) suggested firms owned by teams were more likely to achieve higher firm growth than singly-owned firms, reinforced in the findings of Bruneel *et al* (2009). According to Storey (1994; 2011) and Matlay and Westhead (2005) the management of a firm requires a range of skills not always held by one owner-manager suggesting the combined skills of multiple owner-managers provided the firm with extra resources, skills and access to a broader set of external networks which facilitated firm growth. Similarly Kinsella *et al* (1994) found faster growth firms on average had more than one key founder. Barkham *et al* (1996) supported this relating higher firm with a number of owner-managers complementary skills and knowledge which enhance decision making in the firm. This was consistent with findings in other studies (Glancey 1998; Chandler 1998; Davidsson and Honig 2003; Schjoedt and Kraus 2009; Brinckmann *et al* 2011) which highlighted that in multiple-owned firms there was a greater combination of skills and knowledge and access to external financial resources relative to solely owned-managed firms. Calvo and Garcia (2010) also suggested a positive relationship between ownership structure and firm growth as they are managed by owner-managers with greater levels of entrepreneurial acumen and managerial ability. This echoed previous studies (Gundry and Welsch 2001; O'Connor *et al* 2006) which suggested higher growth-orientated, female owner-managers were nearly twice as likely to have team, rather than individual ownership. In a study by Gilbert *et al* (2006), they revealed when new firms are founded by teams, rather than individuals, the experiences of the team are of substantial importance for

sales growth, aligning with previous studies (Eisenhardt and Schoonhoven 1990; Heirman and Clarysee 2005; Bruneel *et al* 2009). Teams are also deemed important because they enable the firm to distribute responsibility across a greater number of individuals. Further reasoning is that teams possess more talent and resources (financial and knowledge based) and consequently can use their extended resources to benefit the firm. Echoing this, Brinckmann *et al* (2011) argued teams have a stronger resource base and access to financial capital, as funding agents favour proposals from teams rather than individuals, in turn assisting higher growth, supporting previous studies (Baum and Silverman 2004).

While it is accepted that the ideal scenario for the small firm is to have a breadth of expertise to accommodate the functional requirements of the firm, it is equally argued that in many individual small firms this is not the case, an issue very prevalent in the context of female-owned firms whereby it is frequently reported that they are solely owned and managed rather than owned and managed by teams (Ndemo and Maina 2007; Ruane and Sutherland 2007; Roomi *et al* 2009). This may be attributed to female owner manager's access to human capital which takes many forms, education, prior employment experience and managerial experience and industry experience. In the past, researchers have questioned whether females participated fully in appropriate networks, spending sufficient time and effort in building diverse networks and using them appropriately (Renzulli *et al* 2000; Brush *et al* 2004), with a view to building an entrepreneurial team.

Little attention has been given to team ownership in the female context, aligning with the mainstream literature where the extant literature has focused on the individual as an entrepreneur, with entrepreneurial teams being neglected (Forbes *et al* 2006; Stam and Schutjens 2005; Foo *et al* 2006; O'Connor *et al* 2006; Schjoedt and Krauss 2009). Therefore, it is suggested that as a result of the insufficient attention to ownership structure and its influence on firm growth, it is deemed important to address this issue in further detail in the female context, given the associated benefits. Specific attention should be given to ascertaining

whether the findings of this study are consistent with previous studies which highlight that female-owned firms are less likely to be owned by teams and if this is the case is this a factor that influences firm growth?

The review of the literature pertaining to firm characteristics has highlighted that industry sector, firm age and size along with the nature of ownership should be considered for their influence on firm growth. Similar to the female owner-manager characteristics, these firm characteristics have been more commonly researched in the mainstream literature, whereby less attention has been placed on firm growth in female-owned firms, thus presenting a gap in gender-specific studies which this study aims to fill. The discussion now turns its attention to discussing strategy in the small firm, reviewing how strategic-related activities influence firm growth.

3.3 Strategy in the Small Firm

For more than 40 years, academics in various disciplines have investigated strategy and recognised its importance (Chandler 1962; Mintzberg 1978; McClelland *et al* 1994; Perry 2002; Arora *et al* 2001; Burke and Jarratt 2004; Gibcus *et al* 2006; Bruneel *et al* 2009; Moore and Manring 2009; Leitner and Guldenberg 2010). Resulting from this interest, the term strategy has taken on various meanings and definitions (Porter 2004; Wickham 2004; Kirkwood 2009), with research over time presenting various results conceptualising strategy as a pattern of strategic variables, both individual and business-related decisions and actions, which are interdependent and interactive (Galbraith and Schendel 1983; Storey 1994; Pasanen 2003; Majumdar 2008; Singh *et al* 2008).

Strategy is the most important determinant of firm growth and is crucial as it guides and shapes the firm's future (Weinzimmer 2000; O'Regan and Ghobadian 2002; Skrt and Antonic 2004; Gibcus *et al* 2006; Bruneel *et al* 2009). Indeed, according to some researchers (Storey 1994; Brush *et al* 2004; Gibcus *et al* 2006; Bruneel *et al* 2009), one of the most important choices an owner-manager makes is the appropriate strategy for their firm due to its influence on firm growth

(Chandler 1962; Ansoff 1965; Porter 1980; Anderson and Atkins 2001; O’Gorman 2001; Brush *et al* 2004; Skrt and Antoncic 2004). Mazzoral (2005) suggested that strategy was tacit, firm-specific and influenced by a range of internal factors, including the owner-manager, highlighting that strategy provided an important cognitive map directing the more overt strategic activities implemented by the small firm. The importance of having a strategy to guide firm activities was also promoted in earlier research studies by Hamel and Prahalad (1989) and Lado and Wilson (1994) who concluded that a well articulated and documented strategy assisted in the achievement of a sustained competitive advantage and as a result higher firm growth, endorsed in more recent research (Bruneel *et al* 2009; Moore and Manring 2009; Leitner and Guldenberg 2010). Coupled with this, is the importance of growth objectives for firm growth as an important basis for understanding the subsequent vision guiding the firm’s activities. It is maintained that decisions made prior to, concurrent with, and in the early stages of firm development are important to consider in an attempt to gain an understanding of strategy in the small firm, with Delmar and Wiklund (2003) suggesting strategy in small firms is influenced by the characteristics of the owner manager and manifested in their growth objectives for the firm. These findings echoed the research of Freeser and Willard (1990) and were reinforced in research by Wickham (2004) and Singh *et al* (2008), emphasising the importance of understanding the objectives of the small firm as a prerequisite for understanding firm growth.

Given the individual and firm-related components that influence strategy, it makes it difficult to assess clearly the impact of strategic-related activities on firm growth, due to the inconsistencies in the approaches adopted. What is emerging is that strategy focuses on the long-term direction of the firm, through the development of a strategic plan and the implementation of strategic activities (Miles and Snow, 1978; Porter 1980; Sandberg and Hofer 1987; Baum *et al* 2001; Singh *et al* 2008), components that will be investigated in further detail in this review. Furthermore, and of equal importance, it has been recognised that owner-managers also play a significant role in the strategy adopted (Majumdar 2008).

The firm owner makes choices along a number of dimensions which can be represented by a firm's overall collection of individual and business-related decisions, actions and activities (Mintzberg 1978; Miles and Snow 1978; Bruneel *et al* 2009; Moore and Manring 2009; Leitner and Guldenberg 2010). Central to this is the type of objectives for firm growth by the owner-manager which provide the starting point on which strategies are developed and are deemed appropriate as the starting point in discussing how strategy is influenced by growth objectives.

3.3.1 Type of Growth Objectives

Understanding growth objectives is an important foundation on which to assess the strategic activities pursued to achieve these objectives. Various authors propose that multiple objectives exist in the small firm, comprising of commercial and personal objectives of the owner-manager (Kalleberg and Leicht 1991; Smallbone *et al* 1995; Sexton and Similor 1997; Gibb 2000; Smallbone and Wyer 2000; Baum and Silverman 2004; Donohoe and Wyer 2005; Gilbert *et al* 2006). Earlier studies on firm growth (Smith *et al* 1986; Stanworth and Curran 1976) suggest growth objectives are often bound up with the owner-manager's personal goals and that not all of them will pursue the same types of growth objectives. The importance of understanding the influence of the owner-manager on growth objectives has been endorsed by many studies (Kinsella *et al* 1994; Storey 1994; Smallbone *et al* 1995; Wiklund *et al*, 2003; O' Gorman 2003), emphasising that the owner-manager is instrumental in deciding on the growth objectives. Some owner-managers will pursue profit maximisation, while others may primarily be motivated by the lifestyle associated with being their own boss and are not motivated to expand their firms beyond some level of employee numbers as it would conflict with the desire to retain control of decision-making (Stanworth and Curran 1976; Chell 1985; Cliff 1998; Brush *et al* 2004; Roomi *et al* 2009). Further, Davidson (1989; 1991) in his studies developed the analysis of small firms by extending the decision to start a firm to that of the decision to grow and indicated firm growth is a sign of continued entrepreneurship, contradicting the theory that all firms display a willingness to grow by assuming profit maximization (Birley and Westhead 1990; Gimeno *et al* 1997). Davidsson (1989;

1991) suggested that small firm owners are often reluctant to grow even if there is potential for profit expansion and that profitable firms of different sizes co-exist within industries. Thus, Davidsson (1989) argues that growth is a choice of the owner-manager and that profit maximisation is only one of the motives for firm growth implying that non-financial objectives can also be important indicators of firm growth.

Wiklund *et al* (2003) found many firm owners are not interested in growth and as a result do not set out growth objectives. The rationale for not wanting to grow includes potential drawbacks to the well-being of employees, independence from other stakeholders, the firm's ability to control growth, and the likelihood of survival (Wiklund *et al* 2003; Cassar 2007; Manolova *et al* 2012). As a consequence, part of the lack of agreement in firm growth research is that there is such a wide variation across samples and in the types of firms examined and as a result the willingness to grow and the subsequent behaviour of firms are different (Cooper *et al* 1994).

While in agreement with the idea that multiple objectives for growth exist in the small firm, Storey (1994), Barkham *et al* (1996), and Poutziouris (2003) found the majority of owner-managers had financial objectives for profit and commercial growth. In particular, Barkham *et al* (1996) found the majority of firm owners had a focus on profit and turnover growth, positively associated with growth. The emphasis on the desire for profit and commercial gains were also evident in research by Gray (1997), Smallbone and Wyr (2000) and O'Gorman (2001). Donohoe and Wyr (2005), Dobbs and Hamilton (2007) and Fadahunsi (2012) put forward the notion that as the firm grew the motivation for growth and their expectation as to what growth would mean for them, personally and commercially, changed. These findings would suggest that having a focus and desire for commercial firm growth assists in its achievement.

Aligning with the ethos of the mainstream literature, is the central role of the female owner-manager on small firm growth, bringing to the fore the personal

objectives of females for firm growth and the influence this may have on growth objectives (Morris *et al* 2006). To date, the literature on growth objectives presents varied findings; however, what is clear is that the growth objectives of female owner-managers are not identical to those emerging in the general literature (Cliff 1998; Morris *et al* 2006; Roomi *et al* 2009). In some cases, it is reported that female owner-managers attach less value to firm expansion and financial objectives (Rosa *et al* 1996; Cliff 1998; Du Rietz and Henrekson 2000; Orser and Hogarth-Scott 2002; Carter *et al* 2003; Sirec *et al* 2010). Cliff (1998) concluded that personal considerations of female owner-managers appear to override financial considerations due to the concerns they have about growth objectives due to personal factors such as family/work balance. Cliff (1998) noted that female-owned firms were more likely to establish maximum firm size thresholds beyond which they prefer not to expand, indicating:

“These thresholds represent the size that the female entrepreneur is comfortable managing and enables her to maintain control of the business, devote a reasonable amount of time and energy to the business and /or balance work and personal life” (Cliff 1998, p. 523).

Furthermore, this study noted female owner-managers deliberately adopt slow growth objectives and are more control orientated. Based on her study, Cliff (1998) theorised that for various unexplained reasons females value growth differently, thus, different growth objectives will be set out. The results of several research studies have echoed this study suggesting many female owner-managers deliberately choose to keep their firms small (Goffee and Scase 1985; Chagnanti 1986; Kaplan 1988; Brush *et al* 2006) and have consistently shown lower growth aspirations (Rosa *et al* 1996; Carter *et al* 1997; Green *et al* 2003; Morris *et al* 2006). This is a significant issue to consider as the absence of growth objectives amongst younger, highly educated females hinders the opportunity to exploit this “untapped” potential of entrepreneurial activity (Henry and Kennedy 2006; Manolova *et al* 2012), so perhaps changes are emerging over recent years given the changing profile of female owner-managers.

Kjeldsen and Nielsen (2000) and Valiulis *et al* (2004) indicated that females are not growth orientated and, thus, do not display any objective for firm growth,

arguing that females are seeking more flexibility and freedom to juggle many aspects of their lives such as work, leisure and family. Other researchers (Goffee and Scase 1985; Chagnanti 1986; Kaplan 1988; Carter and Kolvereid 1997; Weeks 2008) argue that growth in female-owned firms would conflict with the very purpose of choosing the entrepreneurial way to obtain greater flexibility. This is reflected in the reasons why females start firms with many operating “lifestyle” firms, i.e. oriented toward income replacement or household income enhancement rather than toward wealth creation (Weeks 2008). Thus, the term “lifestyle firm” has taken on a somewhat negative, less-than-serious, anti-growth connotation and, thus, a perception of lower and slower firm growth amongst female owner-managers (Weeks 2008), an issue of concern and raising the question is the case that lifestyle firms are not capable or do not achieve firm growth?

The results of several research studies (Bird 1988; Davidsson 1991; Kolvereid 1992; Cooper 1993; Herron and Robinson 1993) indicated that many female owner-managers deliberately choose to keep their companies small (Goffee and Scase 1985; Chagnanti 1986; Kaplan 1988) and have consistently shown to have lower aspirations and lower expectations and intentions (Carter and Kolvereid 1997), in some cases even being singled out and labelled as “underperforming” (Du Rietz and Henrekson 2000; Storey 2011). This research has been contradicted by Gundry and Welsch (2001) reporting female owner-managers displayed a strong intention to grow and planned at the early stages for firm growth. Similarly, Greene *et al* (2003) found that female owner-managers were just as likely to want to grow their firms as their male counterparts, later supported by Watson (2003) and Watson and Newby (2005), but there exist important differences with respect to how they wish to grow. This cohort of firms are important to identify and obtain a better understanding of as a means of learning and role modeling for female owner-managers.

Early research conducted by Brush (1992) concluded female owner-managers tend to pursue both growth financial and non-financial objectives, pursuing goals

for profit and growth as well as product quality, helping others and contributing to society, resonating in other research (Chagnanti 1996; Singh *et al* 2001; Roomi *et al* 2009; Eddleston and Powell 2012; Hechavarria *et al* 2012). Roomi *et al* (2009) reported differences on the growth objectives set by female owner-managers concluding that emphasis is placed on both financial and non-financial objectives. These findings were very recently corroborated by Jennings and Brush (2013) who indicated that female owner-managers are more likely to pursue both financial and non-financial growth objectives, further highlighting the findings of the mainstream literature and the need to continue to research growth in established female-owned firms.

The setting of growth objectives is an important foundation on which to achieve firm growth and should be investigated so as to add to the research and theory pertaining to growth objectives specific to female owner-managers. Overall, the gender-specific studies purport that understanding growth objectives in female-owned firms is an important foundation on which to assess the influence of the activities or strategies pursued to achieve growth objectives. Growth objectives in the mainstream literature have been set out from a male perspective, and while it is important to acknowledge and recognise them, it is essential not to assume that the objectives for firm growth are identical in the female-owned firms. Female owner-managers place emphasis on both financial and non-financial objectives, and so it is important to consider both as part of this study. While some objectives may be non-financial in terms of measuring firm growth (e.g. helping others, product quality etc.), they should be equally respected and recognised for their influence on growing a successful firm (Roomi *et al* 2009; Manolova *et al* 2012). This echoed previous research by Morris *et al* (2006) and Delmar and Wiklund (2008) whereby they cited growth is not always an indicator of success as the goals of different owner-managers may differ, and given firm growth for female owner-managers is restricted by the desire to balance the work/life balance, it may impact on the growth objectives set out. The growth objectives set out by female owner-managers are deemed appropriate for inclusion in this study for the important role they play on the strategic-related activities and present the

benchmark for which firm growth can be most accurately measured. By obtaining detail on the objectives for firm growth, a basis will be provided on which to assess the subsequent decisions on the type of strategies adopted in female-owned firms.

3.3.2 Strategic Planning

One of the essential questions emerging from the research regarding strategy is how do firms come to adopt particular strategies (Skrt and Antonic 2004; Storey and Greene 2010), with strategic planning emerging as a process that helps to forecast the future of the firm, benefitting firm growth through the implementation of particular strategies (Masurel and Smit 2000; Lerner and Almor 2002; Skrt and Antonic 2004; Kraus *et al* 2006; Mazzarol *et al* 2009). Strategic planning can be beneficial for firm growth as it forces the owner-manager to think about firm questions and search for solutions, while also encouraging the owner-managers' learning and making improvements (Wickham 1998; Mazzarol 2005).

General studies on growth have reported that strategies for the firm emerge through strategic planning whereby effective planning is a good precursor to implementing the strategies. The literature on strategic planning suggests firms which plan in a conscientious, thorough manner increase their chances of reaching their growth objectives as it improves the ability of the owner-manager to take a strategic view of their firm. Barringer *et al* (2004), Hillbrand (2006), and Mazzarol *et al* (2009) found that a number of aspects of planning, including assessing the market, considering a number of functional areas, and devoting more time to planning all related to firm growth. Pasanen (2003) reports strategic planning helps in managing growth and consequently as reported by Beer and Eisenstat (2000) the lack of strategic planning was the main reason why owner-managers failed to achieve projected firm growth. These studies suggested that involvement in strategic planning provided the owner-manager with an awareness and knowledge of their industry sector, competitor and customer characteristics were fundamental for strategy development and the attainment of a competitive advantage. Similarly and reflecting these previous studies, Wickham (1998; 2004)

proposed that strategic planning was an important tool providing the owner-manager with a greater understanding of their customers, competitors, and awareness of market opportunities and challenges plus increased engagement with external stakeholders. Other authors were also positive about the benefits of strategic planning for the small firm. Mazzarol *et al* (2009) concluded strategic planning benefited the small firm as it resulted in increased service and product innovations. This was similar to research by Smallbone and Wyer (2000), and Orser *et al* (2000) who also associated strategic planning with faster growth firms and was linked in a positive manner with the owner-managers' positive attitudes towards growth. These benefits echoed research completed by Storey (1994), Kinsella *et al* (1994), Lussier (1995), Barkham *et al* (1996); Roper (1998) and Beaver and Ross (2000), reflecting a previous discussion whereby the owner-manager is not only closely linked to growth objectives but also to strategic planning (Perry 2001; Delmar and Shane 2006, Liao and Gartner 2008). In contrast, others researchers cannot identify a positive relationship between strategic planning and firm growth (Bhide 2000; Honig and Karlsson 2004; Haber and Reichel 2005; Tornikoski and Newbert 2007).

Another aspect of strategic planning is the timeframe of the strategic plan (Mitchelmore and Rowley 2012), which has not been researched to any significant degree in the mainstream or gender-specific literature. The inclusion of a time frame as part of the consideration of the strategic orientation of owner-managers assists in ascertaining how future focused the owner-manager is with regard to the sustained development and growth of their firm. Additionally, it can be examined if a specific timeframe of the strategic plan influences firm growth. In investigating firm growth in female-owned firms, little attention has been paid to strategic planning and its influence on firm growth (Watson and Robinson 2003; Wang *et al* 2007; Roomi *et al* 2009). With the exception of studies by Lerner and Almor (2002) and Mitchelmore and Rowley (2012) who investigated strategic planning in female-owned firms and reported positive findings for firm growth, limited evidence exists so accordingly there is a need to deepen this understanding given its positive influence on firm growth.

Burke *et al* (2010) reported that there are mixed findings relating to strategic planning and its impact on firm growth, arguing that the value of strategic planning is likely to be dependent upon the context in which it is written and the “profile” of the firm, likely to be very different for individual firms. Burke *et al* (2010) found owner-managers who wrote strategic plans had faster employment growth than those that did not. Probably because of this mixture of motivations for producing a strategic plan, the evidence on the association between strategic plans and growth is mixed, with a study conducted by Storey and Greene (2010) confirming this.

Therefore, what emerges is that strategic planning is conducted for a variety of purposes. It is this diversity that makes it difficult to link the strategic plan to enhanced firm growth. Nevertheless, after taking account of this diversity, the balance of evidence suggests strategic planning has some value as it encourages the owner-manager to decide on the objectives of the firm, requires them to obtain detailed knowledge of the characteristics of their business environment including customers and competitors, and provides them with an insight into alternative strategic options that could be pursued to gain a competitive advantage. In specifically reviewing the existence of strategic plans and their impact on firm growth in female-owned firms, there is a notable absence, and the provision of information on this aspect of female-owned firm growth will add a much needed dimension to how strategic planning can best be used by female owner-managers to enable higher firm growth.

3.3.3 Type of Strategy

There are a number of strategies available to owner-managers when deciding on one or combination of strategies to pursue at a particular period of time as their firm progresses. Due to the variety of strategic frameworks, numerous studies (Papadakis *et al* 1998; Gilmore and Carson 2000; Anderson and Atkins 2001; Gibcus *et al* 2006) suggest that it was more applicable to examine strategic approaches viable for primarily small firms borrowed from the broader strategy literature where a limited number of strategy archetypes are presumed to capture

the essence of small firms. Many studies have investigated strategy in SMEs and the impact of strategy development on performance (Shrader and Siegel 2007) whereby the typology proposed by Miles and Snow (1978) and Porter (1980) has been influential for investigating firm growth in the small firm (Julien and Ramangalahy 2003; Shrader and Siegel 2007; Leitner and Guldenberg 2010) rendering it appropriate to evaluate these strategies for adoption in this study.

Porter (1980) proposed a strategic framework, outlining three ways for firms to build a defensive position in an industry namely cost leadership, focus and differentiation and proposed that in firms which follow one of these strategies above average firm performance will be achieved (Thornhill and White 2007; Leitner and Guldenberg 2010). While Porter's generic strategy (1980) has been used to investigate strategy in small firms, many researchers have contended that the framework was incomplete and not tailored to the specificities of small firms, and was this deemed inappropriate for describing strategy in small firms (Sandberg and Hofer 1987; Julien and Ramangalahy 2003; Shrader and Siegel 2007; Leitner and Guldenberg 2010). Several issues regarding the use of this typology for investigating strategy in the small firm have come to the fore. As proposed by Leitner and Guldenberg (2010), there is an ongoing debate on whether small firms need a competitive strategy that guides investment or whether their competitive advantage arises from their ability to respond to competitive market needs, echoing research by Parnell (2005). A further issue is that strategy choice influences firm growth and only a certain set of specific strategies provide competitive advantage, and they may not be those set out by Porter's (1980) typology. Resulting from the studies, it was argued small firms can only adopt a focus strategy and so the choice between overall cost leadership, overall differentiation, and focus, as proposed by Porter (1980) is not an issue in small firms, concluding that focus strategies are the only viable strategy for small firms. Pursuit of either of Porter's other two generic options, cost leadership and differentiation, seemingly would result in small firms being "stuck in the middle". Research by Campbell-Hunt (2000) points out the dominant paradigm of competitive strategy is now over two decades old, but it has yet to prove its

adequacy as a descriptive framework or move beyond its propositions about firm growth consequences of different strategic designs. Thus, due to the limitations of Porter's (1980) model of competitive strategy in the context of the SME, researchers have adopted the typology proposed by Miles and Snow as a framework to investigate strategy in the small firm (Miller and Toulouse 1986; Sandberg and Hofer 1987; McDougall and Robinson 1990; Allen and Helms 2006; Bruneel *et al* 2009; Chagnanti *et al* 2009). Since its development in 1978, this typology has formed the basis for many studies with leading journals confirming the continuing relevance of this typology (Hambrick 2003; Slater *et al* 2006; Zinn *et al* 2008; Blackmore and Nesbitt 2012) and, thus, is deemed an appropriate typology for its application in the female-owned small firm as a means of revealing a deeper insight into the strategic behaviour of female owner-managers.

Miles and Snow (1978) distinguished generic strategies according to how firms respond to environmental trends. They contended that firms can be categorised by how they co-align strategy, structure and process variables under various environmental conditions (Parnell and Hershey 2005). From their analysis Miles and Snow (1978) produced a typology of firm-level strategies, proposing that firms in general developed patterns of strategic behaviour in order to accomplish what they perceived were the primary opportunities in the general business environment within which they operated (Miles and Snow 1978).

Essentially, the Miles and Snow typology identifies four strategy types, namely defender, prospector, analyser and reactor strategies as identified in Table 3.1. The strategies reflected the decisions of the owner-manager about where and how to compete, taking into consideration the product/service offering of the firm and the competitive environment it operates within. The various strategies accommodated different market and firm-specific characteristics.

Table 3.1: Miles and Snow Typology

| Description | Strategy | Environment | Firm Characteristics |
|-------------|---|------------------|---|
| Defender | Protect turf. Retrench, hold current market. Locates and maintains a secure niche by protecting their position in a relatively stable product or service area | Stable | Tight control, centralised, production efficiency, low overhead |
| Prospector | Innovate. Find new market opportunities. Grow. Take risks. Value being first with new products, markets and technologies | Dynamic, growing | Creative, innovative, flexible, decentralised |
| Analyser | Maintain current market plus moderate innovation. Seldom first to market, but frequently a fast follower with a more cost-efficient or innovative product | Moderate change | Tight control and flexibility, efficient production, creativity |
| Reactor | No clear strategy. React to specific conditions. Drift. Responds to market changes when required by environmental pressures | Any condition | No clear organisational approach; depends on current needs |

Source: Adapted from Miles and Snow (1978)

According to Miles and Snow (1978) the defender strategy was adopted by entrepreneurs whose firms had narrow product/service offerings. Such entrepreneurs who implemented this strategy had a high level of expertise in a narrow discipline (Oltra and Flor 2010; Parnell 2013) and did not wish to progress the firm beyond a certain level of growth which would necessitate the broadening of their expertise base or the employment of the needed functional expertise. In this instance owner-managers were resistant to change and tended to consolidate and improve the efficiency of their existing firms rather than expand business boundaries and activities into unknown and higher risk market or industry sectors.

Owner-managers having adopted a prospector strategy had an external market focus, concentrated on the search for new product and market opportunities (Oltra and Flor 2010; Parnell 2013). These individuals were instigators of change and welcomed the challenge that change brought to the firm, reflecting the more entrepreneurial management styles where individuals were less cautious and

enjoyed taking risks in their strategy choice. Unlike the characteristics evident in entrepreneurs having adopted a defender strategy, the adopters of a prospector strategy were willing to extend beyond current markets to new national and international markets with an emphasis placed on market research, product and process development. This strategy was the most opportunistic and was driven by a strong desire for firm growth by the owner-manager.

Analysis of the research studies found the analyser strategy combined a number of the characteristics of the previously described strategic types (the prospector and defender strategy). Owner-managers who adopted this strategy were open to market opportunities but not willing to take what they considered was too much risk that might result in the personal loss of control in the management of their firm. In this instance owner-managers wished to expand their firm but did so in a more cautious manner. Moreover, those who employed an “analyser” strategy adopted a “wait and see” approach and in some instances a reactive strategic approach (Miles and Snow 1978). Moreover, they wished to maintain the status quo for their firm and were not ambitious for growth or expansion. Such individuals were willing to trade off the benefits of firm growth in favour of the retention of personal control and independence as regards to their autonomy in the firm (Miles and Snow 1978).

Findings regarding the Miles Snow typology emerged through research by Conant *et al* (1990) which supported the expected relationships, i.e. reactors were outperformed by the three other types, and prospectors were the best performing firms in terms of firm growth. By comparison, owner-managers adopting the analyser strategy produced higher return on assets than the other strategic types. Conant *et al* (1990) discovered that the majority of respondents having adopted the prospector strategy favoured a positive approach to product and market planning. Similarly, Raymond *et al* (1990) found those who choose the prospector strategy were proactive and positive about challenges in the environment they operated in and were willing to capitalise on growth opportunities. In keeping with this theme Rajagopalan (1996) found firms who adopted a prospector

strategy were more positive about the business's future which translated into a longer-term focus and were prepared to invest in the strategic orientation of the firm.

With respect to the defender strategy, Lumpkin and Dess (1996) found that owner-managers who chose this strategy were satisfied to be followers in the marketplace and mirrored their strategies on firms which they considered were more proactive and which pursued a prospector strategy. Rajagopalan (1996) found similar characteristics in owner-managers where they had a shorter term focus, with an emphasis on short-term objectives and shorter term planning and allocation of resources. In the analysis of the adoption of the four strategic typologies, prominence was given to the prospector and defender strategies. The review (Rajagopalan, 1996) would suggest that fewer firms engaged in the reactor or analyser strategies. The majority of small firms adopted the prospector strategy, thus, reinforcing the positive disposition of owner-managers towards achieving firm growth.

In summary, the review of empirical evidence related to Miles and Snow's (1978) generic strategies provided strong support for the proposition that four different generic strategies can exist either independently or can co-exist in the small firm to facilitate the achievement of firm growth. The combination of these four strategies should not be viewed independently and they are not mutually exclusive and were found to be closely associated with the characteristics and objectives for firm growth held by the owner-manager (Miles and Snow 1978). This reinforces the importance of understanding the objectives for firm growth. The owner-manager may adopt more than one of these strategies or may move between strategies to achieve growth at different stages of the firm to accommodate changing personal objectives, business objectives and market demands. While these strategic typologies were arrived at in research completed in the 1970s they have been applied and adopted as the basis for researching strategy in the small business by a number of researchers since (Hambrick 2003; Zinn *et al* 2008; Blackmore and Nesbitt 2012), and it is deemed appropriate to apply this typology

in this study. Furthermore, research on the relationship between strategy and firm growth is needed in order to advance strategic theory and its impact on performance, especially in the female context. Of critical importance, none of the studies completed to date has investigated the Miles and Snow typology in the context of female-owned firms- a subject this research serves to address given the lack of studies on strategy in female-owned firms.

3.3.3.1 Strategic Activities

In extending the research on the type of strategy, a number of specific strategic activities emerged through the implementation of the Miles and Snow typologies in the mainstream literature; however, there is a limited range of studies focused in particular on the strategic-related activities in female-owned firms (Roomi *et al* 2009).

Burns (2001) identified four options that could be pursued by the owner-managers in terms of a product/market growth activities, including market penetration, new product development, new market development, moving into new markets with new products. Sandberg and Hoffer (1987) also noted innovation through new product introductions is also positively related to small firm growth (Kinsella *et al* 1994; Wynarczyki 2008). Such activities were clearly reflected in a study of female owner-managers whereby such activities were associated with higher firm growth (Gundry and Welsch 2001).

Further, a constant awareness of new technologies and ICT as well as the ability to carry out research and development activities are vital to a firm's ability to introduce new products successfully into the market (Gundry and Welsch 2001; Yasuda 2005). In doing so, firms gain access to greater cash flow, enhance external visibility and legitimacy and improve market share; all necessary elements for firm growth (Lin 1998; Barringer *et al* 2004). Firms which are able to develop new products and services in existing markets, enter new markets with existing products and generally broaden their customer base are more likely to experience firm growth (Gundry and Welsch 2001; Littunen and Tohmo 2003; Kelley and Nakosteen 2005). This was particularly evident in a study by Roomi *et*

al (2009) where the development of new products and services was reported as the most important contributing factor for firm growth, consistent with the earlier findings of Maysami and Goby (1999).

Research by Baum *et al* (2001) and O’Gorman (2001) found differentiation through high quality and innovation exhibited positive relationships with firm sales and employment. These studies found the more successful firms focused their growth activities on identifying market opportunities and differentiation with an emphasis on the maintenance of a competitive advantage. O’Gorman (2001) particularly emphasised the overall effectiveness of the strategy was dependent on whether the owner-manager had the ability to maintain a competitive advantage in the context of the changes in the business environment aligning with the research conducted by Smallbone *et al* (1995) who suggested the ability to respond to market changes is an essential prerequisite for small firm growth. Additionally, O’Gorman (2001) indicates that superior competitive strategies are essential if the venture is to achieve not only absolute growth rates but also growth relative to competitors and the market, reflected in gender-specific studies by Gundry and Welsch (2001) and Roomi *et al* (2009).

Further analysis (Barkham *et al* 1996; O’Gorman 2001) would suggest the creation of a competitive advantage is part of the broader marketing activities, which are more overtly communicated through the marketing activities of the small firm (Gundry and Welsch 2001). Barkham *et al* (1996) found that a focus on marketing led to faster growth in the small firms. They found that pro-marketing owner-managers had a higher use of external marketing consultants to assist them in the development of their activities. The promotional methods used by respondent firms indicated the use and prevalence of direct methods of communication emphasising the preference for control over these activities by the owner-manager. Bellamy *et al* (2003) highlighted the need to have close contact with the marketplace and to develop personal relationships emphasising customer loyalty, product quality and service as important influences on firm growth, echoing other research (Kalleberg and Leicht 1991; Chagnanti and Parasuraman

1996; O’Gorman and Cunningham 2007) which found that owner-managers place more emphasis on product quality in comparison to offering larger number of products and services. These activities were viewed as a valuable source of competitive advantage for the small firm. The importance of marketing and its potential to influence small firm growth was also addressed by Storey (1994), who found that higher growth firms had a member of their management team with marketing expertise or experience, resulting in greater awareness of their customer and competitor profile where firms were more actively involved in product and process development, and in identifying new market opportunities.

According to Kinsella *et al* (1994) an important marketing activity required to ensure the achievement of business objectives was the completion of marketing research. They found that the businesses which engaged in marketing research were associated with a higher rate of business growth. The benefits of conducting market research were also endorsed in research completed by Barkham *et al* (1996) who found that businesses which had completed market research benefited in terms of improved knowledge of their customer needs and of competitor behaviour and also allowed the owner-manager to develop a personal relationship with their customer base as a means of competitive differentiation. Consistent findings emerged in Roomi *et al* (2009), whereby female owner - managers also reported marketing activities as being crucial for firm growth.

Internationalisation has also emerged as an important strategic activity for firm growth (Storey 1994; Smallbone *et al* 1995; Alarape 2007; Nissan *et al* 2012). Kinsella *et al* (1994) found that higher growth firms were less reliant on local and domestic markets than lower growth firms. Other researchers (Hitt *et al* 1997; Gilbert *et al* 2006; Nissan *et al* 2012) found that moving into new international markets had a positive effect on firm growth, suggesting internationalisation created value for the firm as the learning obtained in the process increased market exposure and the potential to be more innovative in product and service development. Furthermore, other positive factors associated with internationalisation is the owner-manager’s knowledge of international markets, a

positive set of attitudes towards the perceived benefits of international business activities and the willingness to take risks associated with the development of new markets in different countries, concurring with previous research (Bloodgood *et al* 1996; McDougall *et al* 1996; Reuber and Fischer 2002; McClelland 2004; Skrt and Antonic 2004). According to Weeks (2001) and McClelland (2004) internationalisation is increasingly important for many small firms due to its potential for firm growth, being equally important for female owner-managers. Such positive associations were reflected in research by Gundry and Welsh (2001) reporting that high-growth female owner-managers were more likely to operate in international markets, reinforcing internationalisation as an important growth activity. Research (Ruane and Sutherland 2007; Orser *et al* 2010) on female owners indicates that female owner-managers are less likely to export and more reliant on the domestic market, reinforced in recent research by Robson *et al* (2012) and Jennings and Brush (2013). Orser *et al* (1999) previously reported that gender posed a challenge in relation to credibility in foreign markets with many females feeling they were not being taken seriously in export markets. In addition, the study by Orser *et al* (1999) revealed that travel to international markets was a concern for females given the logistics of balancing family commitments with work commitments, a sentiment previously reported (Babaeva and Chirikova 1997; McKay 2001).

Seeking professional support from government support agencies has also emerged as a having positive influence on firm growth (Cooper *et al* 1994; Boter and Lundstrom 2005) in both the mainstream and gender-specific studies. Owner-managers can gain expertise by accessing both formal and informal support from government support agencies. The support benefits the firm in meeting the challenges faced in achieving firm growth and has become a key strategic activity for growing firms (Gundry and Welsch 2001; Lerner and Almor 2002). In contrast, other research (Brush *et al* 2004; Roomi *et al* 2009) conducted with female owner-managers has reported that whilst females valued government support agencies, they felt that some programmes for business support focused on issues pertaining to start-up rather than growth in business development, pointing

out that there are very few support structures for growth-orientated, female owner-managers. Given this, it is deemed interesting to investigate whether female owner-managers are accessing such support as part of their strategic-related activities for firm growth, given the focus of policy on the provision of such supports.

The review of the literature to date has shown there are many strategic activities available to the owner-manager to facilitate firm growth. Also emerging from the review is that most studies, apart from those by Gundry and Welsch (2001) and Roomi *et al* (2009), have been non-gender specific in nature, leading to the absence of an established understanding of how these strategic-related activities influence firm growth in the female context, echoing previous studies (Gundry and Welsch 2001; Lerner and Almor 2002), and accordingly this study aims to make a contribution to this area. Specifically, adding a new product or service, selling to a new market, expanding marketing activities, operating in international markets, research and development, improvement of ICT in the firm, and seeking professional advice (Gundry and Welsch 2001; Roomi *et al* 2009) are examined.

The literature reviewed highlights the various elements of strategy that need to be considered when investigating firm growth in the female context. Firstly, the growth objectives set out by female owner-managers are deemed appropriate for inclusion due to the significant role they play in determining the strategy adopted for firm growth. Following this, the existence of a strategic plan along with its timeframe should be investigated. By applying the Miles and Snow (1978) typology in the female context, its inclusion will show what type of strategy results in higher firm growth. Finally, the identification of specific growth activities resulting in higher firm growth (Gundry and Welsch 2001; Roomi *et al* 2009) will provide a more holistic and integrated insight into the strategic behaviour of female owner-managers.

To conclude, the research studies reviewed highlights that when examining firm growth there is an abundance of studies debating which one or combination of

internal characteristics and factors influence firm growth (Storey 1994; Dobbs and Hamilton 2007; Calvo and Garcia 2010). Furthermore, these studies lack detail specifically focusing on female owner-managers so it is difficult to identify which one or combination of characteristics and factors pertains most to firm growth, thus, a gap in the literature emerges. Therefore, in framing a study to determine the characteristics and factors that influence firm growth in the female context, the following factors identified in the mainstream literature are applied to this study:

- Female Owner-Manager Characteristics: Age; Motivation for Business Start-Up; Education and Prior Employment Experience
- Female-Owned Firm Characteristics: Industry Sector; Firm Age; Firm Size and Nature of Ownership
- Strategic-Related Activities: Growth Objectives; Strategic Planning and Type of Strategy & Activities

The adoption of these factors will place studies on firm growth in female-owned firms more firmly on the agenda and heighten the awareness of the lack of data focused on firm growth in female-owned firms.

3.4 Conclusion

This chapter has provided a review of the literature relevant to investigating how a range of specific owner-manager and firm characteristics and strategic-related activities influence firm growth. This review set out to explore what is known about these factors, having emerged from the mainstream literature as influential on firm growth subsequently examining each factor in the female context. Concluded from the literature review is the notable absence of an established understanding of how specific characteristics of female owner-managers and their firms, and in particular their strategic-related activities influence firm growth, evidenced by the limited studies focusing solely on female owner-managers. With a view to developing and extending the understanding of the factors that influence firm growth specifically in female-owned firms, the literature review conducted assisted in defining the objectives of the empirical study, developing the

investigation of the characteristics of the female owner-managers, their firms and strategic-related activities. The methods used to investigate these characteristic and factors are outlined in detail in Chapter Four.

Chapter Four: The Research Approach

4.0 Introduction

This chapter presents the research methodology adopted in conducting the empirical study focusing on how the research was designed and carried out to answer the research objectives. The nature of the research process is delineated, by discussing the various methodological approaches available, placing a particular emphasis on the nature of paradigms to inform the choice of methodology in addressing the research objectives. The chapter presents a series of hypotheses emerging from the review of the literature to be tested to answer the research objectives. Thereafter, the method employed, quantitative in nature, is outlined and explained including a discussion on how the factors influencing firm growth were assessed and measured, as well as the nature of the data analyses carried out. Additionally, considerations regarding the reliability and validity of the study are presented. The limitations of the study are outlined prior to the conclusion of the chapter.

4.1 Research Design

When conducting research, it is important to distinguish between exploratory, causal research and descriptive research. Exploratory research focuses on collecting either secondary or primary data, using an unstructured format or informal procedures to interpret them (Shiu *et al* 2009). Shiu *et al* (2009) suggests exploratory research includes the fewest characteristics of the scientific methods, often used to simply classify problems or opportunities and is not intended to provide conclusive evidence or information to determine a course of action. Furthermore, exploratory research is not intended to test specific research hypotheses (Hair *et al* 2007). Causal research “*tests whether or not one event causes another*” (Hair *et al* 2007, p.160) explaining patterns relating to the phenomena being researched and identifies relationships between various aspects, often taking a long time from planning to execution. Given that exploratory research is not appropriate for testing hypotheses and causal research is

appropriate for testing whether one event causes another, consideration is given to descriptive research.

Defined by Shiu *et al* (2009, p.62), descriptive research is:

“research that uses a set of scientific methods and procedures to collect raw data and create data structures that describe the existing characteristics of a defined target population or market structure”

and is appropriate when the research objectives include determining the degree to which variables are related to actual phenomena and are related to questions such as who, what, and where. This type of study provides information on an accurate profile of persons, events or situations and according to Robson (2002) requires extensive previous knowledge of the situation to be researched so that the researcher knows the appropriate aspects on which to gather information. Thus, descriptive research is adopted in this study given its aim is to investigate how certain internal characteristics and factors (i.e. characteristics of female owner-managers and their firms and strategic-related activities) influence firm growth in female-owned firms. Having identified that the research is descriptive in nature, it is important to identify the preferred paradigm/theoretical explanation of the methodological approach adopted for this research.

4.2 The Choice of a Positivist Paradigm

Philosophers of science have long debated about how it is best to conduct research and the debate has primarily centred on two main paradigms, interpretivist and positivist, with qualitative and quantitative methods underlying each paradigm. The dilemma of choice between qualitative and quantitative methods has been outlined by many researchers (Hill and McGowan 1999; Blackburn and Kovalainen 2009; Tuli 2011). According to Tuli (2011, p.99), the selection of research methodology depends on *“the paradigm that guides the research activity, beliefs about the nature of reality and humanity (ontology), the theory of knowledge that informs the research (epistemology), and how that knowledge may be gained (methodology)”*.

Interpretivism is the process that recognises the world as socially constructed, and takes a subjective rather than a general approach to research, using qualitative methods in order to find the true meaning of hypotheses, attempting to understand the complexity of the subject (Goulding 2005; Hines 2000). Interpretivists recognise the need to find out the specifics behind a given situation (Saunders *et al* 2007) using qualitative and naturalistic approaches to understand inductively and holistically human experience in context-specific settings. Interpretivism endeavours to understand and explain a phenomenon rather than search for external causes or fundamental laws (Easterby-Smith *et al* 1991; Remenyi *et al* 1998). The goal is the development of theory through explanatory methods rather than through the creation of generalisations.

There are strengths associated with this paradigm including its ability to collect data is based on the respondents' own categories of meaning; its ability for studying individual cases in detail and for conducting cross case comparisons and analysis (Johnson and Onwuegbuzie 2004). There are also associated weaknesses including the knowledge produced may not be generalisable to other people or settings; difficulty in making quantitative predictions; difficulty in testing hypotheses; and it generally takes more time to collect the data when compared to quantitative research (Johnson and Onwuegbuzie 2004).

In contrast, positivism is a scientific approach to developing knowledge, methods and strategies and interpreting results (Hines, 2000). Researchers focus mostly on facts and figures, using quantitative methods to find the cause and effect of the hypothesis (Hines 2000). Positivism uses quantitative and experimental methods to test hypothetical-deductive generalisations, searches for causal explanations and fundamental laws, and generally reduces the whole to the simplest possible elements in order to facilitate analysis (Easterby-Smith *et al* 1991; Remenyi *et al* 1998). The rationale for using such an approach was best described by Nau (1995, p. 121) in which it was found that quantitative investigations look for "*distinguishing characteristics, elemental properties and empirical boundaries*" and tend to measure "*how much or how often*" and is deemed appropriate to

measure quantifiably the relationship between variables (Tuli 2011). There are many strengths associated with this approach including its provision of precise, quantitative numerical data; its use for obtaining data that allow quantitative predictions to be made; its ability to test hypotheses that are constructed before the data are collected; its ability to generalise research findings when the data are based on random samples of sufficient size; its use for studying large numbers of people and its results are relatively independent of the researcher (e.g., effect size, statistical significance) (Johnson and Onwuegbuzie 2004)

The strengths associated with the positivist approach assisted in choosing this approach for this study and it was also deemed valuable to examine the work of some “objective” research design specialists who have contributed to the literature on the merits and applications of both qualitative and quantitative approaches (Creswell 1994; Krauss 2005; Tuli 2011). Creswell (1994) suggests that a literature review is typically advanced as a basis for comparison and is used as a framework for the development of research hypotheses and should be taken as an indication of the authors’ underlying “ontological assumption”. This is certainly in accordance with the stated research objectives of this study. The literature review conducted, having focused on previous studies on small firm growth and its measurement, the characteristics of female owner-managers and their firms, and strategic-related activities, aided in identifying the methodological approach to adopt for this study. As highlighted in Chapter Two of the literature review (Table 2.1), the majority of studies on firm growth have been quantitative in nature and provide a point of reference for the most appropriate approach to adopt in this study, informing the decision to use a quantitative research (positivist) approach. Specifically, studies in the mainstream and gender-specific literature by Kinsella *et al* (1994), Barkham *et al* (1996), Rosa *et al* (1996), Carter and Allen (1997), Cliff (1998), Roper (1998), Du Rietz and Henrekson (2000), Gundry and Welsch (2001), Davidsson *et al* (2006), and Roomi *et al* (2009) adopted a quantitative approach, informing the decision to adopt this approach for this particular study.

Furthermore, Blackburn and Kovalainen (2009) evaluated the quantitative approach in studying the process of firm growth in small firms suggesting the merits included its ability to capture knowledge on the dynamics of the operations of the small firm and provides accurate descriptive quantitative evidence on relationships between events and factors in the firm. Furthermore, they suggested that data obtained from a quantitative study provided important snapshots of firm activity and how it may change over time. The findings of quantitative research studies are useful to identify relationships between independent and dependent variables and provide for a standardised and systematic method for gauging variations in the research findings. Blackburn and Kovalainen (2009) suggested that quantitative research study findings serve as useful benchmarking studies. A review of the literature highlighted the prevalence of a quantitative approach (Kinsella *et al* 1994; Barkham *et al* 1996; Roper 1998; Liao *et al* 2001; Poutziouris 2003). Additionally, the majority of research studies reviewed by Storey (1994) and Dobbs and Hamilton (2007) showed a bias towards the quantitative research approach. Since the objectives of this research are similar albeit a different context (female owner-managers) it was considered that the use of a similar research approach to that adopted in previous studies would be appropriate so as to allow for some general comparisons to highlight how different characteristics and strategic-related activities influence firm growth in the female context. Furthermore, and of particular importance to this study, it is important to investigate firm growth in female-owned firms from a quantitative perspective as to date, little rigorous and in-depth research has been undertaken on the issue of gender and firm growth and although many studies have mentioned it briefly, most have not directly investigated it using quantitative measures (Valiulis *et al* 2004).

While a number of benefits are associated with the quantitative approach, it was also important to consider some of the potential limitations. One of the primary limitations associated with the quantitative approach is its over reliance on the collection of quantitative data. In many instances, the quantitative approach is designed to provide an insight into “what” is happening in a quantifiable manner

and does not provide an insight into the “why” behind the decisions made by respondents. This limitation was compensated for in the design of the questionnaire, whereby open-ended questions were included to allow for more detailed responses to be elicited from female owner-managers, relating specifically to their growth objectives.

4.3 Research Objectives and Emergent Hypotheses

Having evaluated the literature relating to the internal factors that influence firm growth, this study is guided by three distinct objectives as outlined in Chapter One:

- **Research Objective One:** To investigate how a range of female owner-manager characteristics significantly influence firm growth.
- **Research Objective Two:** To investigate how a range of female-owned firm characteristics significantly influence firm growth.
- **Research Objective Three:** To investigate how a range of strategic related-activities significantly influence firm growth.

The review of the literature has brought to the fore both the independent and dependent variables of this study. The independent variables comprise of the characteristics of female owner-managers (age, motivation for business start-up, education, and prior employment experience), firm characteristics (industry sector, firm age, firm size, and nature of ownership) and strategic-related activities (growth objectives, strategic planning, type of strategy and strategic activities). The dependent variables are the measures of growth, namely turnover, turnover per employee and employment growth. The aforementioned variables assist in answering each of the research objectives, with a range of hypotheses emerging from the review of the literature. According to Shiu (2009, p. 333), an hypothesis is “*a formalised statement of a testable relationship between two or more constructs or variables*”, allowing the researcher to use “hypothesis-driven” research which will allow for the advanced statistical testing which facilitates a

more detailed understanding of firm growth in female-owned firms. Both Kerlinger (1979) and Creswell (1994) have advocated the important role of establishing hypotheses that are “testable” propositions deduced from theory. Various types of hypotheses can be adopted in a research study; however, Creswell (1994) states that many modern researchers have tended to adopt the use of “directional” or “alternative” hypotheses (H_x). H_x posits a direction for the relationship rather than making the statement of “no relationship” as in the null approach, echoing Krathwohl (1988) recommending the use of H_x when the literature suggests an hypothesised direction for the variables, as is the case with this study. To answer the aforementioned research objectives the following hypotheses have been derived from the review of the literature and will be discussed as such.

To address Research Objective One, the following hypothesis is proposed:

H₁: Individual characteristics of female owner-managers (age, motivation for start-up, education, prior employment experience) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

As this is an “umbrella” hypothesis encompassing many elements, it is necessary to outline sub-hypothesis addressing the individual elements of the hypothesis, outlined in Table 4.1:

Table 4.1: Hypothesis One (H₁)- Sub-hypothesis

| Characteristics of Female Owner-Managers | Influence on Firm growth |
|---|--|
| Age | H _{1.1} : Younger female owner-managers will achieve higher firm growth. |
| Motivation for Business Start-Up | H _{1.2} : Female owner-managers motivated by “pull” factors for business start-up will achieve higher firm growth. |
| Education | H _{1.3} : Female owner-managers having completed third level education will achieve higher firm growth. H _{1.3.1} : Female owner-managers having pursued technical disciplines will achieve higher firm growth. |
| Prior Employment Experience | H _{1.4} : Female owner-managers having gained prior employment experience in the industry sector in which they operate will achieve higher firm growth. H _{1.4.1} : Female owner-managers with managerial experience will achieve higher firm growth. |

| | |
|--|---|
| | H _{1.4.2} : Female owner-managers with experience in starting other firms will achieve higher firm growth. |
|--|---|

In addressing Research Objective Two, the following hypothesis and sub-hypotheses are proposed:

H₂: Female-Owned Firm Characteristics (industry sector, firm age & size, nature of ownership) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

Table 4.2: Hypothesis Two (H₂)- Sub-hypothesis

| Firm Characteristics | Influence on Firm Growth |
|----------------------|--|
| Industry Sector | H _{2.1} : Female-owned firms operating in non-feminised industry sectors will achieve higher firm growth. |
| Firm Age | H _{2.2} : Younger female-owned firms will achieve higher firm growth. |
| Firm Size | H _{2.3} : Female-owned firms employing fewer than 10 employees will achieve of higher firm growth. |
| Nature of Ownership | H _{2.4} : Female-owned firms owned and managed by a team will achieve higher firm growth. |

In addressing Research Objective Three, the following hypothesis and sub-hypotheses are proposed:

H₃: Strategic-related activities (growth objectives, strategic planning, and type of strategy) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

Table 4.3: Hypothesis Two (H₃)- Sub-hypothesis

| Strategic-related activities | Influence on Firm Growth |
|------------------------------|---|
| Growth Objectives | H _{3.1} : Female owner-managers who set out financial growth objectives achieve higher firm growth. |
| Planning | H _{3.2} : Female owner-managers who prepare a formal strategic plan achieve higher firm growth. H _{3.2.1} : Female owner-managers having completed a formal strategic plan achieve higher firm growth. |
| Type of Strategy | H _{3.3} : Female owner-managers who adopt a prospector strategy achieve higher firm growth. |

4.4 Designing the Research Instrument – The Questionnaire

A questionnaire, as a quantitative data collection method, was deemed an appropriate data collection mechanism for this study. As indicated by Hair *et al* (2007), questionnaires are appropriate when the research involves collecting information from a large sample of individuals, as was the case with this study. When designing the questionnaire, three design principles were adhered to as advocated by Sekaran and Bougie (2010). The first relates to the wording of the questions. The second refers to the planning issues with regard to how the variables will be categorised, scaled, and coded after receipt of the responses. The third relates to the general appearance of the questionnaire. All three issues were considered by the researcher in the design of the research instrument as they minimise the bias in the questionnaire.

In relation to Sekaran and Bougie's (2010) first design principle, i.e. wording of the question efforts were made to ensure the wording used in the questionnaire would be understood by potential respondents and would not be interpreted differently by different respondents. Additionally, two types of questions were utilised in this questionnaire namely open-ended and closed questions. Open-ended questions "*allow respondents to answer them in any way they choose*" (Sekaran and Bougie 2010, p. 200), while a closed question asks the respondent to make choices among a set of alternatives (Hair *et al* 2007; Sekaran and Bougie 2010). Furthermore, in designing the research instrument, the length of the questions was considered and short questions were used as advocated by previous researchers (Oppenheim 1992). The sequence of the questions were such that the respondent was led from questions of a general nature to those that were more specific, and from questions that were relatively easy to answer to those that were progressively more difficult. This funnel approach (Festinger and Katz 1966) facilitated the easy and smooth progress of the respondent through the items in the questionnaire. Additionally, the purpose of each question was carefully considered so that the variables were adequately measured and no superfluous questions are asked.

Related to the third principle as advocated by Sekaran and Bougie (2010), the general appearance of the questionnaire was also considered. Firstly, a cover letter (as can be seen in Appendix A) was provided to respondents, clearly disclosing the identity of the researcher and conveyed the objective of the research. Assurance of confidentiality of the information collected was also provided as well as clear instructions on how to complete each question. The questionnaire concluded on a courteous note thanking respondents for their time and cooperation.

Given that the questionnaire was self-completion, consideration was given to the appearance of the questionnaire with regard to presentation, spacing and layout of the questions paying particular attention to ease of reading. Each section had a clearly marked heading and specific instructions were provided, where required on how to answer the questions. The questionnaire designed for this study was divided into three sections (a copy of the questionnaire has been included in Appendix B), with each section addressing the questions that needed answering in relation to the three research objectives of this research. Section A of the questionnaire focused on gathering data in relation to the independent variables of the study relating to characteristics of the female owner-manager such as age, motivation for business start-up, education, and prior employment experience. These data were deemed classification data and was placed at the beginning of the questionnaire (Oppenheim 1992) based on the assumption that once the respondents have shared their personal history, they may have psychologically identified themselves with the questionnaire, and may feel a commitment to respond (Hair *et al* 2007). Section B of the questionnaire focused on gathering data concerning the characteristics of female-owned firms, namely industry sector, firm age, firm size and nature of ownership. Lastly, Section C of the questionnaire concentrated on gathering data on growth objectives, strategic planning, type of strategy and strategic activities. This section also invited respondents to provide data relating to the dependent variables of this study, namely the measures of growth (turnover and employment).

4.5 Reliability and Validity of the Research Method

Any research method has an inherent set of strengths and weaknesses (Gill and Johnson 2007) and any researcher must question how credible are the research findings?, and if the study were to be conducted again, using the same procedures, would it yield the same results (Creswell 1994; Easterby-Smith *et al* 2002). There are two important characteristics that can be used to evaluate a research method, validity and reliability.

There are two important characteristics used to assess a research method, namely validity (internal and external) and reliability (Gill and Johnson 2007). Validity is concerned with the fact that the research measures only what it is supposed to measure. In order to satisfy the criterion of validity, research must not be subject to other extraneous factors which can bias results in one direction or another. In this study, all decisions with respect to the design of the questionnaire were made with the intention of achieving a methodological fit which is defined as “*internal consistency among elements of a research project- research question, prior work, research design, and theoretical contribution*” (Edmundson and McManus 2007, p. 1155). As such, every effort was made to align the questionnaire to the research questions of this study. While limitations of the self-report survey method include the possible effect of social desirability, every effort was made to remedy such a problem. Here, the research adopted the “sensible approach” as advocated by Podsakoff and Organ (1986) and Podsakoff *et al* (2003) and as much information as possible was provided to the respondents on the purpose and use of this research. Furthermore, the research included a lengthy pilot test, whereby preliminary analyses were performed on the data collected to ensure no violation of the assumptions of the analytic techniques carried out existed. External validity, then refers to generalisability of the research findings.

In terms of reliability, the use of a survey instrument is regarded as one of the most reliable methods due to their highly structured nature (Gill and Johnson 2007). Surveys allow a great depth of information to be generated and allow inferences from the sample to the wider population to be made and are according

Gill and Johnson (2007) high on validity and reliability. The careful random selection of samples ensures that results can be generalised to wider populations with a high degree of confidence. Furthermore, the use of highly structured questionnaires is usually regarded as easily replicable and therefore reliable.

In addition, research ethics approval was granted by the Kemmy Business School Research Ethics Committee to conduct this study and ethical issues were taken into account during the study.

4.6 Sample Selection

As referred to in Chapter One, of note to this study, Ireland reports a lack of basic information and statistics on female owner-managers, mainly due to the fact there are no official statistics on the gender of business owners. According to Valiulis *et al* (2004) and de Bruin *et al* (2006, 2007), the number of female owner-managers can only be estimated since there are no gendered national databases of Irish firms. Existing databases only take into account characteristics such as the number of employees or the sector in which they trade, ignoring the issue of gender, thus it is difficult to determine with any degree of certainty, the actual level of female entrepreneurship in Ireland outside of the findings from the Global Entrepreneurship Monitor (GEM) study in Ireland which indicate that there are approximately 77,000 established female owner-managers operating in Ireland (Fitzsimons and O’Gorman 2010). This figure was extrapolated to ensure that the sample for the empirical study was representative of this population at the time of the study.

To conduct this research, a database of female-owned firms operating in Ireland had to be developed. Contact details were obtained from various public sources such as Enterprise Ireland, City and Council Enterprise Board and Network Ireland. In addition, personal contact was established with representatives from these organisations to ensure the lists were up to date and to obtain profile data omitted from the listings. A number of commercial business databases such as the Kompass Irish Business Directory and the Golden Pages were also consulted for names of businesses and, thus, ensured a comprehensive sample was obtained. All

sources of data were cross-checked to avoid duplication and double counting of firms. A total of 1,200 female-owned firms were identified. The sample size was representative of the population of established female owner-managers, as identified by the GEM report (2010), and reflected the population of established female owner-managers in terms of age, size and industry sector. Whilst the database developed is comprehensive, representing all sectors of industry and various firm sizes, it is acknowledged that it is not a definitive database of all female owner-managers in Ireland as there is no one single complete database available- a significant issue that needs to be addressed. This study has in some part made a contribution, setting the foundation towards the completion of a single database for use by other researchers to assist in future research on female-owner-managers.

To select an appropriate sample for this study, two main criteria were applied. Firstly, only female-owned firms in operation for more than three years were included so as to ensure they were established rather than start-up firms, having experience with the issues pertaining to firm growth. This ensured that female owner-managers would be able to address the issues under investigation. Secondly, as the focus of this research is on female owner-managers who own and manage their own firms in Ireland, only indigenous, female-owned firms were included.

4.7 Pilot Study

A pilot survey is an essential requirement when undertaking research from a quantitative perspective. Sarantakos (1993) suggested that the purpose of a pilot survey was to discover possible weaknesses, inadequacies, ambiguities and problems in any aspect of the research process. Generally the objectives of a pilot study is to test the effectiveness and suitability of the data collection method and to qualitatively test the validity, reliability and overall effectiveness of the research instrument, as was the case with the pilot study for this research. Beyond this, a pilot study establishes the “face validity” of the instrument and allows improvements in question wording and formatting as well as validating the hypotheses to be used in the final study (Creswell 1994)

The pilot test involved a “participating pre-test” in that the selected sample of respondents were informed that it was a pre-test of the questionnaire and were encouraged to provide open and constructive feedback on their ease and ability to answer the questions given. This interaction allowed for the interpretation of both verbal and non-verbal reaction of the respondent to the content and wording of questions, the timing and duration of the questionnaire, the relevance of certain questions and the ability of the researcher to facilitate the process in a non-biased manner.

Piloting of the questionnaire was undertaken by asking fifteen female owner-managers to participate in the pilot study. The selected female owner-managers represented various industry sectors and a variation in firm age and firm size. Respondents were sent an online version of the survey and asked to complete it. They were then invited to provide feedback on various aspects of the questionnaire, including the wording of questions, time taken to complete the survey, their comprehension of the questions being asked and what was required of the answer. On completion of the pilot test, a number of modifications were made. This resulted in more specific grouping of questions (in the profile of the female owner-manager and firm characteristics –Section A and B of the questionnaire) and rephrasing of questions which were problematic for the respondents to answer (questions on growth measurement and strategies for growth). Feedback from the pilot test also resulted in the reduction in the length of the questionnaire to accommodate the limited amount of time female owner-managers were willing to give to complete the questionnaire.

4.8 Data Collection and Screening

Respondents were invited via email to participate in the study by filling out the survey, which was hosted through an online link at Survey Monkey (www.surveymonkey.com), an online survey tool allowing researchers to create and publish surveys. As an ever-increasing amount of communicative activity takes places through the medium of the internet (Wright 2005), the choice of an online survey was deemed an efficient means of data collection, particularly as

this medium has been found to be an especially rich domain in conducting survey research (Wright 2005). Online surveys also tend to be aesthetically pleasing for respondents, allowing for fast collection of data, are effective in terms of response rates and quality, and are relatively inexpensive (Kraut *et al* 2002). This method yielded a response rate of 12.5 per cent (n=151). In order to maximise the response rate, a hard-copy of the invitation to participate, the survey, and a stamp addressed envelope were sent to respondents where email addresses were not available. This method yielded a response rate of 5.4 per cent (n=65), and, therefore, an overall initial response rate of 17.9%, with a total of 216 surveys returned. Baruch (1999) notes, however, that response rate refers to the number of usable responses, not the number of returned surveys. Of the 216 surveys returned, 23 were incomplete in terms of the data required on the measures of growth, while a further 17 respondents indicated they were only in operation for 6-12 months, and were thus excluded from further analysis. Therefore, the study yielded a response rate of 14.6 per cent (n=176), which is considered acceptable in the social sciences (Baruch, 1999), and higher than the typical response rate of 10 per cent in research as suggested by DeVellis (1991).

Before commencing statistical analyses, the raw survey data were transferred into a password protected PASW data file. The data were firstly screened for accuracy. This involved proofreading the original data against the computerised data file. The data were then examined using descriptive frequencies and statistics. Each discrete variable in the data file was checked for out-of-range numbers, continuous variables were checked for implausible values, means and standard deviations were also checked for plausibility. Only fully completed responses were utilised in the study. Having screened the data file, all of categorical variables were recoded into continuous or dichotomous variables under the guideline of Pallant (2007). Furthermore, each of the variables were explored in order to first, describe the characteristics of the sample, and secondly, to check variables for any violation of the assumptions underlying certain statistical techniques. The data collected did not exhibit a frequency distribution that

approximated a normal curve, thus, the researcher had to rely on non-parametric tests for the purpose of statistical analyses.

4.9 Statistical Analyses

The purpose of each of the variables (both independent and dependent) variables in the survey instrument was to allow the research objectives and derived hypotheses of the study to be assessed. Thus, once the data were collected the key consideration in conducting statistical analyses on these data was to ensure that the type of analysis chosen was suited to answering the research objectives. A variety of statistical analyses were utilised in this study. Table 4.4 outlines the analysis requirements for each of the research objectives pertaining to this study, while also including the statistical analysis initially conducted on the dependent variables, namely the measures of growth.

Table 4.4: Analytic Requirements- Dependent and Independent Variables

| Research Questions | Variables | Analytic Requirements |
|---|--|---|
| Measures of Growth Dependent Variables | Turnover; Turnover per employee; Employment | Examine descriptive statistics; Tests for normality (K-S Test); Spearman's Rank Order Correlation |
| Research Objective 1 Independent Variables | To investigate how a range of specific female owner-manager characteristics significantly influence firm growth. | Examine descriptive statistics; conduct cross tabulations; Examine relationships among the dependent variables- Mann-Whitney U Test; Krushal-Wallis Test; Conduct post-hoc tests (where applicable) |
| Research Objective 2 Independent Variables | To investigate how a range of firm characteristics significantly influence firm growth. | Examine descriptive statistics; conduct cross tabulations; Examine relationships among the dependent variables- Mann-Whitney U Test; Krushal-Wallis Test; Conduct post-hoc tests (where applicable) |
| Research Objective 3 Independent Variables | To investigate how a range of strategic-related activities significantly influence firm growth. | Examine descriptive statistics; conduct cross tabulations Examine relationships among the dependent variables- Mann-Whitney U Test; Krushal-Wallis Test; Conduct post-hoc tests (where |

| | | |
|--|--|---|
| | | applicable); Code and thematically examines open-ended questions (where applicable) |
|--|--|---|

4.10 Preliminary Data Analysis

Information was gathered on turnover, turnover per employee and employment growth. In calculating the data for the three measures of small firm growth, 2007 was treated as the base year on which the other years' figures were calculated. The effect of inflation was removed from the turnover data by deflating it in 2007 rates. This real value of the turnover data was obtained by adjusting it for price movements and to allow for inflation using the Consumer Price Index (CPI) which was differentiated separately between goods and services.

In relation to employment, growth was calculated by taking employment figures for 2009 minus those for 2007, then computing the change in employment performance for the period of the study. Data were calculated to provide detail on the average percentage change in employment, turnover and turnover per employee growth for the cohort of firms for the period of the study as a useful indicator on how the sample of firms grew in the three measures of growth. The percentage change was calculated as follows: $(\text{value at the end of 2009} - \text{value at the end of 2007}) / \text{value at 2007} * 100$ and averaged for the three years of the period of the study. The findings for all 176 were included in the analysis, despite some outlier cases as it was believed that an examination of their performance was important to determine how the characteristics of the female owner-managers and their firms and the strategy adopted impact on firm growth.

As previously alluded to in Section 4.8, the use of various statistical tests depend on the normality of the data, thus, this was the first step taken before the statistical tests could be applied to the findings. Given the nature of the data collected there was a belief that the data would not be normal, evident by the skewed data observed in the histograms relating to turnover and employment growth. The completion of Kolmogorov-Smirnov (KS) tests confirmed this implying that non-parametric tests had to be utilised for abnormally distributed data. This allowed

for the testing of observations to ascertain if a significant difference exists between the independent and dependent variables of this study. As indicated in Table 4.4, a number of tests were conducted, including the Kruskal-Wallis H test (non-parametric version of ANOVA), a one-way analysis of variance for data collected on an ordinal scale or for interval data that are unsuitable for parametric testing. Additionally, the non-parametric version of the “t-test” (Mann Whitney-U Test) was adopted to test the relationship between the variables in this research. The 95 per cent confidence level ($p > 0.05$) was applied in this analysis.

In addition, the data gathered on the respondent firms showed some of the firms had experienced exceptional firm growth in terms of turnover and employment, thus deeming it appropriate to investigate the profile of these high-growth firms to determine if common characteristics were shared among the higher growth firms and, furthermore, to identify any similarities or differences that may exist between the firms. Thus, the sample of 176 firms were further segmented. From the sample, higher growth firms adhering to the threshold measures proposed by the OECD (2008) were selected for further investigation. The higher growth firms were those complying with the following criteria:

“All enterprises with average annualised growth greater than 20% per annum, over a three year period should be considered as high-growth enterprises. Growth can be measured by the number of employees or by turnover (OECD 2008, p.61).

Each of the high-growth firms was investigated to examine how the range of internal determinants influenced firm growth. This dimension of the analysis enhances the overall robustness of the research findings by identifying how specific characteristics of the female owner-managers, their firms and strategic-related activities influence firm growth, bringing to the fore important issues for consideration for profiling high-growth, female-owned firms

4.11 Limitations of the Study

While forming a number of critical contributions to the field of growth in female-owned firms, this research, as with all research studies, is not without its

limitations, which are now addressed. The cross sectional nature of the research design can pose challenges for many researchers, and represents one limitation of this particular research. While cross-sectional data can demonstrate influences and associations between variables among large samples in a pragmatic manner, it cannot prove causality (Smart 2003). For the causation (and other complexities) associated with the phenomenon of firm growth and its non-linearity in female-owned firms to be understood fully, longitudinal research is recommended. Such an approach, however requires many resources (e.g. labour, time, and financial resources). This was neither feasible nor necessarily appropriate in this research, where the research objectives were positioned to discover largely unfamiliar knowledge in the context of female-owned firms.

While the use of instruments based on self-report data, such as in this study, have been used by researchers for many decades, self-report bias, or the problem of social desirability, has been acknowledged as a limitation in this type of research. Survey items may stimulate the respondent's need for social approval, and therefore, prompt responses accordingly. This was of particular concern within the methodological design in this study, given the sensitive nature of reporting growth performance in female-owned firms in terms of turnover and number of employees. In an effort to address this potential problem, this research took the "sensible" approach (Podsakoff and Organ, 1986; Podsakoff *et al* 2003) whereby as much information as possible was provided to the respondent female owner-managers on the purpose and the use of this research, as well as the strictly confidential nature of the research data. Although challenged by methodological limitations, the cross-sectional self-report procedure used in this study was considered the most appropriate for answering the research objectives.

Finally, the findings of this research are based on a sample of female owner-managers operating firms in Ireland that cannot claim to be fully representative of all female owner-managers in Ireland. The size of the sample, while sufficient, cannot be seen as representative of all of female owner-managers. Nonetheless, the data gathered in this research represent a much needed new knowledge on firm

growth in female-owned firms, and can serve as a foundation for further exploration of firm growth in such firms.

4.12 Conclusion

This chapter has outlined how the present research was designed and carried out in order to answer the research objectives posed previously in Chapter One, by proposing a series of hypotheses emerging from the literature review in Chapter Two and Chapter Three. This chapter has revisited the research objectives and has described the research as adopting a positivist approach, chosen because it is the most appropriate paradigm with which to address the research objectives. The chapter provided particular detail on the quantitative methods employed in the study, the ways in which the variables were assessed and measured, and the nature of the analyses carried out on the data collected. Finally, the validity and reliability of the methodology employed in the present research were acknowledged, along with the limitations. The empirical findings revealed as a result of the research carried out are now presented in the subsequent chapters- Chapters Five and Six.

Chapter Five: Research Findings -The Influence of Female Owner- Manager and Firm Characteristics, and Strategic-Related Activities on Firm Growth

5.0. Introduction

This chapter presents the empirical findings on how the three sets of independent variables (female owner-manager characteristics, firm characteristics, and strategic-related activities) influence firm growth, across three measures, i.e. turnover, turnover per employee and employment growth. As referred to in Chapter Four, firm growth represents the average percentage change over the three-year period covered in the study (2007-2009). The chapter begins by presenting the findings relating to the measures of firm growth as a precursor to the presentation of more detailed findings on how a range of female owner-manager and firm characteristics, and strategic-related activities influence firm growth. The results of the statistical analysis techniques applied to investigate the differences in firm growth are then presented. The chapter places emphasis on examining the data pertaining to the research hypotheses, investigating whether each hypothesis is supported or rejected as a result of the rigorous data analyses employed.

H₁: Individual characteristics of female owner-managers (age, motivation for start-up, education, prior employment experience) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

H₂: Female-owned firm characteristics (industry sector, firm age & size, nature of ownership) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

H₃: Strategic-related activities (growth objectives, strategic planning, and type of strategy) significantly influence firm growth (as measured by turnover, turnover per employee and employment).

The chapter concludes with a summary and discussion of the findings, setting the stage for the implications of these findings in Chapter Seven.

5.1 Measures of Firm Growth

The measures of firm growth utilised in this study included turnover, turnover per employee and employment growth, of which data on each have been collected from all of the 176 female owner-managers covering a three-year period. A brief overview of the findings for each of the dependent variables is presented in the following subsections.

5.1.1 Turnover

Turnover growth data were examined to include the minimum, maximum and mean levels of turnover growth and secondly how they varied for each year (as depicted in Table 5.1).

Table 5.1: Turnover Levels 2007-2009 (n=176)

| Turnover (€) | Minimum | Maximum | Mean | Median |
|--------------|---------|-----------|---------|---------|
| 2007 | 12,500 | 4,700,000 | 515,253 | 120,000 |
| 2008 | 11,000 | 4,750,000 | 541,866 | 100,000 |
| 2009 | 10,500 | 6,080,511 | 304,035 | 63,532 |

The minimum turnover achieved by the respondent firms was €10,500 while at the other end of the spectrum the maximum was over €6m. The mean turnover is depicted to highlight the difference between the minimum and maximum levels of turnover within the firms for each year of this study. The mean levels of turnover decreased over the three years, ranging from €515,253 in 2007 to €304,035 in 2009, while the average mean turnover over the three-year period was €453,718. Evidently, high levels of turnover were achieved by some of the female-owned firms in this study, deeming it appropriate to investigate in further detail.

The average growth rate in turnover over the period of the research was 12.94% for the sample of respondents in this study, with this percentage of growth in the rate of turnover including a number of high-growth firms. Furthermore, observation of the data for the overall change in the levels of turnover for the period of the study illustrates skewed data with the completion of the

Kolmogorov-Smirnov (KS) test confirming that the data were not normally distributed ($p=.000$), implying that non-parametric tests had to be applied to test the hypotheses.

5.1.2 Number of Employees

The number of employees of the respondent firms was also examined over a three-year period depicted in Table 5.2.

Table 5.2: Number of Employees 2007-2009 (n=176)

| No. of Employees | Minimum | Maximum | Mean |
|-------------------------|----------------|----------------|-------------|
| 2007 | 1 | 650 | 10.60 |
| 2008 | 1 | 610 | 10.67 |
| 2009 | 1 | 600 | 10.69 |

In 2007, the total of employees in all of the firms amounted to 1,867 employees (including the owner/managers) increasing to 1,883 in 2009. The average level of employment growth was 22.12% for the period of the study, with variations highlighting that some firms emerged as high-growth firms due to the employment growth achieved. The minimum number of employees for each year over the three-year period was 1, accounting for a large number of firms where the owner-manager was the sole employee. Furthermore, the maximum number of 650 highlights the disparity that exists between the minimum and maximum number of employees in the firms. The mean number of employees over the three-year period ranged between 10 and 11 depicting the majority as micro-sized firms. Additionally, observation of the data for the overall change in employment numbers illustrated skewed data, with the completion of Kolmogorov-Smirnov (KS) test also confirming that the data were not normally distributed ($p=.000$), again implying that non-parametric statistical tests should be applied when testing the hypotheses.

5.1.3 Turnover per employee

The highest level of turnover per employee was recorded for 2009 (€66,714) showing an increase from the figure in 2007 of €62,047, indicating that labour productivity in these firms increased over the three year period. The average change in turnover per employee for the sample of firms was 5.53%. Observation

of the data for the overall change in turnover per employee for the period of the study also illustrated skewed data, with the completion of Kolmogorov-Smirnov (KS) test confirming once again that the data were not normally distributed ($p=.000$).

The growth rates for the three dependent variables are summarised in Table 5.3 below:

Table 5.3: Average Turnover, Employment, Turnover per Employee Growth (2007-2009) (n=176)

| Growth Measure | Average Growth (%) |
|--|---------------------------|
| Average growth rate in Turnover | 12.94 |
| Average growth rate in Employment | 22.12 |
| Average growth rate in Turnover per employee | 5.53 |

In summary, the data collected relating to the overall change in turnover, number of employees and turnover per employee show a p value of .000, indicating that the data are not normally distributed in the case of all the dependent variables (i.e. measures of performances). As previously mentioned, these findings confirm that non-parametric tests are appropriate and will allow for the testing of observations in groups to ascertain if a significant difference exists between the independent and dependent variables in this study. Preceding this analysis, the relationship between the three dependent variables is explored.

5.2 The relationship between the dependent variables

Due to the complicated nature of firm growth which can occur in a number of measures, an examination of the relationship between the dependent variables provides a more integrated perspective of the dimensions of firm growth. To establish if a relationship existed between the three variables a series of scatter plots with a line of best fit was completed. This allowed for a visual inspection of the direction of the relationship between the measures examined. The first scatter plot examines the relationship between turnover and employment growth.

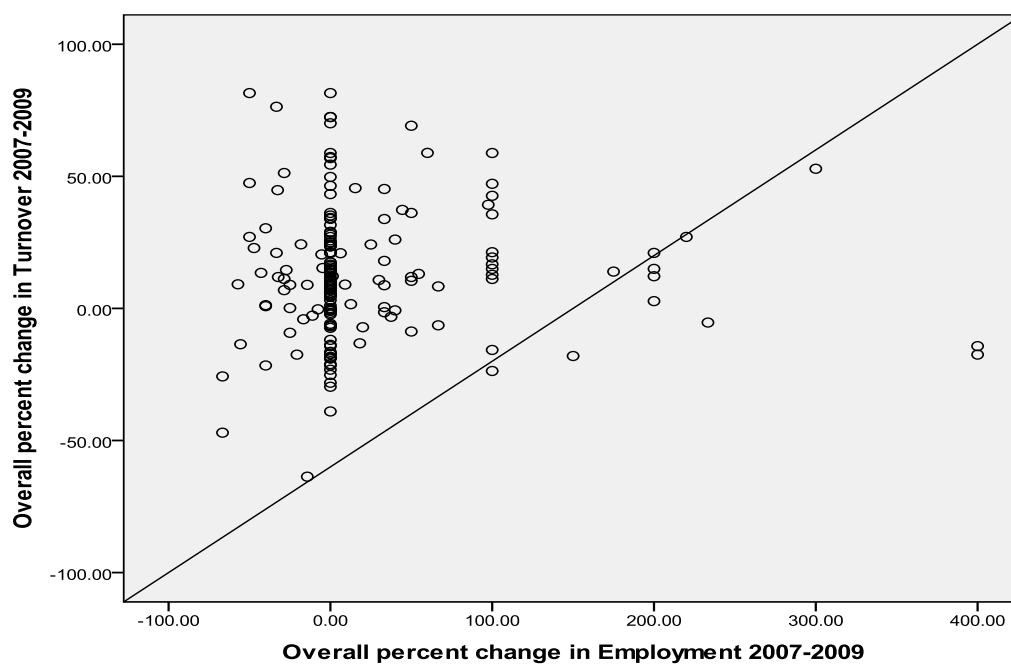


Figure 5.1: Relationship between overall change in Turnover and Employment Growth (2007-2009)

A Spearman's rho correlation was run between the two variables to identify the degree to which the variables were related producing a result of rho. 303. This value indicates that a statistically significant positive correlation exists between the overall change in turnover and overall change in employment numbers. Therefore, as turnover in these firms increases by 10%, employment numbers grow by 3%, indicating a positive relationship.

Secondly the relationship between employment growth and turnover per employee was explored. Again, a Spearman's rho correlation was run between the two variables to identify the degree to which the variables were related.

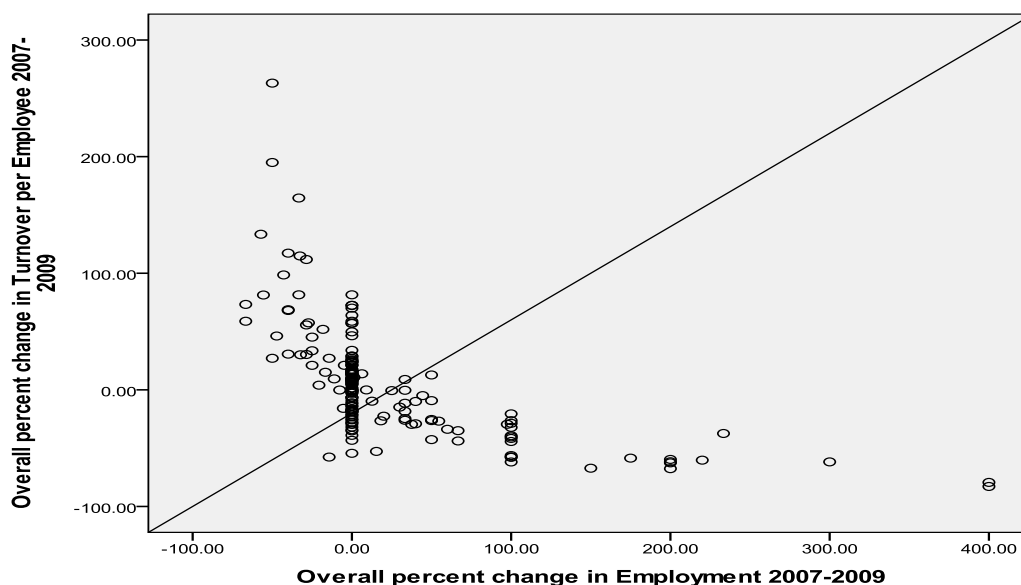


Figure 5.2: Relationship between overall change in Turnover per employee and Employment Growth (2007-2009)

This produced a result of rho. -752 indicating a negative correlation between the overall change in turnover per employee and overall change in employment numbers. A p value of .000 emerged from the test indicating that the result is significant. Furthermore, this value indicates that a 10% increase in turnover per employee in these firms resulted in a 7.52% decrease in employment numbers, reflecting very clearly the economic conditions present during the period of the study.

Finally, an investigation of the relationship between turnover growth and turnover per employee found a moderate positive relationship between turnover per employee growth and turnover growth, again depicting a significant result of $p=.000$. Figure 5.3 depicts the scatter plot.

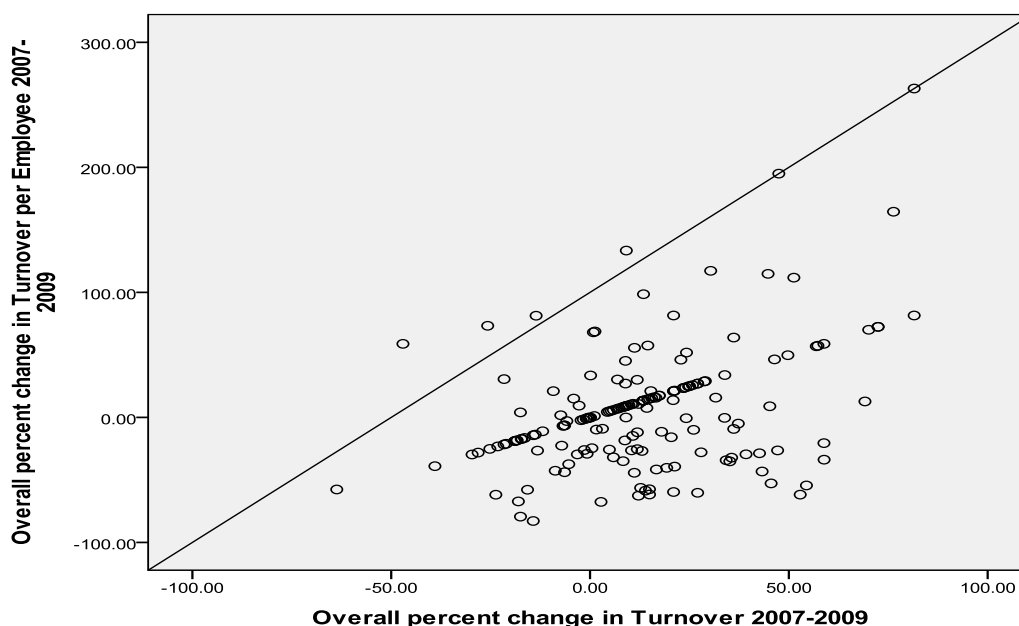


Figure 5.3: Relationship between overall change in Turnover per employee and Turnover Growth (2007-2009)

A Spearman's rho correlation was conducted between the two variables to identify the degree to which the variables were related producing a result of rho.330. This value evidences that a statistically significant positive correlation exists between the overall change in turnover per employee and overall change in turnover. Therefore a 10% increase in turnover per employee results in a 3.3% increase in turnover, indicating that as labour productivity increases, turnover in the firm does not necessarily increase at the same rate.

Further analysis will establish how these relationships are influenced by specific characteristics of female owner-managers, their firms' and strategic-related activities. To date, the analysis has illustrated that the use of multiple measures of growth provide a means of examining of how firm growth can occur in a number of aspects of the firm, but not necessarily concurrently. While growth was experienced in the firms for three of the dependent variables, it is expected that their level will vary by a range of characteristics and strategic-related activities. This information forms the basis of the statistical analysis on how firm growth achieved in the three growth measures are similar or differ in terms of the independent variables.

5.3 Characteristics of Female Owner-Managers

The primary characteristics of female owner-managers investigated are expressed in the hypotheses outlined in Table 5.4:

Table 5.4: Hypothesis One & Related Sub-hypotheses

| Characteristics of Female Owner-Managers | Influence on Firm growth |
|--|---|
| Age | H _{1.1} : Younger female owner-managers will achieve higher firm growth. |
| Motivation for Business Start-Up | H _{1.2} : Female owner-managers motivated by “pull” factors for business start-up will achieve higher firm growth. |
| Education | H _{1.3} : Female owner-managers having completed third level education will achieve higher firm growth. H _{1.3.1} : Female owner-managers having pursued technical disciplines will achieve higher firm growth. |
| Previous Work Experience | H _{1.4} : Female owner-managers having gained prior employment experience in the industry sector in which they operate will achieve higher firm growth. H _{1.4.1} : Female owner-managers with managerial experience will achieve higher firm growth. H _{1.4.2} : Female owner-managers with experience in starting other firms will achieve higher firm growth. |

5.3.1 Age of Female Owner-Managers

A number of non-gender studies have found a significantly negative relationship between the age of the owner-manager and firm growth and attribute this relationship to the owner-manager’s initial goal for growth or to a higher energy level and willingness of younger owner-managers to assume business risks when compared to older owner-managers (Orser *et al* 2000; Welter 2001; Barkham *et al* 2004; Bullock *et al* 2004; Storey 2011). Consequently, as females tend to start firms at an older age (Hart and Levie 2010; Fitzsimon and O’Gorman 2012) they will exhibit firm growth at an older age, a fact which requires attention when comparing the age of female owner-managers and firm growth relative to the findings in non-gender specific studies.

Some studies (Austere and Autio 2000; Barkham *et al* 2004; Storey 2011) support the idea that the age of the owner-manager influences firm growth whereby those owned by younger individuals display higher firm growth. However, as proposed in Chapter Three is it likely that female owner-managers will be older in

achieving firm growth due to the fact that they start firms at an older age – thus, the age of the female owner-manager is investigated to address whether the general literature suggesting that younger owner-managers achieve higher firm growth is applicable in the female context. Given the predominant focus on male firms in the general mainstream growth literature studies, a direct comparison is difficult. That said it is a good benchmark to work from seeking to identify if younger females in the population are more likely to achieve higher firm growth.

In this study, the age of female owner-managers represents their age in 2009, ranging from 18 to 65 years and over. Table 5.5 sets out the data in relation to the age profile of respondents.

Table 5.5: Age of Female Owner-Managers in 2009 (n=176)

| Age | Frequency | Percentage |
|-------|-----------|------------|
| 18-34 | 45 | 25.6 |
| 35-44 | 77 | 43.8 |
| 45-54 | 44 | 25.0 |
| 55 + | 10 | 5.7 |
| Total | 176 | 100% |

The sample was dominated by female owner-managers aged between 35 and 44 years (43.8%) with an additional 25.6% represented by those aged 18-34 years. A further 25% were aged 45-54, while 5.7% were aged 55-65 and over.

The age profile of female owner-managers can be further contextualised by examining their distribution across a number of firm characteristics. Some 50% operating in the ICT sector were aged between 35-44, followed by 29.2% aged between 45-54 and 20.8% aged 18-34. No female owner-managers operating in this sector were over 55. Similar to the ICT sector, female owner-managers aged 35-44 represented the highest percentage operating in the manufacturing sector (51.9%), while 40% aged 35-44 and 45-54 operated in the food and drink sector, the sector least represented by young female owner-managers aged 18-34 (10%). The professional services sector represented all age categories of female owner-managers, with the highest percentage aged 35-44 (47%). The youngest female owner-managers accounted for 24.2% operating in this sector. Similar results

emerged for the education and training sector where again female owner-managers aged 35-44 represented the highest percentage (43.8%). The age profile of those operating in the health sector was divided more evenly across the various age categories; with 35% aged 18-34 and 30% aged 45-54. A further 20% were aged 35-44 while the remaining 15% were aged 55 to 65 and over. Lastly, female owner-managers aged 18-34 and 35-44 accounted for 38.5% of those operating in the retail sector while 15.4% were aged 45-54. The remaining 7.7% were aged 55 to 65 and over.

With regard to firm size, the highest percentage operating micro-sized firms (0-10 employees) were 44 years old or less, with 41.9% aged 35-44 and 27.7% aged 18-34. This compared to 66.7% operating small firms (11-50 employees), with 54.2% operated by female owner-managers aged between 35-44 and 12.5% aged 18-34. Some 70% operating medium-large sized firms were aged 35-44, with 25% being the youngest female owner-managers (18-34). The vast majority (78.1%) of firms in operation for 3-5 years were operated by those under 44 years, with the youngest female owner-managers representing 35.2%. This compared to 66.7% in operation between 6-10 years (15.4% were aged 18-34; 51.3% aged 35-44) and 43.8% in operation for over 10 years. As expected the lowest percentage of the youngest female owner-managers were operating firms for over 10 years, accounting for a minority of 6.2%. Given this profile showing that the youngest respondents held higher levels of education and operated in sectors such as ICT, food and drink, it is interesting to determine if such were influential on firm growth, an issue that will be explored in further detail in this chapter.

Depicted in Table 5.6, turnover growth was highest and above average of all the firms (12.94%) across two of the age categories, 35-44 (18.31%) and 18-34 (14.42%). In stark contrast, the oldest age category (55 +) experienced negative turnover growth of -10.47%. Turnover per employee growth was also highest for those aged 35-44 (9.52%) followed by those aged 45-54 (8.22%), both attaining above the average rate of turnover per employee growth (5.53%).

Table 5.6: Firm Growth and Age of Female Owner-Managers (n=176)

| Firm Growth (Average % change over 3 yrs) | 18-34 | 35-44 | 45-54 | 55 + |
|---|--------------|--------------|--------------|-------------|
| Turnover Growth (%) | 14.42 | 18.31 | 7.35 | -10.47 |
| Turnover per Employee Growth (%) | -2.56 | 9.52 | 8.22 | -0.61 |
| Employment Growth (%) | 53.00 | 15.36 | 8.83 | -6.22 |

Note: A significant difference was evident between the age categories for turnover growth ($p=.000$) and employment growth ($p=.045$). Results for turnover per employee growth did not provide a significant difference ($p=.274$)

Turnover per employee growth was lowest for the youngest (18-34) and oldest (55+) female owner-managers showing a decrease in turnover per employee of over -2.5% and -0.61 respectively. While the youngest (18-34) experienced a decrease in labour productivity, this category experienced the highest increase in employment growth at 53%, significantly higher than the average of all firms in this study (22.12%), with employment growth declining with an increase in the age of female owner-managers. The lowest employment growth was experienced by those aged over 55 (-6.22%). A statistically significant difference was evident between the age of female owner-managers for turnover ($p=.000$) and employment growth ($p=.045$). No statistically significant result was evident between age and turnover per employee growth ($p=.274$).

A Bonferroni test (Table 5.7) highlighted significant differences between the age categories and turnover and employment growth, with a noticeable decline in turnover and employment growth with an increase in the age of female-owner-managers.

Table 5.7: Turnover and Employment Growth and Age of Female Owner-Managers

| Age Categories | Turnover Growth | Employment Growth |
|-----------------------|------------------------|--------------------------|
| 18-34 and 35-44 | $p=.480$ | $p=.136$ |
| 18-34 and 45-54 | $p=.053$ | $p=.011^*$ |
| 18-34 and 55 + | $p=.001^*$ | $p=.042^*$ |
| 35-44 and 45-54 | $p=.003^*$ | $p=.168$ |
| 35-44 and 55+ | $p=.001^*$ | $p=.199$ |
| 45-54 and 55+ | $p=.015^*$ | $p=.739$ |

Note: * denotes a statistically significant difference

Specifically:

- Female owner-managers aged 18-34 achieve higher turnover growth than those aged 55+ ($p=.001$). This age category also achieved higher employment growth than those aged 45-54 ($p=.011$) and 55+ ($p=.042$).
- Female owner-managers aged 35-44 achieve higher turnover growth ($p=.001$) than those aged 45-54 ($p=.003$) and 55+ ($p=.001$).
- Female owner-managers aged 45-54 achieve higher levels of turnover growth than those aged 55+ ($p=.015$).

In this study, younger female owner-managers achieved higher firm growth across two measures, turnover and employment growth, supporting *H 1.1: Younger female owner-managers will achieve higher firm growth (as measured by turnover and employment)*, aligning with previous non-gender specific studies indicating that age has a positive influence on firm growth (Storey 1994; Mata 1996; Autere and Autio 2000; Barkham *et al* 2004, Bosma *et al* 2004; Persson 2004; Storey and Greene 2010; Storey 2011). The findings demonstrate that the mainstream growth literature regarding age as a determinant of firm growth can be applied specifically in the context of female owner-managers, with findings showing little or no deviation from the mainstream literature. The positive firm growth associated with female owner-managers aged between 18-34 and 35-44 coupled with the expectation that an increased number of younger females will start firms in the future in Ireland (Fitzsimons and O’Gorman 2011, 2012) highlights the need for policy to target younger female owner-managers, understanding the growth potential of firms they establish.

5.3.2 Motivation for Business Start-Up

A central focus of previous literature on female owner-managers is their motivation to develop their own firm with few differences emerging between male and female owner-managers (McKay 2001; Brush *et al* 2004, Dobbs and Hamilton 2007; Doern 2009). Indeed “pull” and “push” factors, quite similar between male and female owner-mangers are the most common way of explaining the varying and diverse range of motivations for starting a business (Brush 1990; Buttner and

Moore 1997; Orhan and Scott 2001) and, thus, are deemed important to examine as part of this study to investigate how such factors influence firm growth.

In this study, a significant majority of female owner-managers (75.1%) indicated “pull” factors had motivated them to start their firms, whilst the remaining 24.9% indicated it had been “push” factors (n=169). Female owner-managers motivated by “pull” factors achieved the highest, and above average of all the firms in the study, for all three measures of firm growth—turnover (14.29%), turnover per employee (9.13%), and employment (28.11%). However, a Mann-Whitney U test revealed no statistically significant differences on the influence of either push or pull factors as highlighted in Table 5.8, not supporting *H_{1.2}: Female owner-managers motivated by “pull” factors for business start-up will achieve higher firm growth (as measured by turnover, turnover per employee and employment)*.

Table 5.8: Firm Growth and Motivations for Business Start-up (n=169)

| Firm Growth (Average % change over 3 yrs) | Pull Factors | Push Factors |
|---|---------------------|---------------------|
| Turnover Growth (%) | 14.29 | 12.71 |
| Turnover per Employee Growth (%) | 9.13 | 2.74 |
| Employment Growth (%) | 28.11 | 22.55 |

Note: No significant differences were evident between pull and push factors and turnover growth (p=.572), turnover per employee growth (p=.295) and employment growth (p=.726).

These findings echo some studies which have questioned the appropriateness of investigating motivation using push and pull factors for their influence on firm growth (Liao *et al* 2003; Wiklund *et al* 2003; Dobbs and Hamilton 2007), given that it is questionable whether female owner-managers are able to identify and isolate their motivations for start-up, given that they have established and grown their firms in subsequent years and have been exposed to other intervening factors which in some way prompted them to start their firms. To establish the relationship between motivations and firm growth in female-owned firms, it may be of merit to conduct a longitudinal study, identifying motivations for business start-up from the outset, revisiting them over the various stages of firm development, taking account of intervening factors which may influence firm growth.

5.3.3 Educational Profile of Female Owner-Managers

While studies on the relationship between the education of owner-managers and firm growth (Cooper *et al* 1994; Storey 1994; Bruderl and Preisendorfer 1998; Honig 1998; Roper 1998; Bosma *et al* 2004; Dobbs and Hamilton 2007), show conflicting results, there is a trend where the possession of higher education is viewed to influence higher firm growth. In Ireland, it is reported “*the number of women with third level qualifications in the most entrepreneurial age groups is increasing very rapidly for women and is now well ahead of men in the same age group*” (Forfás 2007, p.21). Coupled with this, in the younger age group (18-24) there is a significantly higher percentage of females who are students than there are men (41% compared to 30%), suggesting there will be a larger pool of talented females within the population in future years that may have the ability and the entrepreneurial spirit to become entrepreneurs (Forfás 2007). For that reason it is useful to identify if more highly educated female owner-managers achieve higher firm growth. Education contains a number of dimensions extending beyond the level of education which is typically the barometer adopted in research. In addition to level, the nature of the educational award is useful to investigate to determine the relationship between it and firm growth.

Regarding female owner-managers, it is valuable to investigate if the educational disciplines pursued are related to the industry sectors in which they operate since it is frequently reported that females pursue educational degrees in liberal arts, social sciences and arts and humanities as opposed to engineering or technical subjects- the latter which are sectors where higher growth is frequently reported. It was expected that higher firm growth would be associated with those who had attained a third level qualification. Table 5.9 illustrates the data in relation to the educational qualifications of the female owner-managers in this study.

Table 5.9: Educational Levels of Respondents (n=176)

| Educational Level | Frequency | Percent |
|--------------------------|------------------|----------------|
| Secondary level | 22 | 12.5 |
| Third level | 95 | 54.0 |
| Postgraduate level | 59 | 33.5 |
| Total | 176 | 100.0 |

The vast majority (87.5%) had completed third level education, with 54% achieving a third level qualification and a further 33.5% a postgraduate level award. The remaining 12.5% completed secondary level and were “older” female owner-managers aged 55+, followed by those aged 45-54. The highest level of third level education was possessed by the youngest female owner-managers (18-34) whilst the highest percentage having completed postgraduate education were those aged 35-44 (40.3%).

The highest percentage of the most highly educated female owner-managers were operating in the ICT sector, accounting for 95.9%, followed very closely by 93.9% and 88.9% operating in the professional services and manufacturing sector respectively. The professional services sector also represented the highest percentage having completed postgraduate education, followed by the ICT sector. A further 81.3% and 80% operating in the education and training and the food and drink sector had completed postgraduate education. The lowest percentage having completed third or postgraduate level of education operated in the retail sector (69.2%). The youngest firms, i.e. those in operation for 3-5 years represented the highest percentage (91.4%) who had completed either third (56.2%) and postgraduate level (35.2%) education; however, it should be noted that only a slight difference existed between these firms and those in operation for 6-10 (87.2%) and over 10 years (75%).

The relationship between firm growth and the educational level of female owner-managers was examined (as depicted in Table 5.10), with findings clearly indicating that those having completed third or postgraduate educational levels achieved the highest firm growth in their firms across all measures.

Table 5.10: Firm Growth and Educational Levels of Female Owner-Managers

| Firm Growth <i>(Average % change over 3 yrs)</i> | Second Level | Third Level | Postgraduate Level |
|--|---------------------|--------------------|---------------------------|
| Turnover Growth (%) | -6.42 | 15.72 | 15.69 |
| Turnover per Employee Growth (%) | -16.19 | 11.49 | 4.03 |
| Employment Growth (%) | 19.36 | 21.81 | 23.66 |

Note: Statistically significant differences emerged between the educational levels of female owner-managers and turnover growth ($p=.000$) and turnover per employee growth ($p=.021$). No statistically significant difference was evident for employment growth ($p=.929$).

Turnover growth was similar for female owner-managers having completed third (15.72%) and postgraduate education (15.69%), both above the average turnover growth (12.94%), in stark contrast to those having completed second level (-6.42%). Highest turnover per employee growth was experienced by female owner-managers having completed third level education (11.49%) and while those with postgraduate education achieved positive levels of turnover per employee growth of 4.03%, it was below the average of the overall study. Like turnover growth, those with second level education experienced a significant decrease in turnover per employee of -16.19%. There was only slight variations in employment growth across the educational levels, with the highest achieved by those with postgraduate education (23.66%), followed closely by those with third level education (21.81%). Female owner-managers, having completed second level education experienced employment growth of 19.26%- slightly lower than the highest of 23.66%. A Kruskal-Wallis Test (Table 5.10) was conducted to determine if there were significant differences between the education level of female owner-managers and three measures of firm growth. Statistically significant differences emerged between educational levels and turnover growth ($p=.000$) and turnover per employee growth ($p=.021$). No statistically significant differences emerged between educational levels and employment growth ($p=.929$).

A Bonferroni test (Table 5.11) highlighted significant differences between educational levels and turnover and turnover per employee growth.

Table 5.11: Turnover and Turnover per Employee Growth and Education of Female Owner-Managers

| Level of Education | Turnover Growth | Turnover per Employee Growth |
|-------------------------|-----------------|------------------------------|
| Second and Third | p=.000* | p=.022* |
| Second and Postgraduate | p=.000* | p=.005* |
| Third and Postgraduate | p=.863 | p=.873 |

Note: * denotes a statistically significant difference

In particular:

- Female owner-managers with third and postgraduate levels of education achieve higher turnover and turnover per employee growth than those with second level education.

No statistically significant differences emerged between those who had completed third or postgraduate level qualifications in turnover (p=.863) or turnover per employee growth (p=.873), thus the disparity in firm growth only exists between second and third, inclusive of postgraduate level education. The findings of this study accept *H_{1.3}: Female owner-managers having completed third level education will achieve higher firm growth (as measured by turnover and turnover per employee)*. Furthermore, the findings support many mainstream studies which positively link the educational level of owner-managers and firm growth (Storey 1994; Barkham *et al* 1996; O' Gorman 2001; Wiklund and Shepherd 2003; Brush *et al* 2004; Menzies *et al* 2004; Storey and Greene 2010) but also indicate that, moreover this is the case in the female context. This finding sends out a positive message that more highly educated female owner-managers should be supported. This finding is also positive given that in Ireland higher educational attainment (in particular postgraduate level) is positively linked with entrepreneurial activity and coupled with the increase in the population of more highly educated females suggests a positive outlook for firm growth.

Female owner-managers' educational disciplines were also examined.

Table 5.12: Female Owner-Managers Educational Disciplines (n=154)

| Educational Disciplines | Frequency | Percentage |
|----------------------------------|-----------|------------|
| Business | 61 | 39.6 |
| Arts, Humanities, Social Science | 43 | 27.9 |
| Education | 11 | 7.1 |
| Science & Engineering | 39 | 25.3 |
| Total | 154 | 100 |

The sample was dominated by a majority (39.6%) having completed a business discipline, followed by 27.9% having completed arts, humanities and social science. A further 25.3% had pursued a science and engineering discipline, accounting for just over a quarter of the sample in this study. The remaining 7.1% had completed an education discipline. The highest percentage having completed a business discipline operated in both feminised and non-feminised industry sectors, including retail (55.6%), health (46.7%), professional services (43.5%), ICT (39.1%) and manufacturing (37.5%). For those having completed arts, humanities and social science, the highest percentage operated in professional services (35.5%). Those having completed an educational discipline operated in education and training (46.2%) while the largest cohort having completed a science and engineering discipline operated in the food and drink sector (75%), both sectors clearly reflecting the educational disciplines pursued.

Positive turnover growth was experienced by female owner-managers across all educational disciplines, with those having completed science and engineering and business achieving the highest and above average turnover growth, at 25.44% and 18.18% respectively. This too was the case for turnover per employee growth with female owner-managers who had completed science and engineering and business disciplines achieving the highest levels of 24.54% and 15.48%, both levels again above the average (5.53%). In stark contrast, those having completed arts, humanities and social sciences and education achieved turnover per employee growth of -11.29% and -7.82%, significantly lower than the average. A possible explanation for this is the type of firms operated by these female owner-managers i.e. provision of education and training services, where turnover per employee is difficult to achieve due to the dependency on human capital. Employment growth was highest amongst those who had completed qualifications in education (32.58%) and arts, humanities and social sciences (36.65%), while the lowest was experienced by those having completed science and engineering (20.79%) and business (11.85%), both achieving below the average employment growth rate of all firms in the study. A Kruskal-Wallis test (Table 5.13) revealed significant differences between educational disciplines and turnover ($p=0.001$) and turnover

per employee growth ($p=.004$). No significant differences emerged for turnover per employee growth ($p=.109$).

Table 5.13: Firm Growth and Educational Disciplines

| Firm Growth (Average % change over 3 yrs) | Arts, Humanities & Social Science | Business | Education | Science & Engineering |
|---|--|-----------------|------------------|--|
| Turnover Growth (%) | 5.13 | 18.18 | 8.85 | 25.44 |
| Turnover per Employee Growth (%) | -11.29 | 15.48 | -7.82 | 24.54 |
| Employment Growth (%) | 36.65 | 11.85 | 32.58 | 20.79 |

Note: A significant difference emerged between educational disciplines and turnover growth ($p=.001$) and turnover per employee growth ($p=.004$). No significant difference emerged for employment growth ($p=.109$).

Additional post-hoc Bonferroni tests (depicted in Table 5.14) revealed the following statistically significant differences:

- Female owner-managers having completed business and science and engineering disciplines achieve higher levels of turnover and turnover per employee growth when compared to arts, humanities and social sciences.

Table 5.14: Turnover, Turnover per Employee Growth and Educational Discipline

| Educational Discipline | Turnover | Turnover per Employee |
|---|-----------------|------------------------------|
| Business/Arts, Humanities, Social Sciences | $p=.001^*$ | $p=.002^*$ |
| Business/Education | $p=.186$ | $p=.095$ |
| Business/Science & Engineering | $p=.379$ | $p=.788$ |
| Arts, Humanities, Social Sciences/Education | $p=.446$ | $p=.614$ |
| Arts, Humanities, Social Sciences/Science & Engineering | $p=.000^*$ | $p=.004^*$ |
| Education/Science & Engineering | $p=.068$ | $p=.085$ |

Note: * denotes a statistically significant difference

These findings support *H_{1.3.1}: Female owner-managers having pursued technical disciplines will achieve higher firm growth (as measured by turnover and turnover per employee)*, but more specifically highlight business and science and engineering as educational disciplines that point to higher firm growth. Moreover the findings support previous studies which have alluded to the same patterns (Brush *et al* 2004; Aylward 2007; Zafar 2009; Coleman and Robb 2012). Such studies suggest that specific disciplines such as science and engineering provide owner-managers with an advantage if they start a firm related to their area of expertise and in science and engineering industries, perceived as high-tech, high-growth sectors. This is an issue pertinent to female owner-managers given

the low percentages of females pursuing technical disciplines in science and engineering (Coleman and Robb 2012). The pursuit of science and engineering disciplines is an issue that needs to be encouraged amongst females at the early stages of their education. The high-growth sectors are reported as those resulting in higher growth and, thus, females should be encouraged to pursue educational disciplines related to such sectors. Furthermore, together with the fact that younger females are starting new firms in Ireland (Fitzsimons and O’Gorman 2011; 2012) entrepreneurship education should be used as a mechanism for imparting knowledge amongst all programmes extending beyond business disciplines, and at postgraduate levels to enhance the overall human capital dimension of females who start new firms.

5.3.4 Prior Employment Experience

Previous studies on firm growth suggest that various dimensions of prior employment experience has a positive impact (Cooper *et al* 1994; Carter and Allen 1997; Perren 2000; Dobbs and Hamilton 2007; O’ Gorman and Cunningham 2007; Fadahunsi 2012). In particular, having prior experience in the industry sector where female owner-managers start their firms, having held managerial positions and having gained experience in starting other firms. This study investigates how such dimensions influence firm growth for female owner-managers, given they start firms at an older age (Fitzsimons and O’Gorman 2012) and are frequently reported to occupy fewer managerial positions (Carter and Shaw 2006; Fairlie and Robb 2009; Minniti and Naude 2010). Table 5.15 illustrates the findings relating to the prior employment experience of the female owner-managers in this study.

Table 5.15: Female Owner-Managers’ Previous Work Experience (n=176)

| Previous Work Experience | Response | Frequency | Percentage |
|----------------------------------|-----------------|------------------|-------------------|
| Same sector experience | Yes | 108 | 61.4 |
| | No | 68 | 38.6 |
| Managerial Position | Yes | 111 | 63.1 |
| | No | 65 | 36.9 |
| Involvement in Business Start-up | Yes | 65 | 36.9 |
| | No | 111 | 63.1 |

The majority (61.4%) had previously worked in the sector in which they started their firms, with 63.1% having held managerial positions. Some 36.9% had experience in starting other firms apart from their current firm. The highest percentage having experience in the sector operated in education and training (75%), professional services (72.7%) and ICT (70.8%) sectors. Retail emerged as the sector where female owner-managers had gained the least experience, accounting for 15.4%.

Turnover (16.25%) and turnover per employee (10.89%) growth was highest for female owner-managers with experience in the sector, with employment growth being higher for those without experience in the sector (27.25%) in comparison to 13.99% who had experience.

Table 5.16: Firm Growth and Same Sector Work Experience (n=176)

| Growth Achieved (Average % change over 3 yrs) | Sector experience | No Sector Experience |
|---|--------------------------|-----------------------------|
| Turnover Growth (%) | 16.25 | 10.85 |
| Turnover per Employee Growth (%) | 10.89 | 2.15 |
| Employment Growth (%) | 13.99 | 27.25 |

Note: A significant difference was evident between same sector experience and turnover growth ($p=.037$). No significant differences were found between same sector experience and turnover per employee growth ($p=.262$) and employment growth ($p=.141$)

A Mann-Whitney U test (Table 5.16) confirmed a statistically significant difference in one measure of growth, namely turnover ($p=.037$), accepting $H_{1.4}$: *Female owner-managers having gained prior employment experience in the industry sector in which they operate will achieve higher firm growth (as measured by turnover)*, aligning with previous studies (Storey 1994; Carter *et al* 1997; Brush *et al* 2004; Carter and Bennett 2006; O’Gorman and Cunningham 2007; Dobbs and Hamilton 2007; Fadahunsi 2012) that having gained sector experience results in higher firm growth. Clearly, higher growth was achieved by female owner-managers who had been exposed to and worked in the sector in which they decided to start their firm.

Managerial experience has been well documented in the literature as having a positive impact on firm growth (Storey 2004; Storey 2011) and, thus, was deemed

appropriate to consider in the female context. Given that previous studies report female owner-managers are motivated to start their own business due to the lack of career progression or the effects of the “glass ceiling” (Marlow 1997; Sarri and Trihoupolou 2005; Martin 2008) and consequently may not have occupied managerial positions in their previous employment (Cross and Linehan 2006), it was considered important to investigate the influence of this factor on firm growth.

Two-thirds of female owner-managers held managerial positions with those operating in the ICT (75%), manufacturing (70.4%) and food and drink (70%) sectors evidencing a higher percentage of management positions in comparison to those operating in retail (53.8%) and education and training (50%). Female owner-managers holding third (68.4%) or postgraduate (59.3%) education occupied more managerial positions in previous employment when compared to second level education (50%), with those aged 35-44 holding most managerial positions in their previous employment. This further reinforces the importance of education as a solid foundation for career progression.

Female owner-managers with managerial experience achieved higher firm growth across all measures, achieving above average firm growth of all the firms in the study- turnover growth (20.02%), turnover per employee (11.96%) and employment growth (25.23%), represented in Table 5.17. The completion of a Mann-Whitney U test confirmed statistically significant differences between managerial experience and turnover ($p=.000$) and turnover per employee growth ($p=.045$), supporting ***H_{1.4.1}: Female owner-managers with managerial experience will achieve higher firm growth (as measured by turnover and turnover per employee)***. No statistically significant differences emerged between managerial experience and employment growth ($p=.677$).

Table 5.17: Firm Growth and Managerial Experience Gained (n=176)

| Firm Growth (Average % change over 3 yrs) | Managerial Experience | No managerial experience |
|---|------------------------------|---------------------------------|
| Turnover Growth (%) | 20.02 | 0.85 |
| Turnover per Employee Growth (%) | 11.96 | -5.44 |
| Employment Growth (%) | 25.23 | 16.82 |

Note: Significant differences were evident between managerial experience and turnover growth ($p=.000$) and turnover per employee growth ($p=.045$). No statistically significant difference emerged for employment growth ($p=.677$).

Managerial experience has been well documented in the mainstream literature as having a positive influence on firm growth (Storey 1994; Dobbs and Hamilton 2007; O’Gorman 2007; Storey 2011); however other studies report that females occupy fewer managerial positions (Tai and Simms 2005; Cross and Linehan, 2006). This study showed a higher percentage of females with managerial experience in comparison to those who had not- a positive finding in terms of the gender divide so frequently reported, and consequently having a positive influence on firm growth, aligning with previous studies (Storey 1994; Dobbs and Hamilton 2007; O’ Gorman 2007; Storey 2011). Not only is this finding positive in terms of firm growth but also suggests that females are occupying managerial positions in their employment, perhaps due to the increasing level of higher educational qualifications amongst females.

Another element relating to the prior employment experience of female owner-managers is their experience in starting other firms, an element previously reported as having a positive influence on firm growth (Watkins and Watkins 1984; Fischer *et al* 1993; Storey 1994; Audretsch 2012). In this study, female owner-managers having experience in starting other firms accounted for 36.9%, with a higher percentage of “older” female owner-managers (50%) (i.e. those aged between 45-54 and 55+) possessing this in comparison to younger female owner-managers aged 18-34 (28.9%). The more highly educated female owner-managers had greater experience in starting other firms, with holders of postgraduate qualifications (40.7%) showing the highest level of experience in starting other firms. There was also a higher incidence of experience in starting other firms amongst female owner-mangers who had held managerial positions (39.6%) in previous employment. Turnover and turnover per employee growth

was highest for female owner-managers with experience in starting other firms, albeit only slight differences of 0.35 in turnover and 2.99% in turnover per employee growth respectively. Despite this, employment growth was highest for female owner-managers with no experience in starting other firms (23.61%). The completion of a Mann-Whitney U test did not demonstrate any statistically significant differences in any of the three growth measures, turnover growth ($p=.902$), turnover per employee growth ($p=.304$) and employment growth ($p=.142$) and experience in starting other firms, and in consequence did not support *H_{1.4.2}: Female owner-managers with experience in starting other firms will achieve higher firm growth (as measured by turnover, turnover per employee and employment)*.

Table 5.18: Firm Growth and Experience in Starting Other Firms

| Firm Growth <i>(Average % change over 3 yrs)</i> | Experience in starting other firms | No experience in starting other firms |
|--|---|--|
| Turnover Growth (%) | 13.07 | 12.72 |
| Turnover per Employee Growth (%) | 6.63 | 3.64 |
| Employment Growth (%) | 21.26 | 23.61 |

Note: No significant differences between starting other firms and turnover growth ($p=.902$), turnover per employee growth ($p=.304$) and employment growth ($p=.142$) were evident.

The findings of this study did not support previous studies evidencing a positive relationship between experience in starting other firms and firm growth (Watkins and Watkins 1984; Fischer *et al* 1993; Storey 1994; Storey 2011; Audretsch 2012). Perhaps this is attributable in part to the fact that overall there is a lower level of female owner-managers starting firms. It may also be related to the high educational levels of female owner-managers given the time they spend in education. If this is the case, perhaps this explains their lack of experience in starting other firms. These findings, coupled with the findings relating to age and prior employment experience of female owner-managers bring to the fore issues surrounding the encouragement of entrepreneurial activity and reducing the fear of failure that may exist for females who want to start a firm. The lack of experience in starting other firms should not restrict or discourage business start-up.

To date the analysis on the range of female characteristics show that age, education, sector and managerial experience emerged as the characteristics which have a positive influence on higher firm growth, more specifically on turnover and turnover per employee growth. Employment growth was only influenced by the age of female owner-managers whereby younger female owner-managers achieved higher levels. The motivations for business start-up, and involvement in other firms did not result in statistically significant differences in firm growth and recommendations have been proposed to extend the future research in these areas. The discussion now turns its attention to considering the findings on how a range of firm characteristics influence firm growth.

5.4 Female-Owned Firm Characteristics

Previous studies have reported that specific firm characteristics such as industry sector, firm age, firm size and ownership structure influence firm growth and these were the primary firm characteristics investigated in this study as displayed in Table 5.19:

Table 5.19: Hypothesis Two & Related Sub-hypotheses

| Firm Characteristics | Influence on Firm Growth |
|-----------------------------|--|
| Industry Sector | H _{2.1} : Female-owned firms operating in non-feminised industry sectors will achieve higher firm growth. |
| Firm Age | H _{2.2} : Younger female-owned firms will achieve higher firm growth. |
| Firm Size | H _{2.3} : Female owned firms employing fewer than 10 employees will achieve higher firm growth. |
| Nature of Ownership | H _{2.4} : Female owned firms owned and managed by a team will achieve higher firm growth. |

5.4.1 Industry Sector

The majority of studies investigating the influence of industry sector on firm growth conclude that firms operating in certain industries achieve higher firm growth, e.g. ICT. Furthermore, it is reported that these are the sectors in which female owner-managers are least likely to operate, instead operating in “feminised industry sectors” where barriers to entry are low and products/services are non-differentiated, e.g. retail, education and training, health and wellbeing (Henry and

Johnston 2003; Carter and Bennett 2006; Browne *et al* 2007; Marlow *et al* 2009; McGowan *et al* 2012). Thus, it was deemed useful to determine if the female owner-managers operating in these high-growth sectors achieved greater firm growth than their counterparts.

The largest percentage of female owner-managers were operating in (37.5%), followed by 15.3% in manufacturing and 13.6% in ICT. Some 11.4% were operating in health (11.4%) and education and training (9.1%), with the remaining 7.4% and 5.7% operating in retail and food and drink respectively.

Table 5.20: Industry Sector

| Industry Sector | Frequency | Percentage |
|------------------------|------------------|-------------------|
| ICT | 24 | 13.6 |
| Manufacturing | 27 | 15.3 |
| Food and Drink | 10 | 5.7 |
| Professional Services | 66 | 37.5 |
| Education and Training | 16 | 9.1 |
| Health | 20 | 11.4 |
| Retail | 13 | 7.4 |
| Total | 176 | 100 |

The highest percentage of younger female owner-managers (18-34) were operating in the professional services sector, accounting for 35.6%, followed by 15.6% operating in manufacturing and 11.1% in ICT. Approximately 18% operated in education and training (18%) or health (17.6%). Along with the highest proportion of “young” female owner-managers, the professional services sector also represented the highest levels of postgraduate education (42.4%) followed very closely by 41.7% operating in the ICT sector with postgraduate education. The highest percentages of female owner-managers having held managerial positions operated in professional services (36.9%), followed by manufacturing (17.1%) and ICT (16.2%).

Female owner-managers operating in non-feminised industries achieved higher growth in two of the three measures of growth, depicted in Table 5.18. Turnover (16.41%) and turnover per employee (12.15%) growth was highest for firms operating in non-feminised sectors. Employment growth was highest in feminised

sectors, suggesting that these sectors may be more labour intensive than non-feminised sectors. A Mann-Whitney U test demonstrated significant differences between feminised and non-feminised sectors and turnover ($p=.006$) and turnover per employee growth ($p=.025$), accepting *H_{2.1}: Female-owned firms operating in non-feminised industry sectors will achieve higher firm growth (as measured by turnover and turnover per employee)*. While firms operating in feminised sectors achieved higher employment growth, no statistically significant differences were evident ($p=.563$).

Table 5.21: Firm Growth and Industry Sector

| Growth Achieved (Average % change over 3 yrs) | Feminised Sector | Non-Feminised Sector |
|---|-------------------------|-----------------------------|
| Turnover Growth (%) | 6.06 | 16.41 |
| Turnover per Employee Growth (%) | -7.60 | 12.15 |
| Employment Growth (%) | 31.08 | 17.61 |

Note: Significant differences emerged between industry sector and turnover growth ($p=.006$) and turnover per employee growth ($p=.025$). No significant difference was evident for employment growth ($p=.563$).

Firms operating in non-feminised sectors achieved higher turnover and turnover per employee growth, supporting the findings of other studies indicating that industry sector has a positive influence on firm growth (Storey 1994; Barringer and Jones 2004; Carter and Bennett 2006; Wiklund *et al* 2009). The contribution of these firms is significant and consequently should be considered and promoted amongst female owner-managers as high-growth achieving sectors. This echoes the discussion relating to the age and education of female owner-managers recommending that a concerted effort is required to actively pave the way for female owner-managers to enter such industries. Combining this positive influence of sector on firm growth with that of age and educational disciplines, the active encouragement for females to pursue technical educational disciplines as the first step in gaining familiarity with high-growth achieving sectors should be promoted.

5.4.2. Firm Age

The majority of previous mainstream studies reviewed suggest that younger firms display faster rates of employment and turnover growth when compared to older

firms (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Orser *et al* 2000; Bullock *et al* 2004; Minniti 2010; Storey 2011; Fadahunsi 2012). In the female context, the evidence is not as clear as less attention has been given to the actual influence of firm age on firm growth, instead focusing on profiling firm age. Echoing the discussion on the age of female owner-managers, it is deemed appropriate to test whether the findings in the mainstream literature regarding firm age apply in the female context so as to add to and develop useful information concerning this issue specifically in the female context.

As illustrated in Table 5.19, it emerged from this study that the majority of firms were in operation for 3-5 years accounting for 59.6%, followed by 22.2% in operation for 6-10 years. The remaining 18.2% were in operation for more than 10 years. Furthermore, as expected firms in operation for 3-5 years were in the majority operated by female owner-managers aged 18-34 while those in operation for over ten years reported the highest percentage of female owner-managers aged 55+.

Table 5.22: Firm Age (n=176)

| Firm Age | Frequency | Percentage |
|-----------------|------------------|-------------------|
| 3-5 yrs | 105 | 59.6 |
| 6-10 yrs | 39 | 22.2 |
| Over 10 yrs | 32 | 18.2 |
| Total | 176 | 100 |

Younger firms (3-5 years and 6-10 years) outperformed the older firms (over 10 years) in all of the growth measures. Turnover growth was highest amongst firms operating for 6-10 years (20.64%) - above the average of all firms in the study (12.94%), followed by 12.02% for firms in operation for 3-5 years. Those in operation for over 10 years reported the lowest turnover growth (6.58%). Turnover per employee growth was also highest for firms in operation for 6-10 years (29.74%) in comparison to 3.68% experienced by those in operation for over 10 years. Whilst both of these categories experienced positive increases in turnover and turnover per employee growth, the same cannot be reported for the youngest firms (3-5 years) experiencing a decrease in turnover per employee of - 2.89% . Employment growth showed the largest variation across the three

measures. Younger firms (3-5 years) showed the highest levels of employment growth of 36.59% well above the average of all firms in the study (22.12%) against 3.58% for firms in operation for 6-10 years. Older firms (i.e. over 10 years) showed a decrease of -2.71% in employment growth.

Table 5.23: Firm Growth and Firm Age

| Firm Growth (Average % change over 3 yrs) | 3-5 yrs | 6-10 yrs | Over 10 yrs |
|---|----------------|-----------------|--------------------|
| Turnover Growth (%) | 12.02 | 20.64 | 6.58 |
| Turnover per Employee Growth (%) | -2.89 | 29.74 | 3.68 |
| Employment Growth (%) | 36.59 | 3.58 | -2.71 |

Note: Significant differences were evident between firm age and turnover growth ($p=.034$), turnover growth ($p=.006$) and employment growth ($p=.001$).

A Kruskal-Wallis test revealed significant differences between firm age and turnover growth ($p=.034$), turnover growth ($p=.006$) and employment growth ($p=.001$), leading to the completion of additional post-hoc Bonferroni tests, depicted in Table 5.24:

Table 5.24: Turnover, Turnover per Employee and Employment Growth and Firm Age

| Firm Age | Turnover Growth | Turnover per Employee Growth | Employment Growth |
|--------------------------|------------------------|-------------------------------------|--------------------------|
| 3-5 yrs and 6-10 yrs | $p=.064$ | $p=.002^*$ | $p=.007^*$ |
| 3-5 yrs and over 10 yrs | $p=.188$ | $p=.042^*$ | $p=.001^*$ |
| 6-10 yrs and over 10 yrs | $p=.011^*$ | $P=.995$ | $p=.036^*$ |

Note: * denotes a statistically significant difference

The results revealed:

- Younger firms (those in operation for 3-5 years) achieved higher turnover per employee ($p=.002$) and employment growth ($p=.007$) than those in operation for 6-10 years.
- Younger firms (those in operation for 3-5 years) achieved higher turnover per employee ($p=.042$) and employment growth ($p=.001$) than those in operation for over 10 years.
- Firms in operation for 6-10 years achieved higher levels of turnover ($p=.011$) and employment growth ($p=.036$) than those in operation for more than 10 years.

Evidently younger firms experience higher turnover, turnover per employee and employment growth when compared to older firms, **supporting H_{2.2}: Younger female-owned firms will achieve higher firm growth (as measured by turnover and turnover per employee)**. These results support previous studies (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Orser *et al* 2000; Bullock *et al* 2004; Minniti 2010; Storey 2011; Fadahunsi 2012). Of significance, smaller rather than larger firms should be acknowledged as major sources of employment and revenue growth, demonstrating the benefits of using general growth literature as a basis of understanding the influence of firm age on firm growth in female-owned firms.

5.4.3 Firm Size

Firm size as measured by employment numbers is viewed as having a positive influence on firm growth and is, therefore, a useful predictor of higher growth. A number of studies have used this measure as a predictor for higher firm growth among smaller firms (Storey 1994; Barkham *et al* 1996; Davidsson and Wiklund 2000; Orser *et al* 2000; Hill *et al* 2006; Coleman 2007), relating to the fact that smaller firms were more flexible in their business operations, had a greater ability to react quickly to address customer needs and respond to competitor and industry sector changes. Given the over reliance of comparative studies on firm size of male and female firms, it is difficult to determine with any degree of certainty the influence of female-owned firm size on firm growth and so it is useful to investigate this further.

The results of this study, illustrated in Table 5.25, depict the highest percentage as micro firms, employing 0-10 employees, accounting for 84.1% of firms, followed by 13.6% employing 11-50 and 2.3% employing 51 or more employees.

Table 5.25: Firm Size

| Firm Size | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| 0-10 (Micro) | 148 | 84.1 |
| 11-50 (Small) | 24 | 13.6 |
| 51 plus employees (Medium) | 4 | 2.3 |
| Total | 176 | 100 |

Firms employing 11-50 and 51 or more employees reported above average turnover growth of 14.23% and 13.17% respectively, while the micro firms, although positive, showed the lowest turnover growth of 12.68%. In contrast, micro firms showed the highest level of turnover per employee growth at 7.15% (above the average 5.53%) when compared to -2.35% and -7.16% for firms employing 11-50 employees (-2.35) and 51 plus employees. Employment growth was highest for firms employing 11-50 (25.95%) and 51 or more (24.47%), both above the average of all firms (22.12%). Micro firms showed the lowest employment growth at 21.64%. Although, overall larger firms achieved higher firm growth, the completion of a Kruskal-Wallis test showed no statistically significant differences between firm size and any of the growth measures (turnover growth, $p=.919$; turnover per employee growth, ($p=.533$), employment growth, $p=.430$), of consequence rejecting $H_{2,3}$: *Female-owned firms employing fewer than 10 employees will achieve of higher firm growth (as measured by turnover, turnover per employee and employment).*

Table 5.26: Firm Growth and Firm Size

| Firm Growth (Average % change over 3 yrs) | 0-10 Employees | 11-50 Employees | 51+ Employees |
|---|---------------------------------|----------------------------------|----------------------|
| Turnover Growth (%) | 12.68 | 14.53 | 13.17 |
| Turnover per Employee Growth (%) | 7.15 | -2.35 | -7.16 |
| Employment Growth (%) | 21.64 | 24.47 | 25.95 |

Note: No significant differences were evident between firm size and turnover growth ($p=.919$), turnover per employee growth ($p=.533$), employment growth ($p=.439$)

Firm size did not influence firm growth in this study, diverging from previous studies reporting this a determinant of firm growth where firms with fewer than 10 employees achieve higher firm growth (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Glancey 1998; Bullock *et al* 2004). The findings do, however, bring to the fore whether other firm characteristics such as industry sector and firm age are more important than firm size to consider for their influence on firm growth.

5.4.4 Nature of Ownership

Previous studies (Kinsella *et al* 1994; Storey 1994; Glancey 1998; Morris *et al* 2006; Dobbs and Hamilton 2007; Bruneel *et al* 2009; Calvo and Garcia 2010)

promoted a positive relationship between ownership structure and firm growth as firms owned and managed by teams have greater levels of entrepreneurial acumen and managerial ability, functional expertise, managerial skills and competencies, thus being less reliant on external expertise and advice, hence improving firm growth. Storey (1994) and Kinsella *et al* (1994) suggested firms owned and managed by teams are more likely to achieve higher firm growth than singly owned firms. Glancey (1998) also promoted a positive relationship between ownership structure and firm growth. While it is accepted that the ideal scenario for the small firm is to have a breadth of expertise to accommodate the functional requirements of the firm, it is equally argued that in many individually operated small firms this is not the case, especially in the female context where females are less likely to operate firms owned and managed by teams (Ndemo and Maina 2007; Ruane and Sutherland 2007; Roomi *et al* 2009). Therefore, in this study specific attention is given to whether singly-owned or multiple ownership influences firm growth.

The majority of firms (66.5%) in this study were solely-owned with 33.5% owned by a team. Female owner-managers aged 35-44 represented the highest percentage (40.3%) operating firms with teams, with over 30% having completed either third (37.9%) or postgraduate (30.5%) levels of education. In terms of industry sector, the highest percentage owned and managed by teams operated in non-feminised industry sectors such as manufacturing (48.1%) and ICT (41.7%). This was followed by 30% operating in the food and drink or health sector. The sector emerging with the lowest level of team ownership was represented by retail (7.7%), the sector achieving the lowest growth.

Firms owned and managed by teams achieved higher growth across all three measures of firm growth outlined in Table 5.24. Turnover growth (23.69%) was highest in firms owned by teams in stark contrast to 7.52% by solely owned firms. Turnover per employee growth evidenced the largest disparity between firms owned by teams (19.13%) and solely owned firms (-1.32%). Employment growth (32.07%) was also highest in firms owned and managed by teams, well above the

average of all firms in the study (22.12%). The completion of a Mann-Whitney U test demonstrated statistically significant differences between ownership structure and turnover ($p=.000$) and turnover per employee growth ($p=.047$), supporting *H 2.4: Female owned firms owned and managed by a team will achieve higher firm growth (as measured by turnover and turnover per employee)*. Although very positive employment growth was experienced by firms owned and run by teams, no statistically significant difference emerged ($p=.233$).

Table 5.27: Firm Growth and Nature of Ownership

| Firm Growth (Average % change over 3 yrs) | Solely owned | Team Ownership |
|---|---------------------|-----------------------|
| Turnover Growth (%) | 7.52 | 23.69 |
| Turnover per Employee Growth (%) | -1.32 | 19.13 |
| Employment Growth (%) | 17.11 | 32.07 |

Note: Significant differences were evident between ownership structure and turnover growth ($p=.000$) and turnover per employee growth ($p=.047$). No significant difference was evident for employment growth ($p=.233$).

This study confirms the findings of previous mainstream studies (Storey 1994; Kinsella *et al* 1994; Glancey 1998; Morris *et al* 2006; Dobbs and Hamilton 2007; Bruneel *et al* 2009; Calvo and Garcia 2010) that firms operated by a team, rather than solely operated are positively linked with firm growth. This finding is promising as it shows that female owner-managers are operating firms owned and managed by teams, having in the past been reported as being less likely to (Stam and Schutjens 2005; Forbes *et al* 2006; O'Connor *et al* 2006; Schjoedt and Kraus 2009). Secondly, the findings confirm that the mainstream literature is applicable in the female context, depicted by the positive influence of team ownership on firm growth. Delving behind the nature of ownership, it is deemed important as an issue that warrants further investigation in future research in the context of female-owned firms. It is suggested that more detailed, in-depth research should be conducted on various aspects of the team, paying particular attention to the number and composition of the team (females and/or males), the composition of the technical expertise and also the percentage ownership held by each member of the team. Also deemed important is the examination of the specific roles of female owner-managers in the day-to-day operations of the firm. Previous research (Storey 1994; Kinsella *et al* 1994; Glancey 1998; Morris *et al* 2006; Dobbs and

Hamilton 2007; Bruneel *et al* 2009; Calvo and Garcia 2010) suggests that the team dynamic and relative diversity of knowledge, skills and resources play an important role in determining the composite impact of team ownership on firm growth, and thus is an area that should be specifically investigated in the female context.

In summary, this study has examined a number of female-owned firm characteristics with a view to investigating and discussing their influence on firm growth. Firm age, industry sector and nature of ownership were found to have a positive influence firm growth, more specifically turnover and turnover per employee growth, while firm size did not. Employment growth was only influenced by firm age in this study whereby younger firms achieved higher growth. The chapter now discusses the findings on how a range of strategic-related activities influence firm growth.

5.5 Strategic-Related Activities

The primary strategic-related activities of female owner-managers investigated are expressed in the hypotheses outlined in Table 5.28:

Table 5.28: Hypothesis Three & Related Sub-hypotheses

| Strategic-Related Activities | Influence on Firm Growth |
|------------------------------|---|
| Growth Objectives | H _{3.1} : Female owner-managers who set financial growth objectives achieve higher firm growth. |
| Planning | H _{3.2} : Female owner-managers who prepare a formal strategic plan achieve higher firm growth. H _{3.2.1} : Female owner-managers having completed a formal strategic plan achieve higher firm growth. |
| Type of Strategy | H _{3.3} : Female owner-managers who adopt a prospector strategy achieve higher firm growth. |

5.5.1. Growth Objectives

Previous studies conducted on firm growth have promoted that growth is manifested in a variety of objectives, both personal and commercial, which in turn influences firm growth. In fact, it has frequently been reported that female owner-managers may not even set out growth objectives for their firms as they do not aspire to grow or grow their firms beyond a certain size (Cliff 1998; Carter *et al* 2003; Sirec *et al* 2010). Previous studies suggested female owner-managers may

place emphasis on non-financial objectives such as commitment to service quality, employee well-being, customer satisfaction and not on financial objectives, i.e. profit, turnover (Brush 1992; Cliff 1998; Weeks 2008), deemed to have a more positive influence on firm growth. This topic is largely under-researched in the female context and so it is seen as appropriate to investigate the type of growth objectives which set the foundation for the subsequent strategic activities in the firm.

It emerged in this study that 59.1% of female owner-managers had set out growth objectives in comparison to 40.9% who had not (n=176). The findings demonstrate 61.5% having set out financial objectives, i.e. objectives for increased profit, turnover, margins and cashflow, in comparison to 38.5% having set out non-financial growth objectives i.e. improving customer service, developing reputation in the market, developing brand image. As outlined in Table 5.26, both categories of objectives achieved above average turnover growth (12.94%), with only slight differences emerging between financial (17.89%) and non-financial objectives (17.84%).

Table 5.29: Firm Growth and Types of Growth Objectives

| Firm Growth (Average % change over 3 yrs) | Financial Objectives | Non-financial Objectives |
|---|-----------------------------|---------------------------------|
| Turnover Growth (%) | 17.89 | 17.84 |
| Turnover per Employee Growth (%) | 18.07 | 12.70 |
| Employment Growth (%) | 12.03 | 25.84 |

Note: No significant differences were evident between the type of growth objectives and turnover (p=.731), turnover per employee growth (=0.376) and employment growth (p=.828).

Similarly both categories experienced positive and above average turnover per employee growth- 18.07% in comparison to 12.70%. Employment growth was highest for those that had set out non-financial growth objectives (25.84%) when compared to 12.03% with financial objectives. A Mann-Whitney U test revealed no statistically significant differences between the type of objectives and any measures of firm growth (turnover growth (p=.731); turnover per employee growth (p=.376) and employment growth (p=.828), rejecting *H*_{3.1}: *Female*

owner-managers who set out financial growth objectives achieve higher firm growth (as measured by turnover, turnover per employee, and employment).

The findings demonstrate that female owner-managers are positive in their approach to firm growth, placing emphasis on both financial and non-financial growth objectives with a higher percentage focused on financial objectives. This somewhat questions suggestions in previous studies that female owner-managers place more emphasis on non-financial objectives. Furthermore, the findings imply that firm growth is not necessarily achieved by only setting out financial objectives but can be achieved through non-financial objectives. Female owner-managers are serious about firm growth and have clear financial targets driving business activities.

5.5.2 Strategic Planning

In achieving growth objectives, previous research has reported that the existence of a formal strategic plan increases the owner-manager's chances of reaching their objectives (Skrt and Antonic 2004; Mazzarol *et al* 2009; Storey and Greene 2010), while also helping in managing firm growth. Furthermore, involvement in strategic planning provides an awareness and knowledge of industry sector, competitor and customer characteristics, fundamental for strategy development. The optimal timeframe of the strategic plan has not been researched to any significant degree in the literature reviewed. Where it was included in research studies, researchers have found a positive relationship between long-term formal planning and positive firm. The inclusion of a timeframe as part of the consideration of the strategic development of the firm will assist in ascertaining how future focused owner-managers are with regard to the firm, yet previous studies have not proposed the optimum timeframe in terms of months or years. Hence, an opportunity exists to investigate the existence of formal strategic plans and the timeframe associated with them to determine their influence on firm growth to address the lacuna of research in this area, specifically in the female context.

The majority of female owner-managers had a formal strategic plan (77.3%) achieving the highest turnover (18.12%) and turnover per employee (10.71%) growth. In comparison female owner-managers with no formal strategic plan (22.7%) in place experienced decreases in both measures, however experienced higher employment growth of 23.37% in comparison to 21.76% who had a plan. Table 5.27 outlines these findings along with the results of a Mann-Whitney U test completed to investigate any statistically significant differences between firm growth and the existence of formal strategic plans. The test revealed that female owner-managers with a formal strategic plan in place achieved higher turnover ($p=.000$) and turnover per employee growth ($p=.006$), *accepting H_{3.2}: Female owner-managers who prepare a formal strategic plan achieve higher firm growth (as measured by turnover and turnover per employee)*. No statistically significant differences were evident between the existence of a formal strategic plan and employment growth ($p=.458$).

Table 5.30: Firm Growth and the Existence of Formal Strategic Plans (n=176)

| Firm Growth (Average % change over 3 yrs) | Existence of a Formal Strategic Plan | Non-Existence of a Formal Strategic Plan |
|---|---|---|
| Turnover Growth (%) | 18.12 | -4.67 |
| Turnover per Employee Growth (%) | 10.71 | -12.07 |
| Employment Growth (%) | 21.76 | 23.37 |

Note: A significant difference emerged in the existence of a formal strategic plan and turnover growth ($p=.000$) and turnover per employee growth ($p=.006$). No significant difference was evident for employment growth ($p=.458$)

The highest percentage (37.5%) had set out strategic plans for 1-2 years (37.5%), followed closely by 3-5 year plans (36%). Over 22% had completed plans for a short-time frame of 6-12 months, while the remaining 3.7% had completed long term plans for 6-10 years.

The highest turnover growth was experienced by those having set out plans for 1-2 years (24.76%), followed by 6-10 year (15.5%) and 3-5 years (15.46%). Turnover per employee growth was highest for those who had set out plans of 6-10 years (35.10%), followed by 1-2 year plans (19.23%). Following considerably behind this were those with 6-12 months (5.34%) and 3-5 year (2.75%) plans.

Moreover, those with plans for 6-12 months experienced the highest employment growth of 27.44% followed closely by 3-5 year plans (26.95%). Firms with plans 1-2 years experienced an overall increase in employment of 17.29%. This was in stark contrast to those with plans of 6-10 years which experienced a decrease in employment of -18.71%. Table 5.31 depicts these results, along with the results of Kruskal-Wallis test confirming a statistically significant difference between turnover growth ($p=.045$) and the timeframe of formal strategic plans. No statistically significant differences were evident for turnover per employee ($p=.652$) and employment growth ($p=.200$).

Table 5.31: Firm Growth and Timeframe of Formal Strategic Plans (n=136)

| <i>Firm Growth (Average % change over 3 yrs)</i> | 6-12 mths | 1-2 yrs | 3-5 yrs | 6-10 yrs |
|--|-----------|---------|---------|----------|
| Turnover Growth (%) | 11.84 | 24.76 | 15.46 | 15.50 |
| Turnover per Employee Growth (%) | 5.34 | 19.23 | 2.75 | 35.10 |
| Employment Growth (%) | 27.44 | 17.29 | 26.95 | -18.71 |

Note: A significant difference between turnover growth ($p=.045$) and the timeframe of strategy of formal strategic plans was evident. No significant differences were evident for turnover per employee ($p=.652$) and employment growth ($p=.200$).

Given the statistical significant difference in turnover growth, a further post-hoc Bonferroni test was conducted, outlined in Table 5.32.

Table 5.32: Turnover Growth & Timeframe of Formal Strategic Plan

| Timeframe of Plan | Turnover Growth |
|--------------------|-----------------|
| 6-12 mths/ 1-2 yrs | $p=.401$ (-) |
| 6-12 mths/3-5 yrs | $p=.004$ (+) * |
| 6-12 mths/6-10 yrs | $p=.583$ (-) |
| 1-2 yrs/3-5 yrs | $p=.048$ (+) * |
| 1-2 yrs/6-10 yrs | $p=.397$ (-) |
| 3-5 yrs/6-10 yrs | $p=.041$ (+) * |

Note: * denotes a statistically significant difference

The findings demonstrate that:

- Female owner-managers having completed a 3-5 year plan achieved higher turnover growth ($p=.004$) when compared to those with a 6-12 month ($p-$

.401), 1-2 year plan ($p=.048$) or a 6-10 year plan ($p=.041$), indicating that a 3-5 year plan results in higher firm growth.

Evidently this study reaffirms previous mainstream studies (Kinsella *et al* 1994; Storey 1994; Lussier 1995; Barkham *et al* 1996; Roper 1998; Beaver and Ross 2000; Skrt and Antonic 2004; Mazzarol *et al* 2009; Storey and Greene 2010),) which positively link formal strategic planning with higher growth, contributing also understanding in the female context, Moreover, in examining the optimal timeframe associated with formal strategic plans, the findings demonstrate specifically that a 3-5 year plan resulted in higher turnover growth, identifying female owner-managers as strategic planners, making a difference to firm growth irrespective of gender.

5.5.3. Type of Strategy

The Miles and Snow (1978) strategy has been recognised as being influential in the context of small firms (Thornhill and White 2007; Leitner and Guldenberg 2010). This typology distinguished generic strategies, namely defender, prospector, analyser and reactor strategies, according to how firms respond to environmental trends. Research indicates that the combination of these four strategies should not be viewed independently as they are not mutually exclusive and were found to be closely associated with the characteristics and vision for growth held by owner-managers (Miles and Snow 1978). This reinforces the importance of understanding the objectives for firm growth as owner-managers may adopt more than one of these strategies or may move between strategies to achieve growth at different stages of business development to accommodate changing personal or business objectives, and market demands. Furthermore, based on the Miles and Snow typology it has been reported that owner-managers who adopt a prospector strategy achieve higher growth in comparison to those who adopt either analyser, reactor or defender strategies (Allen and Helms 2006; Bruneel *et al* 2009; Parnell 2013). Of more relevance, previous literature is generic in nature and has not focused on the adoption of the Miles and Snow typology in the female context and is included to identify if these strategies are

utilised by female owner-managers and for their influence on firm growth. By introducing this into female growth research, it contributes to and complements the study of firm growth.

A common consensus emerged in this study that having a strategy was important for small firm growth as all female owner-managers identified at least one strategy and many applying a combination. The highest percentage of female owner-managers adopted a combination of strategies (37.5%) followed by 25% and 21.6% adopting a prospector or analyser strategy respectively. Some 11.9% adopted a defender strategy while a minority of 4% a reactor strategy. In contextualising the findings further, younger female owner-managers, those aged 18-34 (31.8%) and 35-44 (43.2%) adopted a prospector strategy or combination of strategies more frequently than those aged 45-54 (22.7%) and 55+ (2.3%). Furthermore, these strategies were also more prevalent for female owner-managers with prior managerial experience, operating in ICT and Manufacturing sectors.

Table 5.33: Strategy Type (n=176)

| Strategy | n | Percentage |
|---------------------------|----------|-------------------|
| Prospector | 44 | 25.0 |
| Defender | 21 | 11.9 |
| Reactor | 7 | 4.0 |
| Analyser | 38 | 21.6 |
| Combination of Strategies | 66 | 37.5 |
| Total | 176 | 100.0 |

Firm growth achieved was investigated along with the completion of a Kruskal-Wallis test to identify if there were any statistically significant differences between strategy type and firm growth outlined in Table 5.34.

Table 5.34: Firm Growth and Type of Strategy (n=176)

| Firm Growth (Average % change over 3 yrs) | Prospector | Defender | Reactor | Analyser | Combination |
|--|-------------------|-----------------|----------------|-----------------|--------------------|
| Turnover Growth (%) | 23.87 | 2.01 | 17.45 | 10.36 | 10.14 |
| Turnover per Employee Growth (%) | 18.22 | -11.66 | -5.13 | .92 | 1.00 |
| Employment Growth (%) | 18.50 | 21.45 | -19.96 | 41.75 | 17.92 |

Note: There was a significant difference in turnover ($p=.002$) and turnover per employee growth ($p=.019$) and type of strategy adopted. No significant difference was evident for employment growth ($p=.116$).

Turnover growth was highest for those who had adopted a prospector (23.87%) or reactor strategy (17.45%), achieving above the average turnover growth (12.94%). In contrast, the lowest turnover growth was achieved by those having adopted an analyser (10.36%) or a defender strategy (2.01%). Only the adoption of a prospector strategy (18.22%) resulted in above average turnover per employee growth (5.53%). Those utilising defender and reactor strategies experienced not only below average turnover per employee growth but also negative levels of -11.66% and -5.13% respectively. While firms utilising analyser strategies achieved somewhat positive turnover per employee growth, it was considerably lower than the average of all firms, at .92%. Employment growth was highest for those having adopted an analyser strategy (41.75%) - the only strategy to achieve above average employment growth. Female owner-managers employing a combination of strategies also experienced high employment growth of 17.92%, albeit below average. A Kruskal-Wallis test revealed significant differences between strategy type and turnover ($p=.002$) and turnover per employee growth ($p=.019$), leading to the completion of a post-hoc Bonferroni test depicted in Table 5.35. No significant difference was evident between strategy type and employment growth ($p=.116$).

Table 5.35: Post Hoc Tests- Strategy Turnover and Turnover per Employee Growth

| Strategy | Turnover Growth | Turnover per Employee Growth |
|------------------------|-----------------|------------------------------|
| Prospector/Defender | $p=.001^*$ | $p=.008^*$ |
| Prospector/Reactor | $p=.002^*$ | $p=.036^*$ |
| Prospector/Analyser | $p=.007^*$ | $p=.042^*$ |
| Prospector/Combination | $p=.374$ | $p=.250$ |
| Reactor/Combination | $p=.389$ | $p=.028^*$ |

Note: * denotes a statistically significant difference

The results of a post-hoc Bonferroni test demonstrated:

- Female owner-managers adopting a prospector strategy achieved higher turnover growth than those adopting a defender ($p=.001$), reactor ($p=.002$) or analyser strategy ($p=.007$).

- Female owner-managers adopting a prospector strategy achieved higher turnover per employee growth than those adopting a defender ($p=.008$), reactor ($p=.008$) or analyser strategy ($p=.042$).
- Female owner-managers adopting a combination of strategies achieved higher levels of turnover per employee growth when compared to those who had adopted a reactor strategy ($p=.028$).

These findings align with previous studies indicating that the adoption of a prospector strategy is positively linked with firm growth (Dess and Davies 1984; Reitsperger *et al* 1993; Hambrick 2003), reinforcing that this strategy results in higher turnover and turnover per employee growth and supporting *H_{3.3}: Female owner-managers who adopt a prospector strategy achieve higher firm growth (as measured by turnover and turnover per employee)*. Developing this further, the findings demonstrate that a combination of strategies has a positive influence on turnover per employee growth.

In extending the research on strategy, previous studies propose that certain strategic activities result in higher firm growth. In this study, a number of strategic activities were examined (Table 5.36) where “adding a new product or services” (60%); “selling to a new market (55.7%)” and “seeking professional advice” (55.7%) emerged as the most frequently reported. Over half of the respondents (52.3%) had “expanded marketing activities” while research and development (38.6%), operating in international markets (38.1%) and improving ICT (28.4%) were also evident, providing fruitful insights into the components of the various strategies adopted.

Table 5.36: Strategic Activities of Female Owner-Managers (n=176)

| Strategic Activities | Yes (%) | No (%) |
|-------------------------------------|----------------|---------------|
| Add a new product or service | 60.0% | 40.0% |
| Sell to a new market | 55.7% | 44.3% |
| Seek professional advice | 55.7% | 44.3% |
| Expand marketing activities | 52.3% | 47.7% |
| Research and development activities | 38.6% | 61.4% |
| Operate in an international market | 38.1% | 61.9% |
| Improve ICT in the business | 28.4% | 71.6% |

Engagement in each of these activities resulted in higher turnover, turnover per employee and employment growth, achieving above the average for each measure when compared to those who had not engaged in these activities. Highest turnover growth was achieved for those who had improved ICT (33.24%), research and development (30.15%), and sought professional advice (29.75%). Similarly, turnover per employee growth was highest for those who had improved ICT (33.24%), sought professional advice (25.01%), and were operating in an international market (23.33%). Employment growth was highest for those who highlighted research and development (32%), selling to a new market (27.57%) and seeking professional advice (23.32%). Table 5.34 outlines the findings along with the results of a Mann-Whitney U test, evidencing statistically significant differences between each activity and turnover and turnover per employee growth, with the exception of adding a new product/service and selling to a new market. Of note, there were no statistically significant differences between the strategic activities and employment growth.

Table 5.37: Firm Growth and Strategic Activities

| <i>Strategic Activities</i> | Engaged in growth activities | | | Did not engage in growth activities | | |
|-----------------------------|------------------------------|-----------------------|------------|-------------------------------------|-----------------------|------------|
| | Turnover | Turnover per employee | Employment | Turnover | Turnover per employee | Employment |
| Add new product/service | 17.31 | 8.21 | 20.40 | 6.92 | 1.84 | 24.51 |
| Sell to a new market | 23.69 | 11.63 | 27.57 | -0.56 | -2.13 | 15.29 |
| Seek professional advice | 29.75 | 25.01 | 23.32 | 3.53 | -1.69 | 17.28 |
| Expand marketing | 22.71 | 15.22 | 16.51 | 2.24 | -5.08 | 28.27 |
| Research & Development | 30.15 | 20.56 | 32.00 | 2.10 | -3.93 | 15.91 |
| International market | 26.55 | 23.33 | 24.08 | 4.57 | -5.40 | 20.92 |
| Improved ICT in the firm | 33.24 | 32.19 | 12.23 | 4.88 | -5.04 | 26.05 |

Note: A significant difference emerged between turnover growth and add a new product ($p=.002$); sell to a new market ($p=.000$), seek professional advice ($p=.000$), expanded marketing activities ($p=.000$), research & development ($p=.000$), operate in an international market ($p=.000$), improve ICT in the firm ($p=.000$). No significant difference was evident for employment growth. A significant difference emerged between turnover per employee growth and seek professional advice ($p=.018$), expanded marketing activities ($p=.008$), research & development ($p=.000$), operate in an international market ($p=.000$), improve ICT in the firm ($p=.000$). No significant difference was evident between employment growth and each of the activities.

Going deeper into the strategic behaviour of female-owned firms, it was interesting to investigate whether any notable or common strategic activities emerged through the adoption of a prospector strategy or a combination of strategies, given the statistically significant differences between these strategy types and firm growth, which had previously emerged.

Female owner-managers engaged in multiple rather than singular activities in adopting a prospector strategy or combination of strategies. Female owner-managers having adopted a prospector strategy were operating in international markets (35.8%), improving ICT (34%) and seeking professional advice (29.3%), apparent as the most common strategic activities amongst prospectors. “Seeking professional advice” (41.8%) and “operating in an international market (37%)” were similar for female owner-managers having adopted a combination of strategies to those identified by prospectors, all resulting in higher turnover and turnover per employee growth.

Internationalisation is a current policy issue, recognised as an important growth activity and this study reinforces its positive contribution with firms adopting this activity achieving higher turnover and turnover per employee growth. Internationalisation as a strategy for growth needs to be highlighted and supported especially amongst female-owned firms as they have been reported as being less likely to engage in this activity.

Improving ICT in the firm resulted in higher turnover and turnover per employee growth. The benefits of ICT are well-documented in the literature (Gundry and Welsh 2001; Yasuda 2005) due to the efficiencies that results from such, confirmed by this study and hence is an important consideration for any growing firm that needs to be addressed by support agencies through the provision of training in ICT.

Seeking professional advice has emerged from a number of studies as an activity positively related to firm growth (Kinsella *et al* 1994; Storey 1994; Barkham *et al*

1996; Bennett and Robinson 1999; Bennett *et al* 1999; Boter and Lundstrom 2005), with some studies suggesting owner-managers who avail of external sources of assistance for firm growth were more effective in implementing their strategy (Kinsella *et al* 1994; Storey 1994), reinforced in this study. This study also clearly indicates that female owner-managers firms place considerable value on seeking advice from support agencies as part of their strategic activities, rendering the important role of support agencies as focal reference points for female owner-managers.

Overall, this study concludes that those female owner-managers having adopted a prospector strategy achieved the highest turnover and turnover per employee growth. It is important to note that the strategic activities engaged in by female owner-managers adopting this strategy are similar to those of a combination of strategies, and thus should be valued, along with prospectors. Female owner-managers are proactive in achieving firm growth, employing multiple rather than singular strategic activities, with these actions having a positive influence on turnover and turnover per employee growth. Given the multiplicity of objectives and strategic-related activities, the findings have demonstrated that none of the strategic activities engaged in by female owner-managers resulted in significant differences in employment growth. While at the outset this might seem a cause for concern in the Irish economy, at a time when unemployment is high, due attention should be given to the general economic climate and not ignore growth in other aspects of the firm, i.e. jobless growth. The reason for this may be due to the backdrop of the economic climate when the research was conducted at a time when more and more firms were reducing employment numbers. Alternatively, it may also be attributed to the costs/complexities associated with employing people, a potential deterrent for any firm in creating employment. Furthermore, the lack of employment creation could be a reflection of the industry sector in which the firms are operating,, whereby some of the high-growth industries where growth is dependent on technology and not people investment, e.g. ICT sector. In summary, findings in relation to strategic-related activities such as strategic planning and type of strategy have emerged as characteristics that have a positive

influence on higher firm growth, more specifically on turnover and turnover per employee growth. More specifically, the findings have demonstrated that having a 3-5 year strategic plan and adopting a prospector strategy resulted in higher firm growth. Although setting out financial objectives rather than non-financial objectives did not result in significant differences, it was important to note that female owner-managers do set out growth objectives and place emphasis on both types of objectives as a basis for strategy development.

The findings conclude the investigation of how the characteristics of female owner-managers, their firms and strategic-related activities influence firm growth. To conclude the discussion, a profile of high-growth firms is presented.

5.6 Towards Profiling Higher Growth Female-Owned Firms

There is a constant strife to describe how higher firm growth can be achieved (Blackburn and Kovalainen 2009; Shepherd and Wiklund 2009; Leitch *et al* 2010; Storey 2011; Fadahunsi 2012), and from this study, it is evident firm growth is not determined by one single factor but is influenced by numerous factors related to the characteristics of female owner-managers, their firms and strategic-related activities. All of these factors are interlinked and must be considered when determining the profile of higher growth firms. Table 5.35 outlines the female owner-manager and firm characteristics, and strategic-related activities that had a positive and statistically significant influence on firm growth in this study, with a view to identifying the distinguishable characteristics of higher growth female-owned firms. The findings presented provide supportive evidence of the influence of the characteristics of female owner-managers, their firms and strategic-related activities on firm growth. The most notable differences were evident for turnover and turnover per employee growth, whereby employment growth was influenced only by the age of female owner-managers and firm age.

In particular, the age and education of female owner-managers show statistically significant differences for all three measures of firm growth, clearly illustrating that younger, more highly educated female owner-managers achieve higher firm

growth. Having prior sector and managerial experience also demonstrated statistically significant results for turnover and turnover per employee growth. The findings of this study did not concur with those of previous studies reporting a positive relationship between firm growth and motivation for business start-up (Doern 2009) and experience in starting other firms, thus rendering it difficult to describe a definitive set of femaleowner-manager characteristics that influence firm growth.

By combining the characteristics of female owner-managers with firm characteristics, a more in-depth profile of higher growth firms is established. In particular, attention is drawn to the importance of industry sector, firm age and nature of ownership on firm growth. Firm age showed positive results in all the measures of firm growth, while industry sector impacted on turnover and turnover per employee growth whereby younger female owner-managers operating in “non-feminised” sectors achieved higher firm growth, an issue that needs to be addressed to encourage more females to consider non-feminised industries for business start-up. Furthermore, findings indicate younger firms (i.e. less than 10 years) owned and managed by teams are more likely to achieve higher firm growth than those solely operated.

By including the third set of factors, those at the strategic level, a more developed and holistic understanding of higher firm growth is obtained. In particular, the completion of a formalised 3-5 strategic plan and adopting a prospector strategy resulted in higher turnover and turnover per employee growth.

By examining and combining these three set of characteristics, a more composite insight into the interlinked range of internal factors is depicted in Table 5.38:

Table 5.38: Summary of Statistically Significant Results of the Empirical Study

| Statistically Significant Influences on Firm Growth | Turnover Growth | Turnover per Employee Growth | Employment Growth |
|--|------------------------|-------------------------------------|--------------------------|
| Age Female owner-managers aged 18-34 and 35-44 achieved higher firm growth. | (+) | (-) | (+) |
| Education Female owner-managers having completed third level education achieved higher firm growth. Female owner-managers having pursued technical disciplines achieved higher firm growth. | (+) (+) | (+) (+) | (-) (-) |
| Prior Employment Experience Female owner-managers having gained prior experience in the same industry sector achieved higher firm growth. Female owner-managers with managerial experience achieved higher firm growth. | (+) (+) | (-) (+) | (-) (-) |
| Industry Sector Female-owned firms operating in non-feminised sectors achieved higher firm growth. | (+) | (+) | (-) |
| Firm Age Female-owned firms in operation for less than 10 years achieved higher firm growth. | (+) | (+) | (+) |
| Nature of Ownership Female-owned firms owned and managed by teams achieved higher firm growth. | (+) | (+) | (-) |
| Strategic Planning Female owner-managers having prepared a formalised 3-5 year strategic plan achieved higher firm growth. | (+) | (+) | (-) |
| Type of Strategy Female owner-managers adopting a prospector strategy achieved higher firm growth. | (+) | (+) | (-) |

Note: the “+” sign denotes a significant positive influence on firm growth, while “-” indicates no statistically significant differences.

This concludes the presentation of the findings of the empirical study of 176 female-owned firms operating in Ireland, demonstrating very clearly that firm growth is indeed a complex issue, influenced by a range of interlinked female owner-manager and firm characteristics along with strategic activities, all of which positively influence higher firm growth.

5.7. Conclusion

Due to the numerous factors and the variations of their influence on firm growth measures, there is a challenge in prescribing a definitive or ultimate set of factors that influence higher firm growth in female-owned firms. However, this study has demonstrated that in describing a definitive profile of higher firm growth female-

owned firms, both personal and firm characteristics, along with strategic-related activities influenced higher firm growth and are important to understand. Thus, it is deemed appropriate to investigate the profile of the highest growth firms in this study in further detail, with a view to identifying the most distinguishable characteristics of female-owned high-growth firms, as defined by the OECD.

Chapter Six: Profiling OECD-Defined High-Growth Female-Owned Firms

6.0 Introduction

The aim of this chapter is to build upon the findings of the overall study, providing a deeper investigation into the profile of high-growth female-owned firms, with a view to isolating distinguishable characteristics at female owner-manager level, firm level, and by the type of strategic-related activities. This deeper level of analysis presents a more holistic and integrated perspective of high-growth firms incorporating three sets of factors that influence firm growth, an aim set out in Chapter One of this study. This descriptive insight provides valuable information that is useful to establish consistencies in multifaceted firms, determining how strong female owner-manager characteristics are when examined in conjunction with firm characteristics and strategic-related activities and, subsequently how strong female-owned firm characteristics are when considered alongside female owner-manager characteristics and strategic-related activities.

The chapter begins by outlining the definition of high-growth firms as set out by the OECD and identifies the firms meeting the prescribed criteria of this definition. Building on the previous chapter, the characteristics of high-growth female owner-managers, their firms and the strategic-related activities are examined to investigate whether the significant factors influencing firm growth emergent from the overall study manifest in high-growth firms. Furthermore, reflections from policy representatives are outlined, with a view to determining if their experiences in working with female-owned firms align with the findings of the empirical study. A discussion of these findings lay the foundation for the implications for research and policy discussed in Chapter Seven.

6.1 Defining High-Growth Firms (OECD Classification)

According to the OECD, high-growth firms can be defined in terms of employment (number of employees) and turnover and in studying high-growth

firms it is recommended that both criteria are used. High-growth firms are defined by the OECD as:

“Enterprises with average annualised growth greater than 20% per annum, over a three year period should be considered as high-growth enterprises. Growth can be measured by the number of employees or by turnover (OECD 2008, p.61).

The OECD also recommends that in studying high-growth firms a meaningful size threshold should be set out so as to avoid the growth of small firms distorting the investigation. For instance, a firm growing from one or two employees would automatically be classified as a high-growth firm, using the above criteria, thus the size threshold should be low enough to avoid excluding too many firms. A provisional size threshold has been suggested as ten employees at the beginning of the growth period and holds for both the turnover and employment measure as it ensures the initial population is the same regardless of whether firm growth is measured in employment or turnover. In identifying high-growth firms in this study, the following criteria were applied- ensuring the firm had ten or more employees at the beginning of the growth period and had achieved an average annualised growth in turnover greater than 20% per annum. Seventeen firms emerged to satisfy the criteria, representing 10% of the overall sample. Table 6.1 outlines the average turnover and employment growth achieved by the firms:

Table 6.1: Profile of High-Growth Firms

| Firm | Average growth in Turnover | Average growth in Employment | Year on Year Growth |
|---------|----------------------------|------------------------------|---------------------------------|
| Firm 1 | 26.05 | 40.01 | Yes for Turnover and Employment |
| Firm 2 | 37.29 | 44.00 | Yes for Turnover and Employment |
| Firm 3 | 20.90 | 10.00 | - |
| Firm 4 | 58.87 | 60.00 | Yes for Turnover and Employment |
| Firm 5 | 88.26 | 15.38 | Yes for Turnover |
| Firm 6 | 30.34 | 42.06 | Yes for employment |
| Firm 7 | 44.77 | 32.61 | Yes for Turnover and Employment |
| Firm 8 | 62.85 | 78.23 | Yes for Turnover and Employment |
| Firm 9 | 39.23 | 20.01 | Yes for Turnover |
| Firm 10 | 70.08 | 97.56 | Yes for Turnover and Employment |
| Firm 11 | 42.62 | 23.24 | Yes for Turnover |
| Firm 12 | 39.21 | 52.37 | Yes for Turnover and Employment |
| Firm 13 | 42.85 | 37.22 | Yes for Turnover |
| Firm 14 | 27.06 | 27.82 | Yes for Turnover |
| Firm 15 | 76.33 | 33.33 | Yes for Turnover and Employment |
| Firm 16 | 34.26 | 28.18 | - |
| Firm 17 | 41.26 | 28.57 | - |

In investigating the turnover and employment growth achieved, it emerged:

- The highest turnover growth over the three-year period was 88.26% (Firm 5), 76.33% (Firm 15), 70.08% (Firm 10), considerably higher than the turnover growth of 20% set out by the OECD. This was followed by other firms achieving turnover growth of 62.85% (Firm 8), 58.87% (Firm 4), and 44.77% (Firm 7).
- The highest employment growth was 97.56% (Firm 10), 78.23% (Firm 8), and 60% (Firm 4). This was followed by 52.37% (Firm 12), 44% (Firm 2), and 42.06% (Firm 6)

Furthermore, Table 6.1 identifies the year-on-year growth achieved in turnover and employment to determine if consistent, sustained growth was achieved by firms, with the findings demonstrating:

- Eight firms achieved year-on-year growth in both turnover and employment growth (Firm 1, 2, 4, 7, 8, 10, 12, 15).
- Five firms achieved year-on-year growth in turnover but not employment growth (Firm 5, 9, 11, 13, 14).
- One firm achieved year-on-year employment growth (Firm 6).
- Three firms (Firm 3, 16, 17) did not achieve year-on-year growth in either turnover or employment growth, however, turnover and employment growth was achieved in some of the three years examined, thus affirming the non-linear nature of growth so frequently evidenced in the literature (Blackburn and Kovaleinen 2009; Hansen and Hamilton 2011; Storey 2011).

The positive findings indicate that 10% of the sample fall within the OECD definition of high-growth firms, clearly demonstrating female owner-managers achieve high-growth in terms of both turnover and employment growth, challenging previous studies indicating that female-owned firms are less growth-orientated and achieve low firm growth. Further, it reinforces the multidimensional nature of firm growth, necessitating the use of more than one growth measure to obtain a real understanding of growth in female-owned firms. The high-growth firms are now profiled to identify the key characteristics female

owner-managers, their firms and strategic-related activities most influential on firm growth.

6.2 Characteristics of High-Growth Female Owner-Managers

The findings from the study of 176 firms (herein referred to as the overall study) demonstrate that a selection of female owner-manager characteristics, specifically age, education, prior employment experience in the sector in which the firm is currently operating and having held a managerial position had a statistically significant influence on firm growth. Table 6.2 illustrates how these select higher growth female-owner manager characteristics emerge through the profiling of high-growth female-owned firms.

Table 6.2: Characteristics of High-Growth Female-Owners

| Firm | Age | Education | | Prior Employment Experience | | |
|---------|-------|--------------------------|--|-----------------------------|----------------------------|--------------------|
| | | <i>Educational Level</i> | <i>Educational Discipline</i> | <i>Same sector</i> | <i>Managerial Position</i> | <i>Other Firms</i> |
| Firm 1 | 18-34 | Postgraduate | Business | Yes | Yes | No |
| Firm 2 | 35-44 | Third | Business | Yes | Yes | No |
| Firm 3 | 35-44 | Postgraduate | Business | Yes | Yes | No |
| Firm 4 | 35-44 | Postgraduate | Arts, Humanities, Social Science | Yes | Yes | No |
| Firm 5 | 35-44 | Postgraduate | Business | Yes | Yes | Yes |
| Firm 6 | 35-44 | Third | Business | No | Yes | No |
| Firm 7 | 35-44 | Third | Business | No | Yes | No |
| Firm 8 | 18-34 | Postgraduate | Science & Engineering | Yes | Yes | No |
| Firm 9 | 18-34 | Third | Science & Engineering | Yes | Yes | No |
| Firm 10 | 35-44 | Third | Business | No | Yes | No |
| Firm 11 | 35-44 | Third | Education | Yes | No | No |
| Firm 12 | 45-54 | Third | Science & Engineering | Yes | Yes | No |
| Firm 13 | 35-44 | Postgraduate | Business | No | Yes | No |
| Firm 14 | 18-34 | Postgraduate | Education | Yes | Yes | No |
| Firm 15 | 45-54 | Third | Science & Engineering | No | Yes | Yes |
| Firm 16 | 45-54 | Postgraduate | Science & Engineering | Yes | No | Yes |
| Firm 17 | 35-44 | Third | Business | Yes | Yes | No |

The overall study clearly demonstrated younger, female owner-managers aged 18-34 and 35-44 achieved higher firm growth, reflected in the profile of high-growth firms for the most part. Nine high-growth female owner-managers were aged 35-

44 (Firm 2, 3, 4, 5, 6, 7, 10, 11, 13), with a further four aged 18-34 (Firm 1, 8, 9, 14). The smallest proportion was represented by those aged between 45-54 (Firm 12, 15, 16). No high-growth female owner-managers were 55 or over. Female owner-managers aged 35-44 were most prevalent in the profile of high-growth firms, with the notable absence of older female-owner-managers (those aged 55+) suggesting firm growth declines with age. Although there is a prevalence of high-growth female owner-managers aged 35-44, also noted is the presence of those aged 18-34 and 45-54, suggesting high-growth is achieved by female owner-managers at different stages. For those achieving high firm growth at an older stage, it could perhaps be due to female owner-managers starting their firms at a later stage and consequently achieve growth at a later stage. It may also be attributed to females taking time out of their firms to balance family demands, thus delaying firm growth by choice. In contrast, younger female owner-managers achieving firm growth may not have taken this time to balance family demands. Moreover, the early achievement of high firm growth could be related to the higher educational levels, educational disciplines of younger females and industry sectors in which they operate given that younger owner-managers are more likely to operate in high-growth sectors (Storey and Greene 2010). Age should be recognised as an indicator of high firm growth by support agencies; however, a need to provide training that appropriately meets the differing age profiles of female owner-managers should be taken into account along with the stage of firm development, educational levels, educational disciplines and industry sector.

The overall study indicated female owner-managers with third level education, in non-technical disciplines achieved higher firm growth. All seventeen high-growth female owner-managers had completed third level education, with eight having completed postgraduate education (Firm 1, 3, 4, 5, 8, 13, 14, 16), reinforcing the findings of the overall study that education is influential on firm growth. Those aged 18-34 and 35-44 represented the highest proportion having completed postgraduate education. The most prevalent discipline pursued by high-growth female owner-managers was business (nine), followed by five having completed

science and engineering”. While this is positive, given that in general studies report that traditionally females do not pursue such disciplines, the profile of high-growth firms show a lack of technical disciplines – perhaps a manifestation of earlier influences on female students and their career plans. The lowest proportion of high-growth female owner-managers was represented by those having pursued arts, humanities and social science (one) and education (two).

The emerging educational profile of high-growth female owner-managers show high educational levels and educational disciplines such as business and science and engineering to an extent, are distinguishable features of high-growth firms and accordingly have implications. In Ireland, in the younger age category of 18-24, there is a significantly higher percentage of female students than there are male students (41% compared to 30%), suggestive of a larger pool of talented females within the population in future years (Fitzsimons and O’Gorman 2012) requiring support in terms of third level education and the type of educational disciplines they pursue. Technical educational disciplines should be highlighted and promoted amongst females at the early stages of their education and careers given that technical sectors are those resulting in higher firm growth.

The overall study indicates having sector and managerial experience has a significant influence on higher firm growth, reaffirmed in the profile of high-growth firms, whereby the existence of same sector experience was clearly evident. Twelve of the seventeen female owner-managers had experience in the same sector where their firm is currently operating (Firm 1, 2, 3, 4, 5, 8, 9, 11, 12, 14, 16, 17), aligning with previous studies (Storey 1994; Dobbs and Hamilton 2007; Fadahunsi 2012). Of note, firms operating in feminised sectors such as professional services, retail, and education and training reflected the sectors where females are frequently reported to be previously employed (Aylward 2007; Brown *et al* 2007; Marlow *et al* 2009; Diaz-Garcia and Brush 2012). In addition, it is interesting to note that high-growth female owner-managers operating in non-feminised industry sectors, such as ICT and manufacturing, despite not having prior experience, nevertheless started firms in these sectors- a positive outlook for

female owner-managers when so often it is reported that female owner-managers usually do not start firms in these sectors. This echoes the findings regarding the education of female owner-managers whereby a concentrated effort is needed to encourage younger females to pursue more technical rather than non-technical discipline to gain exposure to such highly growing industry sectors. Greater experience in these areas should result in an increased number of females starting firms in these areas.

Fifteen of the seventeen high-growth female owner-managers held managerial positions in their previous employment, reaffirming the overall study and supporting previous studies that managerial experience has a positive influence on firm growth (Menzies *et al* 2003; Audretsch 2012). These findings point to occupying managerial positions in previous employment is a key distinguishing characteristic of those running female-owned high-growth firms. Of consequence there is a need to address the career positions occupied by females in their employment as it may influence high firm growth. Support agencies should consider providing managerial training to female owner-managers (without managerial experience) at start-up so as to equip them with the necessary managerial skills to facilitate firm growth. Moreover, support agencies should assess the level of managerial experience of females to ascertain whether further managerial training will benefit growth of the firm.

While motivation for business start-up did have a significant influence on small firm growth in the overall study its investigation in the seventeen high-growth firms should shed some light on the prevalence of positive or negative motivations amongst those operating high-growth firms. It is worth noting pull factors were more prevalent amongst those establishing high-growth firms, with fifteen high-growth female owner-managers starting their firms for positive reasons, echoing previous studies (Liao *et al* 2003; Wiklund *et al* 2003; Dobbs and Hamilton 2007; Doern 2009). However, also worth noting is the presence of “push” factors amongst two high-growth firms which in some way debunks the perception that it is only positive motivations that result in high firm growth. This is particularly

relevant in the current environment whereby female owner-managers are more likely to establish firms due to negative “push” factors, i.e. being made redundant, therefore this is a positive message that high firm growth can be achieved in adverse situations. Thus it is how female owner-managers are enabled and facilitated to achieve firm growth that becomes more important than their initial motivations for business start-up.

Similar to motivations for business start-up, the overall study showed that having experience in starting other firms did not have a significant influence on firm growth, mirrored in the profile of high-growth firms where only two female owner-managers (Firm 5, 15) had experience in starting other firms. This was an anticipated finding given the low percentage of female owner-managers in the overall study with previous experience in starting other firms. Perhaps this finding emerges because overall females represent fewer start-ups firms in general. However, it is interesting to note that in spite of not having experience in starting other firms it did not restrict or discourage female owner-managers in starting their current firms and achieving high firm growth.

In summary, the most distinguishable characteristics of high-growth female owner-managers are age, education, prior experience in the same sector and having held managerial positions. Given this analysis, high-growth female owner-managers are likely to be under 45, highly educated in educational disciplines such as business and science and engineering. They have previously held managerial positions and have sector experience. The detailed description of female owner-manager characteristics partially assists in understanding high-firm growth; however, with a view to developing a more holistic and integrated profile, it is necessary to consider these characteristics in conjunction with high-growth female-owned firm characteristics.

6.3 High-Growth Firm Characteristics

The overall study concluded that female-owned firm characteristics, specifically industry sector, firm age and nature of ownership significantly influenced firm

growth and hence attention must be afforded to them in extending the profile of high-growth firms to develop the next generation of high-growth female-owned firms, which need to be considered when devising support interventions.

Table 6.3: Profile of High-Growth Female-Owned Firms

| Firm | Industry Sector | Firm Age | Nature of Ownership |
|---------|------------------------|---------------|---------------------|
| Firm 1 | Professional Services | 3-5 years | Team |
| Firm 2 | Food and Drink | 3-5 years | Team |
| Firm 3 | Professional Services | 3-5 years | Solely Owned |
| Firm 4 | Health | 6-10 years | Solely Owned |
| Firm 5 | ICT | 3-5 years | Solely Owned |
| Firm 6 | Manufacturing | 6-10 years | Team |
| Firm 7 | Manufacturing | 6-10 years | Team |
| Firm 8 | Food and Drink | 6-10 years | Team |
| Firm 9 | Manufacturing | 6-10 years | Team |
| Firm 10 | ICT | 6-10 years | Team |
| Firm 11 | Education and Training | 6-10 years | Team |
| Firm 12 | Food and Drink | Over 10 years | Solely Owned |
| Firm 13 | Health | Over 10 years | Team |
| Firm 14 | Education and Training | 3-5 years | Solely Owned |
| Firm 15 | ICT | 6-10 years | Team |
| Firm 16 | Food and Drink | Over 10 years | Solely Owned |
| Firm 17 | Professional Services | 6-10 years | Team |

The seventeen high-growth firms are represented across a diverse range of industry sectors, both non-feminised (i.e. food and drink, ICT, manufacturing) and feminised sectors such as education and training, professional services, health), reflecting the overall study and dispelling some findings which in some ways diminish the potential that exists for firm growth in certain sectors i.e. feminised sectors. The food and drink (Firm 2, 8, 12, 16) sector emerged as the most prevalent amongst the profile of high-growth female-owned firms, followed by ICT (Firm 5, 10, 15), manufacturing (Firm 6, 7, 9) and professional services (Firm 1, 3, 17). Both health (Firm 4, 13) and education and training (Firm 11, 14) sectors were represented by two firms.

The age of high-growth firms operating in the food and drink sector varied between 3 years and over 10 years, with an equal proportion (two) being solely and owned and managed by teams. In further contextualising the firms operating in this sector, they were owned and managed by a majority having completed

postgraduate levels of education in science and engineering disciplines, thus suggesting that industry sector choice may reflect their education. Moreover, the dominance of postgraduate levels of education in science and engineering may well possibly be a contributor to high firm growth in the sector and, thus, should be recognised as a key indicator for high-firm growth. Firm growth across this sector was consistent in terms of both turnover and employment whereby three of the four firms (Firm 2, Firm, 8, Firm 12, Firm 16) achieved year-on-year growth in both turnover and employment growth. This sector also achieved high levels of turnover (76.33%- Firm 10) and employment (78.23%- Firm 8) growth. Given the importance of the food and drink sector for the Irish economy, this positive finding highlights this sector as a high-growth potential sector and should be supported appropriately.

The ICT sector was represented by three high-growth female-owned firms (Firm 5, 10, 15), all of which were young firms in operation for less than 10 years, with two being owned by teams (Firm 10, 15), having completed science and engineering and business as their educational disciplines. While younger high-growth firms were more prevalent in this sector it was interesting to note that none were owned by female owner-managers aged 18-34, instead aged 35-44 and 45-54. On one level this could be attributed to females starting firms at a later stage, a point previously alluded to, or perhaps on another level, it is questionable whether it takes a more prolonged period of time for females to achieve high-firm growth in a predominantly male-dominated industry - an issue that warrants further investigation in future studies. Nevertheless, female-owners managers (without prior sector experience) operating in the ICT sector represented the highest turnover (Firm 5-88.26%) and employment growth (Firm 10- 97.56%) of all of the seventeen high-growth firms profiled, with two achieving year-on-year growth in both turnover and employment (Firm 5, 15), highlighting that recognition must be given to the firm growth achieved in this sector, given the firms are younger and less well established than in other industries.

Three high-growth female-owned firms (Firm 6, 7, 9) operated in the manufacturing sector for 6-10 years and were all owned and managed by teams. The profile of the female owner-managers in this sector is depicted in the main as those aged 35-44, having pursued business as their educational discipline and occupying managerial positions in their previous employment, albeit not in the same sector. Year-on-year firm growth varied across this sector with one firm (Firm 6) achieving year-on-year growth in employment, one in turnover (Firm 9) and the remaining firm (Firm 7) achieving growth in both measures. While high turnover (Firm 6- 30.34%, Firm 7- 44.77%, Firm 9-39.23%) and employment growth (Firm 6- 42.06%, Firm 7- 32.61%, Firm 9-20.01%) was achieved, there was a noticeable difference when compared to other sectors, specifically food and drink and ICT, where turnover and employment growth were significantly higher. This could perhaps be the result of the competitive international market in the manufacturing sector which in turn has led to the decreasing presence of the manufacturing sector in Ireland. Accordingly, in the provision of supports it is necessary to consider whether firm growth is sustainable for firms operating in the manufacturing sector. On a positive note, similar to the ICT sector, it is noteworthy that female owner-managers are achieving high firm growth in a traditionally male-dominated sector, bringing to the fore whether gender influences firm growth or are female owner-manager characteristics combined with firm characteristics more influential.

Non-feminised industry sectors in the profile of seventeen high-growth firms demonstrated the most consistent year-on-year firm growth for both measures, achieving the highest turnover and employment growth of all firms. Two sectors in particular emerged, namely the ICT and the food and drink sector, operated by highly educated, female owner-managers aged 35-44. There was also a higher incidence of teams in these firms. The contribution of high-growth firms operating in non-feminised sectors is significant, and a concentrated effort is required to actively pave the way for females to enter such industries. One such way of doing this is to encourage female entrepreneurs actively to pursue non-technical

disciplines as the first step in gaining familiarity with high-growth achieving sectors.

Three feminised sectors were apparent in the profile of high-growth firms, specifically education and training, professional services and health. Two high-growth firms (Firm 11, 14) operating in education and training, for 3-5 and 6-10 years respectively. Both female owner-managers had completed education as their educational discipline, having gained sector experience, evidently featuring in their sector choice. High turnover (Firm 11- 42.62%; Firm 14- 27.02%) and employment (Firm 11-23.24%; Firm 14- 27.82%) growth were achieved by these firms; however it is important to note that sustained year-on-year growth was achieved for only turnover, and not employment growth.

The professional services sector was also represented by three high-growth female-owned firms (Firm 1, 3, 17), in operation for less than 10 years, owned and managed by female owner-managers having completed business as their educational discipline. Firm growth across this sector was not consistent on a year-on-year basis, whereby only one firm (Firm 1) achieved growth in both turnover and employment growth over the three-year period of the study. The other two firms (Firm 3, Firm 17) did not achieve consistent growth in either of the measures over the three year period with one firm (Firm 3) representing the lowest turnover (20.90%), just above the criteria set out by the OECD, and also the lowest employment growth (10%) of all of the high-growth firms. The other firm (Firm 17) achieved high firm growth in turnover (41.26%) and employment (28.57%).

The remaining two firms represented the Health sector (Firm 4, Firm 13), in operation for 6-10 years and over 10 years respectively, operated by female owner-managers aged 35-44, with postgraduate education, in arts, humanities and social science and business. High turnover (Firm 4- 58.87%, Firm 13- 60%) and employment (Firm 4- 42.85%, Firm 13- 37.22%) growth were achieved in both of these firms, with one (Firm 4) achieving year-on-year growth over the three years

for both measures while the other (Firm 13) achieved year-on-year growth for turnover.

This study acknowledges that feminised sectors achieve high-growth, albeit not as consistent as non-feminised sectors, and accordingly, it is important to recognise the contribution of high-growth female-owned firms operating in such sectors. First, these sectors are where the vast number of female owner-managers traditionally and currently operate in (Henry and Johnston 2003; Aylward 2007; Diaz-Garcia 2012), and, secondly, evidence high levels of turnover and employment growth. Thus they should be acknowledged and supported in an appropriate manner. It may be of value to assess firms operating in feminised sectors, discovering the reasons why year-on-year firm growth is not consistently achieved. Could it simply be related to external factors, i.e. the current demand for their products service? or perhaps this inconsistency in firm growth is due to females taking time out of their firms to balance family demands, thus impacting on firm growth at different stages? If this is the case, given the lower incidence of team ownership in these sectors when compared to non-feminised sectors, it may well be that when females take time out from their firm, firm growth is negatively affected.

The profile of high-growth female-owned firms was dominated by younger firms, specifically those in operation for 6-10 (14 firms) and 3-5 years (five firms), reflecting the findings of the overall study, and aligning with previous studies (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Glancey 1998; Dobbs and Hamilton 2007; Fadahunsi 2012). Those in operation for 6-10 years evidenced the highest and most consistent year-on-year turnover and employment growth in comparison to the youngest (3-5 year) and oldest firms (over 10 years). Team ownership was also more prevalent across this age category of 6-10 years, along with the highest educational levels of female owner-managers.

The youngest high-growth firms (3-5 years) were represented across a diverse sector range of sectors, professional services, food and drink, ICT and education

and training, with feminised industry sectors being more apparent. Similarly, those in operation for 6-10 years, ranged across numerous sectors, however, of note, non-feminised sectors, namely manufacturing and ICT, emerged as the most prevalent in this firm age profile. The oldest firms (in operation for over 10 years) operated in both feminised and non-feminised sectors, namely food and drink (two) and health (one).

The prevalence of firms in operation for 6-10 years should be noted as the highest achievers in terms of turnover and employment growth, however, overall firm age of high-growth firms is quite diverse, ranging between 3 and those over 10 years and, thus, it is difficult to isolate any one particular firm age category that points to high firm growth. Thus, it is important to consider firm age in conjunction with other characteristics such as educational levels and nature of ownership given their noted presence in the profile of high-growth firms in operation for 6-10 years.

The findings of the overall study in relation to the nature of ownership were endorsed in the profile of high-growth firms where eleven high-growth firms were operated and managed by teams, clearly distinguishing team ownership as a key characteristic of high-growth female-owned firms, concurring with previous studies (Kinsella *et al* 1994; Storey 1994; Gilbert *et al* 2006; Storey, 2011). This is a very positive finding given that studies show that females typically owned and manage firms alone (Ndemo and Maina 2007; Ruane and Sutherland 2007; Roomi *et al* 2009). Team ownership was most common amongst those having pursued science and engineering educational disciplines, operating firms for 6-10 years, in non-feminised industry sectors. The prevalence of team ownership amongst this cohort may be due to the educational discipline pursued where business acumen and knowledge may not have been gained through science and engineering. As a result they may build a team whereby the necessary skills can be acquired to grow the firm. Thus, the composition of the team should be considered along with female owner-managers' motivations' for team ownership.

While firm size did not emerge from the overall study as having a significant influence on firm growth, it is interesting to examine this across the profile of high-growth female-owned firms, given the importance of employment to the Irish economy. Sixteen high-growth firms employed between 11-50 employees (categorised as small firms by the EU), with only one emerging as a medium-sized firm. Year-on-year employment growth was achieved by nine of the seventeen firms, with those operating in the food and drink and ICT sector experiencing the most consistent year-on-year growth. Small firms in the ICT sector also experienced the highest turnover growth. The profile of high-growth firms emerging shows that small rather than large high-growth female-owned firms achieved high firm growth and, thus, should be recognised as a major source of employment and revenue growth, concurring with the majority of studies (Kinsella *et al* 1994; Storey 1994; Barkham *et al* 1996; Glancey 1998; Ahl and Marlow 2012; James 2012). Of note, in identifying the optimal size of high-growth female-owned firms, note should be taken of the exclusion of firms with fewer than 10 employees in the calculation promoted by the OECD (2008). Thus, such firms were not considered as part of the investigation of the high-growth female-owned firms even though they had achieved high firm growth.

The analysis of high-growth female-owned firm characteristics has extended the development of the profile of high-growth firms and when combined with the characteristics of high-growth female owner-managers presents a holistic and integrated perspective on high-growth firms. The developing profile now characterises high-growth firms as small firms, owned and managed by teams operating for less than 10 years in non-feminised industry sectors. These high-growth firms are owned and managed by highly educated females, less than 45 years of age, from business and science and engineering educational backgrounds, with sector and managerial experience.

The final section of this chapter now turns its attention to identifying the strategic-related activities of high-growth female-owned firms to extend and develop this profile even further.

6.4 Strategic-Related Activities of High-Growth Firms

The overall study demonstrates that strategic-related activities - setting growth objectives, completing a formal strategic plan, adopting a prospector strategy and engagement in certain strategic activities influence higher firm growth. Accordingly, these activities are examined with a view to identifying distinguishable strategic-related activities in high-growth female-owned firms depicted in Table 6.4:

Table 6.4: Strategic-Related Activities in High-Growth Firms

| Firm | Growth Objectives | Strategic Plan | Timeframe of Plan | Strategy Type |
|---------|---------------------------|----------------|-------------------|---------------|
| Firm 1 | Financial | Yes | 3-5 yrs | Combination |
| Firm 2 | Non-financial | Yes | 1-2 yrs | Prospector |
| Firm 3 | Financial | Yes | 3-5 yrs | Prospector |
| Firm 4 | Financial | Yes | 1-2 yrs | Combination |
| Firm 5 | Non-financial | Yes | 3-5 yrs | Prospector |
| Firm 6 | Financial | Yes | 1-2 yrs | Prospector |
| Firm 7 | Financial | Yes | 6-10 yrs | Combination |
| Firm 8 | Financial | Yes | 3-5 yrs | Prospector |
| Firm 9 | Financial | Yes | 3-5 yrs | Prospector |
| Firm 10 | Financial | Yes | 3-5 yrs | Prospector |
| Firm 11 | Non-financial | Yes | 3-5 yrs | Prospector |
| Firm 12 | Financial | Yes | 6-10 yrs | Analyser |
| Firm 13 | Financial | Yes | 3-5 yrs | Analyser |
| Firm 14 | Financial & Non-financial | Yes | 3-5 yrs | Prospector |
| Firm 15 | Financial & Non-financial | Yes | 1-2 yrs | Prospector |
| Firm 16 | Non-financial | Yes | 1-2 yrs | Combination |
| Firm 17 | Financial | Yes | 1-2 yrs | Prospector |

All seventeen high-growth firms had set out growth objectives. The overall study did not provide evidence of significant differences between firm growth and the type of objectives, however, financial objectives were clearly more prevalent in high-growth firms. Thirteen of the seventeen firms had set out financial growth objectives, with two firms (Firm 14, 15) setting out a combination of financial and non-financial. The remaining four firms (Firm 2, 5, 11, 16) had set out non-financial objectives, operating across feminised and non-feminised sectors. These findings somewhat counterbalance those in previous studies which report female owner-managers placing less emphasis on financial growth objectives (Cliff 1998; Carter *et al* 2003; Weeks 2008; Sirec 2010). High-growth female owner-managers are indeed focused on financial objectives as well as non-financial objectives, in

some part, supporting the findings of other studies (Brush 1992; Rosa *et al* 1996; Roomi *et al* 2009) reporting that high-growth female owner-managers are pursuing both financial and non-financial objectives.

Similar to setting growth objectives, all seventeen high-growth female owner-managers had completed a formal strategic plan, reflecting the overall study and proposing that formal strategic planning is a distinct feature of the strategic-related activities of high-growth female-owned firms, irrespective of industry sector. A 3-5 year plan was most common (amongst nine firms), with a notable presence of 1-2 year plans (six firms) across all industry sectors. Three-five year plans were completed more frequently by firms owned and managed by teams, in operation for 6-10 years in comparison to younger firms which were solely owned. Of note, there was a higher incidence of 3-5 year plans amongst those having completed a business educational discipline in comparison to science and engineering, arts and humanities, and education disciplines. High-growth firms having set out 6-10 year plans (Firm 7 and 12) were operating in the manufacturing sector.

The overall study established that the adoption a prospector strategy resulted in the highest firm growth, reflected in some way in the profile of high-growth female-owned firms. Eleven high-growth firms adopted this strategy, most prevalent amongst female owner-managers aged 35-44, operating in both feminised and non-feminised sectors. A higher incidence of a prospector strategy was evident in firms owned and managed by teams. Further, a combination strategy was adopted by four high-growth firms (Firm 1, 4, 7, and 16), operating across feminised and non-feminised sectors while the remaining two firms (Firm 12 and 13) adopted an analyser strategy in operation for over 10 years in the food and drink and health sector respectively. Of note, none of the high-growth female-owned firms had employed a “reactor” or “defender” strategy”.

Across the profile of high-growth firms, there is no emergent typical pattern of strategy, whereby similar strategies are used across different sectors, and different

sectors adopt similar strategies, which highlights that there is no homogeneity associated with strategy in female-owned high-growth firms. Although prospectors are most dominant, they are not the only strategies adopted and so it cannot be assumed that one strategy is applicable to all firms in all sectors. Support agencies need to be cognisant of this when providing advice on strategy development and implementation, taking account of the stage firm development when devising appropriate strategies.

This study acknowledges the influence of a prospector strategy on firm growth, aligning with previous studies; however, it also highlights the importance of other strategies, specifically combination and analyser strategies, given their presence across the profile of high-growth firms, concurring with previous studies. Due to the differences in the various strategies adopted across the high-growth female-owned firms and the sectors in which they operate, the supports provided by advisers need to be flexible and adjustable to accommodate the diverse needs of high-growth firms.

Strategic activities of high-growth firms in general reflected the overall study where “adding a new product or services” and “selling to a new market”, emerged as the most common activities along with “seeking professional advice”, “research and development” and “operating in international markets”. “Improving ICT” and “expanded marketing activities” were the least common strategic activities.

In extending the research on strategy type and strategic activities, the overall study demonstrated firms adopting a prospector strategy (i.e. the strategy deemed most influential on firm growth) engaged in certain strategic activities resulting in higher firm growth, specifically “operating in international markets”, “improving ICT” and “seeking professional advice”. It is noteworthy that two of these three activities were also adopted by firms having employed a combination strategy, (seeking professional advice, and operating in an international market)

Accordingly, these strategic activities are investigated across the profile of high-growth firms.

High-growth firms having adopting a prospector strategy engaged in each of these strategic activities, albeit at different levels. Emerging as the most common activity, seeking professional advice was evident in eight of the high-growth firms across all industry sectors. Seven high-growth firms were operating in international markets, operating in food and drink (Firm 2, Firm 8), ICT (Firm 5, Firm 10, Firm 15), manufacturing (Firm 6, Firm 9) sectors. Improving ICT was the least common activity amongst four high-growth firms, operating in professional services (Firm 3), ICT (Firm 5, Firm 15) and education and training (Firm 14) sectors.

High-growth firms which adopted a combination strategy engaged in two of these strategic activities, specifically seeking professional advice (Firm 1, Firm 4, Firm 7, Firm 16) and operating in an international market (Firm 4, Firm 7). Similar to prospectors, seeking professional advice was evident across various sectors while “operating in an international market” was evident in health and manufacturing sectors. There was no evidence of “improving ICT” in firms having adopted a combination strategy. It is also worth noting there was no evidence of “seeking professional advice”, “operating in an international market” or “improving ICT” amongst the high-growth firms which adopted an analyser strategy.

Upon reflection of the strategic activities, it is apparent that seeking professional advice is valued amongst high-growth firms, echoing the overall study, reinforcing the need for support agencies to continue their role in providing advice and support. In addition, internationalisation is an activity that needs to be promoted amongst SMEs in Ireland to build a sustainable economy; however previous research has shown that female-owners managers are less likely to internationalise (Ruane and Sutherland 2007; Orser *et al* 2010; Robson *et al* 2012). In this regard, the findings emerging from the profile of high-growth firms are very positive, illustrating in some way this activity is occurring in female-

owned firms. The findings also bring to the fore considerations for the promotion of internationalisation amongst SMEs. As previously alluded to, firms operating in the food and drink, ICT, manufacturing and health were operating in international markets, while firms in the professional services and education and training sectors were not, implying that internationalisation may not be a suitable strategic activity for all firms, but could be dependent on the industry sector in which the firm operates. Given this, support agencies, in promoting internationalisation should assess whether it is an appropriate strategic activity for firm growth.

Improving ICT resulted in higher firm growth in the overall study; however its absence in the examination of the high-growth firms is clearly evident. The benefits of ICT are well-documented in the literature due to the efficiencies that results from such (Feuer *et al* 2002; Forfás 2007), and is an important consideration for any growing firm. It was expected that improving ICT would be a common strategic activity amongst the high-growth firms (given its significant influence on firm growth in the overall study); however, this was not the case, with only certain sectors engaging in this, i.e. the ICT sector. Perhaps this activity is sector driven or is due to the educational disciplines pursued by female owner-managers, whereby previous studies have shown that females are less likely to pursue technical disciplines and operate in non-feminised sectors such as ICT. Although this particular study does not reveal the reasons for this limited activity amongst such high-growth firms, the notable absence may be due to a lack of understanding amongst female owner-managers about the importance and benefits associated with ICT. Consequently it needs to be addressed by support agencies through the provision of training in ICT. Additionally, improving ICT is clearly associated with firms operating in the ICT sector, with its limited presence evident in the other sectors. It is necessary for support agencies to educate and inform female owner-managers through training programmes about the benefits associated with ICT and firm growth. It is essential that these training programmes are streamlined to suit the individual needs of female owner-managers and their firms, taking into account age, education, and the industry

sector in which they are operating, so as to ensure that the ICT training is relevant and appropriate.

The analysis of the strategic-related activities of high-growth firms has presented more specific information on how growth objectives, strategic planning and strategy type are activities influence firm growth, reflecting the overall study and extending the profile of high-growth firms even further. In combining the strategic-related activities with the characteristics of high-growth female owner-managers and their firms, a more holistic and integrated profile of high-growth firms emerge. The developing profile now characterises high-growth female-owned firms as small firms, owned and managed by highly educated females, less than 45 years of age, from business and science and engineering educational backgrounds, with sector and managerial experience. High-growth female-owned firms are young, operating for less than 10 years in non-feminised industry sectors, where team ownership is prevalent. High-growth female-owned firms have financial objectives for growth, setting out short-medium term plans, adopting prospector and combination strategies, actively seeking professional advice and operating in international markets as part of their strategic activities.

6.5 Profiling High-Growth Female-Owned Firms

Concluding from the overall study, in profiling 176 female-owned firms, with further in-depth analysis of seventeen OECD-defined high-growth firms, there are many complexities associated with investigating firm growth (Storey 1994; Dobbs and Hamilton 2007; Wiklund *et al* 2009; Leitch *et al* 2010; Fadahunsi 2012) due to variations that exist in how firm growth is measured, and adding to this complexity, a range of integrated internal factors that influence it (characteristics of female-owner-managers, their firms and strategic-related activities).

Concerning the investigation of small firm growth, the overall study and the profile of high-growth female-owned firms demonstrates firm growth does not necessarily occur consistently, and may not be achieved on a year-on-year basis for all firms in all sectors, supporting previous studies that firm growth is non-

linear in nature (Smallbone *et al* 2009; Blackburn and Kovaleinen 2009; Fadahunsi 2012). However, it is noteworthy to highlight linear growth was evidenced in some high-growth firms, especially those operating in the ICT and food and drink sectors. These findings indicate that when measuring growth it is important to measure and investigate it over a period, and not just at a single point in time so as to provide a truer reflection on what constitutes firm growth in female-owned small firms. Moreover, linear firm growth may be associated with the industry sector in which the firm operates.

Coupled with this, are the considerations for the measurement of small firm growth. The overall study reports small firm growth is most frequently evidenced in two of three measures, specifically turnover and turnover per employee, concluding not all firms will achieve firm growth across all, but rather in some measures, aligning with previous studies (Blackburn and Kovaleinen 2009; Roomi *et al* 2009; Diaz-Garcia and Brush 2012). This is not to discount employment growth, given in its importance to the Irish economy where employment growth was significant for some firms. Moreover, the use of multiple measures (two in this case) was reinforced in the seventeen OECD defined high-growth female-owned firms where some firms achieved high-growth in turnover but not necessarily high employment growth. These findings bring to the fore the importance of using not only multiple measures but also the value that should be placed on the types of measurement, turnover and turnover per employee and employment growth measures, given their contribution to the economy in terms of revenue and employment.

The key findings from the overall study relating to the influence of the characteristics of female owner-managers, their firms and strategic-related activities on firm growth are strongly reflected in the profile of high-growth female-owned firms, developing a more holistic and integrated perspective on what constitutes a high-growth female-owned firm. The emergent profile strongly endorses that firm growth cannot be explained by one particular set of characteristics, specifically related to the characteristics of female owner-

managers, their firms or strategic-related activities, but rather a combination of these factors, as no one set of characteristics emerges as the most distinguishable. Given the high-growth achieved in female-owned firms, and the desire to continue this growth, issues surrounding strategy development and internationalisation are becoming more important in strategic development decisions for aspiring female-owned growth firms. Female owner-managers acknowledge the need, and place considerable value on professional advice to assist in the achievement of firm growth. Therefore, at this juncture it was considered beneficial to identify and ascertain policy representatives' experiences of dealing with female owner-managers seeking to achieve firm growth, and assess the current supports that women owner-managers are able to access to help achieve it. In this context, three policy representatives were consulted to obtain feedback on the findings of the empirical study. A summary document (Appendix C) was presented to representatives from Network Ireland, a City Enterprise Board and Enterprise Ireland, outlining the issues for their consideration.

6.6 Reflections from Policy Representatives on the Internal Factors Influencing Firm Growth, and Relevant Supports

The purpose of this analysis was to identify, from a policy perspective, if common themes relating to female owner-manager and firm characteristics, and strategic-related activities, are emerging based on policy representatives' experiences of working with female-owned high-growth firms. This comparison of both sets of findings serves, in the first instance to identify where the commonalities exist in terms of the internal influences of firm growth. In the second instance, this analysis can ascertain the sources of variations, serving as a basis of determining how supply (policy-makers) and demand (female owner-managers) are aligned in addressing the needs of female owner-managers in achieving firm growth.

The inputs from policy representatives on the type of, and effectiveness of initiatives are also considered in light of the findings, and furthermore how the strengths of current supports can be developed, identifying areas to address the

contemporary growth needs of female owner-managers. Feedback from a policy perspective is considered by investigating their viewpoints on each of the sets of the internal influences on firm growth (female owner-manager characteristics, firm characteristics, and strategic-related activities) which were investigated through the empirical study of the 176 firms. Commentary on the supports currently available is considered to further the design of targeted and focused growth policy for female owner-managers. To allow for consistency with the empirical study, Table 6.5 reiterates the key findings of the study, highlighting whether the experience of policy representatives, in working with female-owned firms, align with the findings. The “+” sign denotes where their experiences align; “-” where their experiences did not align; and “*” indicates where further commentary was received from policy representatives.

Table 6.5: Reflection of Government/Support Agencies on the Empirical Study

| Factors Influencing Firm Growth | Network Ireland | City Enterprise Board | Enterprise Ireland |
|---|------------------------|------------------------------|---------------------------|
| Female Owner-Managers Characteristics | | | |
| Age Female owner-managers aged 18-34 and 35-44 achieved higher firm growth. | (+) | (+) | (+) |
| Education Female owner-managers having completed third level education achieved higher firm growth. | (+) | (+) | (+) |
| Female owner-managers having pursued technical disciplines achieved higher firm growth | (-) | (-) | (-) |
| Prior Employment Experience Female owner-managers having gained prior experience in the same industry sector achieved higher firm growth. | (+) | (+) | (+) |
| Female owner-managers with managerial experience achieved higher firm growth | (-*) | (-*) | (+) |
| Firm Characteristics | | | |
| Industry Sector Female-owned firms operating in non-feminised sectors achieved higher firm growth. | (+*) | (+*) | (+*) |
| Firm Age Female-owned firms in operation for less than 10 years achieved higher firm growth. | (+) | (+) | (+) |
| Nature of Ownership Female owned firms owned and managed by teams achieved higher firm | (+*) | (-*) | (+*) |

| | | | |
|--|-----|-----|-----|
| growth | | | |
| Strategic-Related Activities | | | |
| Strategic Planning Female owner-managers having prepared a formalised 3-5 year strategic plan achieved higher firm growth. | (+) | (+) | (+) |
| Type of Strategy Female owner-managers adopting a prospector strategy achieved higher firm growth. | (+) | (+) | (+) |

Note: the “+” sign denotes when experiences of the agencies aligned with the findings; “-” when their experiences did not align; and “*” indicates when the representative had some further commentary.

6.6.1 Female Owner-Manager Characteristics

All representatives supported the view that younger female owner-managers achieve higher firm growth, more particularly those in the age category of 35-44, mirroring the emergent age profile of the high growth female owner-managers. High educational levels of female owner-managers were also reported, however in the majority of cases, representatives commented that female owner-managers, in their experience, hold degree rather than postgraduate qualifications. Prior employment experience was supported as having a positive influence on higher firm growth, with representatives endorsing the finding that female owner-managers frequently start firms in sectors where they were previously employed. Of note, they stated that female owner-managers who do not have previous sector experience often experience business failure. Representatives agreed previous managerial experience has a positive influence on firm growth; however in their experience they did not encounter many females who have held such positions in their previous employment.

6.6.2 Female-Owned Firm Characteristics

All representatives strongly agreed that females operating firms in non-feminised industry sectors achieve higher firm growth when compared to those operating in feminised sectors. Based on their experience, representatives commented on how females who start firms in feminised sectors have very different motivations for business start-up, operating “lifestyle” businesses. These cohorts of female owner-managers do not have the same aspirations for growth as those operating in non-feminised sectors, who were recognised as being more ambitious and growth-

oriented. All were in agreement that female-owner-managers operating in non-feminised sectors recognise the growth potential of the industry and strive to achieve firm growth. The value of team ownership was reconfirmed through the experience of the policy representatives, deemed a necessity for firm growth, however representatives commented that team ownership is not particularly prevalent in female-owned firms, apparent only in non-feminised sectors.

6.6.3 Strategic-Related Activities

The strategic behaviour of female owner-managers was substantiated by policy representatives whereby all agreed that female owner-managers are very proactive in terms of firm growth, however they are risk adverse. Female owner-managers plan for slower firm growth, actively engaging in strategic planning in adopting this approach. Representatives indicated female owner-managers make a conscious decision about firm growth, and as a result various growth objectives are set out, dependent on a range of issues, i.e. the profile of the female owner-manager; the stages they are at in their personal lives; the sector in which they operate; and the stage of business development which they are at. Female owner-managers operating in certain sectors (i.e. feminised sectors) realise growth potential is limited and do not aspire to grow beyond a certain level. Females operating in non-feminised sectors have greater ambition and set out “*more serious*” (Network Ireland) objectives for firm growth. Representatives agreed that strategic-related activities such as internationalisation, seeking professional advice and improving ICT resulted in higher firm growth, however, of note, based on their experience, only a small proportion of female owner-managers are pursuing internationalisation as part of their growth strategy, highlighting this as an area where supports are required.

It is positive to observe that the experience of policy representatives in working with female owner-managers support the findings of the study. This provides evidence of the alignment between supply and demand, reinforcing the key themes from the empirical study relating to female owner-manager and firm characteristics, and strategic-related activities. The role of age, education, prior employment experience, industry sector and team ownership emerge, along with

the substantiation of the strategic-related activities of female owner-managers. This consultation adds credibility to the robust and rigorous research completed, evidencing that the empirical study completed is reflective of the experience of policy representatives whom work closely with growing female-owned firms.

6.6.4 Feedback on Current and Future Policy Supports for Female-Owned Firms

Representatives were also asked to provide feedback on which programmes female owner-managers most commonly access to support the achievement of firm growth, and also comment on the effectiveness of these programmes. Specific programmes identified included:

- Competitive Feasibility Funding for Females
- Going for Growth
- Networks for Female Entrepreneurs (run by city and county enterprise boards at a local, regional and national level)
- New Frontiers
- Leader
- Leadership4Growth

All of these programmes were recognised by the policy representatives as being very effective in terms of the support they offer. More specifically, the Going for Growth and Leadership4Growth initiatives were viewed in a very positive light where representatives indicated that these programmes “*open new doors*” (City Enterprise Board) for female owner-managers with potential to grow. These programmes provide “*the exact kind of support that females need in terms of grants, mentoring, and advice*” (Enterprise Ireland) and more importantly provide “*the opportunity to network and make new contacts that will benefit their firm*” (City Enterprise Board). Representatives commented that these programmes are “*most suitable for very driven women*” (Network Ireland) who are “*stuck at one point in their business*” (City Enterprise Board), needing this type and level of support to move them and their business to the next level. Such programmes have the “*ability to move female owner-managers on to the next stage of business development*” (City Enterprise Board). Based on the experience of policy representatives, female owner-managers having completed these programmes had

“*very positive experiences*” (Network Ireland), identifying them as “*excellent programmes*” (City Enterprise Board; Enterprise Ireland). All representatives strongly supported these programmes in their ability to support the profile of high-growth firms emerging from this study in terms of professional capability and personal competency.

Representatives were also asked to consider the best way to support growing female-owned firms in the future. Representatives highlighted a gap in the current supports offered to female owner-managers at a local, regional and national level. They stated that a significant majority of female owner-managers they had dealt with had availed themselves of all the supports available to them at a local and regional level (City and County Enterprise Boards), however they had not reached the stage of development meeting the eligibility criteria for support from Enterprise Ireland (national level). Thus, this cohort of female owner-managers are “*stuck in a vacuum*”, having “*no options in terms of support*”. Representatives recommended that “*additional resources and funding are required at local and regional levels to bridge this gap*” (City Enterprise Board), providing strategy development support to this cohort of female owner-managers.

Furthermore, representatives noted that although many female owner-managers are achieving high turnover growth and demonstrate strong indications of growth, they are not eligible for support from Enterprise Ireland due to the fact that they are not meeting the employment number criterion set out - an issue which needs to be addressed. Representatives recommended that perhaps Enterprise Ireland need to re-assess its eligibility criteria with regard to this issue.

6.7 Conclusion

This chapter has extended the empirical study even further, providing a deeper analysis of high-growth female-owned firms, presenting a holistic and integrated profile of high-growth female-owned firms, as defined by the OECD. This emergent profile demonstrates how a combined set of distinguishable female owner-manager and firm characteristics and strategic-related activities influence

high firm growth, strongly endorsed through the reflections on policy representatives. Furthermore, the feedback received from policy representatives offered insights into the current and future supports required to promote firm growth in female-owned firms. This information provides important and useful insights that can be used by policy makers, providing for a number of recommendations which will be discussed in further detail in Chapter Seven.

Chapter Seven: Conclusions, Policy and Research Implications

7.0 Introduction

The rationale for this research originated from the lack of empirical studies focusing specifically on firm growth in female-owned firms within the SME sector, more particularly in the Irish context at a time when government policy is increasingly focused on increasing the quantity and quality of female owner-managers (Fitzsimons and O’Gorman 2012; Ireland, Department of Jobs, Enterprise and Innovation 2013). Therefore, the theoretical and empirical findings of this study will advance the development of research for female owner-managers, practitioners, academia and policymakers alike.

There are many complexities associated with investigating the determinants of small firm growth and measuring small firm growth, with many studies advocating that a range of internal factors influence it (Storey 1994, 2011; Davidsson 2006, Morrison 2006; McKelvie and Wiklund 2010; Fadahunsi 2012). Such studies guided the literature review and the empirical study, focusing on investigating how a range of female owner-manager characteristics (age, motivation for business start-up, education, and prior employment experience), firm characteristics (industry sector, firm age and size, nature of ownership) and strategic-related activities (setting growth objectives, strategic planning, and type of strategy) influence firm growth. In essence, the review evaluated what is already known about the internal factors influencing firm growth, and also identified areas requiring further investigation in the empirical study amongst female owner-managers. The research methodology along with the analysis of the findings has been presented, and accordingly, this chapter is dedicated to a discussion of the conclusions and their implications for policy and future research. To recap the study set out to address three key objectives:

- **Research Objective One:** To investigate how a range of female owner-manager characteristics significantly influence firm growth.

- **Research Objective Two:** To investigate how a range of female-owned firm characteristics significantly influence firm growth.
- **Research Objective Three:** To investigate how a range of strategic-related activities significantly influence firm growth.

This chapter will discuss the main contributions from a theoretical and then empirical perspective. The richness and depth of small firm growth research has the potential to add value to existing female growth studies which to date are limited, and focus mainly on profiling growth firms as opposed to understanding why and how they grow.

7.1 Contributions of the Study

With respect to the theoretical findings, this study has linked the mainstream firm growth literature with that of female growth to provide a more comprehensive understanding of the key topics worthy of investigation in small firm growth determinants. The study demonstrates the scarcity of in-depth studies of established female owner-managers and has unearthed important issues for consideration. The study shows that the mainstream literature on small firm growth has merit in its application to female growth studies, highlighting similarities in the factors that influence firm growth from both the mainstream and female growth perspective. Such findings add value in terms of their contributions and applications for further study in single gender studies.

Furthermore, from a theoretical perspective, the study has helped to address the lacuna of research surrounding the factors that influence firm growth in female-owned firms, highlighting the underlying female owner-manager and firm characteristics and strategic-related activities. New knowledge developed through this study helps to fill the lacuna pertaining to the female growth literature. This is especially true in the Irish context where this specific study has developed an in-depth profile of female owner-managers, providing a more holistic and integrated perspective of growth in established female-owned firms in Ireland.

The study also highlights the necessity to use multiple measures when investigating growth in female-owned firms to capture the multi-dimensional nature of firm growth, reinforcing the mainstream literature and highlighting the importance of using multiple measures in further studies on firm growth in the female context.

In extending the contributions of the study, the empirical study of 176 firms coupled with the in-depth profile of seventeen high-growth firms presents a very contemporary picture of high-growth firms in Ireland. The results of the empirical study highlight the importance and the influence of three sets of characteristics related to female owner-managers, their firms and strategic-related activities on small firm growth.

A number of female owner-manager characteristics were investigated in the empirical study, having emerged from the review of the literature as influential on firm growth. Specifically, age, education, sector and managerial experience had a statistically significant influence on high firm growth in the overall study and the profile of high-growth firms. In relation to age, female owner-managers aged 18-34 and 35-44 achieved higher firm growth - the latter being most prevalent across the profile of high-growth firms. This proposes high firm growth is most likely to occur amongst female owner-managers aged 34-55 and age should be considered as an indicator of firm growth and targeted accordingly. The importance of high levels of education was endorsed in the empirical study sending a positive message that more highly educated females achieve higher firm growth. In extending the influence of education on firm growth, the study clearly demonstrates female owner-managers, having completed technical disciplines achieve higher firm growth and accordingly require attention given the continued low percentage of females completing these disciplines. In addition, having gained same sector and managerial experience were positive indicators of firm growth, indicating that females, perhaps due to their higher levels of education are occupying managerial positions in their prior employment which in turn has a positive influence on firm growth. Coupled with this is that females start firms at

a later age and, thus, may be more likely to have more senior managerial experience.

Motivation for business start-up did not emerge from the empirical study as having a significant influence on firm growth and so it is questionable how realistic it is to use the dichotomy of push or pull factors as a means of determining why individuals start a new business and moreover their use as a determinant of firm growth. Given that female owner-managers will have been exposed to other intervening factors when growing their firms they may not be able to isolate their motivation for start-up at this stage. Moreover, experience in starting other firms did not have a significant influence on firm growth, endorsed in the profile of high-growth, evident only in two firms. This is perhaps attributable to the overall lower level of business start-up amongst females frequently reported.

Female-owned firm characteristics examined in the empirical study demonstrate that industry sector, firm age and nature of ownership have a positive influence on firm growth. Female owner-managers operating in non-feminised sectors achieved the highest firm growth, specifically turnover and turnover per employee, suggesting firms operating in non-feminised industry sectors may be achieving “jobless growth”, placing more emphasis on turnover and turnover per employee as measures of firm growth. Of note are the firms operating in the ICT sector. Higher turnover growth was confirmed across non-feminised industry sectors in the profile of seventeen high-growth firms, also evidencing high employment growth, particularly in the food and drink and ICT sectors.

Feminised industry sectors (e.g. retail, professional services) did not emerge from the overall study as having a significant influence on firm growth; however, their presence in the profile of seventeen high-growth firms and the reported prevalence of female owner-managers operating in these sectors warrants them further consideration. The profile of the seventeen high-growth firms indicated high firm growth was achieved in feminised sectors, dispelling in some way these sectors as

lower growth achieving sectors previously alluded to and their importance should not be minimised, especially in terms of employment growth, where feminised industries may be more labour intensive than non-feminised industries. The theoretical and empirical study highlights industry sector as an issue to be considered. Given the significant impact of industry sector on firm growth it calls into question how firms are categorised. This is an issue proving to be difficult as the literature is ambiguous, with little guidance on industry sector categories rendering it difficult to investigate industry sector in the female context.

Firm age also positively influenced firm growth in the overall study and profile of high-growth firms where younger firms in operation for less than 10 years achieved the highest firm growth and should be supported and targeted accordingly. Furthermore, female-owned firms owned and managed by teams in the overall study achieved higher firm growth and a strong endorsement of this was the prevalence of team ownership in the profile of high-growth firms. To date, little attention has been given to the influence of the nature of ownership in female-owned firms on firm growth, thus this finding is important in contributing to filling the void, adding an interesting dimension. This presents an interesting area to extend research on to gain a more detailed, in-depth insight into team ownership in female-owned firms.

Firm size did not emerge as having a statistically significant influence on firm growth and of consequence it is important to reassess how firm size determines the level of support provided. This necessitates the need to consider different types of firm growth (i.e. turnover and turnover per employee growth), looking beyond firm size and considering other factors such as the age of female owner-managers, firm age, and industry sector.

The contribution of the empirical study on the strategic-related activities of female-owned firms is perhaps the most interesting given the scarcity of research on this topic in the female context. This study concludes that setting growth objectives, completing a formalised 3-5 strategic plan, employing a prospector or

combination of strategies through various strategic activities positively influences firm growth in female-owned firms. Although the overall study did not evidence statistically significant differences between the type of objectives and firm growth, financial objectives were more widespread amongst the profile of high-growth firms, highlighting financial objectives as a distinctive feature of high-growth female-owned firms, somewhat displacing previous research that female owner-managers place emphasis on non-financial objectives, and instead are focused on financial growth objectives for their firms.

Completing a formalised 3-5 year strategic plan is positively linked with firm growth, clearly reflected in the profile of high-growth and bringing to the fore an important consideration for growing firms that having set out feasible growth objectives, a formalised strategic plan should be implemented to guide firm growth over a 3-5 year period. Support agencies need to ensure that relevant assistance and support is provided to female owner-managers in developing strategic plans. In tandem, it is important attention should be given to the implementation of the strategic plan whereby implementation is monitored and corrective action is taken, if necessary.

Female owner-managers adopting a “prospector” strategy achieved higher firm growth in the overall study, emphasised through the examination of high-growth firms. It is important to document evidence of other strategies in the empirical study and, thus, should be considered. In extending research on strategy, the study demonstrates that specific activities such as operating in international markets, improving ICT, and seeking professional advice, achieved higher firm growth and thus should be promoted as high-growth achieving activities.

Regarding the strategic behaviour of female owner-managers, an important finding of the empirical study is the desire and objective for growth as a key driver of higher firm growth and, thus, there is an opportunity to encourage more females to see business growth as a real possibility and mentors and advisors need to promote growth and enable it through training in strategy development.

The empirical study confirms that firm growth is indeed a complex issue challenging the development of a clearly distinguishable profile of high-growth female owner-managers. Ultimately, it is difficult to define a precise set of internal characteristics of female owner-managers, their firms, and strategic-related activities that influence firm growth, likely to vary in different industry sectors. That said, this study has demonstrated that some common influencing factors related to the characteristics of female owner-managers, their firms and the strategic-related activities positively influence firm growth over a period of time. Upon reflection, the study clearly demonstrates that mainstream research on small firm growth has merit and is relevant in the female context.

The study has also established firm growth as unpredictable and non-linear, dependent on a range of interlinked factors, which may vary as the firm develops. Firm growth in female-owned firms is of a temporal nature and should be considered to provide a truer reflection of firm growth. Coupled with this are the various measures of firm growth emerging whereby some firms achieve growth across all measures, and others in some, highlighting all measures should be equally recognised and valued given their contribution to revenue, or employment or in some cases, both.

Given the complexities associated with firm growth and the influence of the various internal characteristics and factors will have on it, it presents a number of important suggestions for inclusion in government policy and opportunities for future research.

7.2 Policy Implications

Combining the theoretical contributions with the findings of the empirical study a number of policy implications emerge:

- Policy makers frequently assess and measure firm growth by an increase in employment growth and the provision of financial supports to small firms is generally assessed on job creation. This focus may underestimate other areas where firm growth occurs, e.g. turnover and turnover per

employee growth, making a contribution to the Irish economy through revenue rather than employment. It may also be the case that “jobless growth” is occurring in certain sectors in which employment growth may not be an appropriate measure. This brings to the fore important considerations in determining the provision of supports for female owner-managers. Policy makers need to give equal consideration to turnover and turnover per employee growth, necessitating a change in funding eligibility criteria set by many government agencies, particularly in the high technology sectors, given the impact these sectors have on high firm growth.

- Improving labour productivity is also the focus of government policy and should be supported in female-owned firms, given the positive finding of this study with regard to turnover per employee growth. Government support agencies need to provide practical assistance to female owner-managers on how they can improve productivity across all functions of their firms. Mentoring programmes are potential options that could achieve this.
- Education is an issue to focus on at the earlier point in the careers of females where increasing numbers of females must be encouraged, especially in technical disciplines, and within these females should be encouraged to view self-employment as a career option. Firms operating in non-feminised industry sectors achieved higher firm growth and so such educational disciplines should be encouraged amongst young females from an early stage so as to expose them to high-growth sectors. Education in technical disciplines will prepare females to take an active role in the high-growth technology sectors. Developing and promoting younger female role models operating younger firms in these sectors will assist in this.
- Strategic-related activities have a significant influence on firm growth and of consequence strategic competencies and skills development must be heightened amongst all established female owner-managers. Currently Enterprise Ireland, through the “Going for Growth” programme provides

strategy supports to growth-orientated female owner-managers, proving very successful. This programme is open to firms which adhere to the Enterprise Ireland eligibility criteria. It is advised that the “Going for Growth” programme is rolled out to an increased number of female managers by reconsidering the eligibility criteria, specifically the criteria relating to employment numbers given that high-growth female-owned firms may not achieve firm growth in employment but instead in turnover. Support for strategy development needs to be extended to all non-eligible Enterprise Ireland established female-owned firms, taking into account the key indicators for high firm growth, i.e. age, levels of education, educational disciplines, industry sector, and firm size, broadening access for strategy development support for all female owner-managers.

- Specific activities emerge as having a positive influence on firm growth and accordingly should be promoted and supported amongst established female owner-managers. Internationalisation is recognised as an important growth activity, not only from the perspective of individual female-owned firms but also the perspective of the Irish economy. This growth activity needs to be specifically addressed in the context of female-owned firms, as they are less to likely to export. Support agencies need to encourage a greater level of export activity by non-exporting female-owned firms. One way of addressing this issue is to heighten the awareness of successful established female-owned firms operating in international markets, providing detailed and comprehensive profiles of these firms. In turn, these women could act as mentors for female owner-managers with internationalisation potential. Indeed this study contains profiles of such firms.
- Support agencies need to encourage those already operating in international markets to expand this activity further in a more efficient manner, actively encouraging female-owned firms operating in the high-growth sectors, e.g. ICT and food and drink, to place priority on internationalisation as part of their strategy. Support agencies need to devise specialist training and

development programmes that will enhance the export capabilities of female owner-managers, providing them with assistance in developing adaptable strategies to deliver sustained export growth. Additionally, support agencies should consider how they can create exposure to and facilitate the building of networks, and potential alliances and partnerships for female-owned firms with internationalisation potential.

In essence, these recommendations are dependent on gaining a more comprehensive understanding and insight into established female-owned firms operating in Ireland. Previous publications (Small Business Forum 2006; CSO 2008) provide information on the SME sector in Ireland; however, they do not take into account gender as a variable. This demands the development of a comprehensive small firm database, identifying not only firm size, firm age and industry sector, but also gender, strengthening the level of profile information on female-owned firms, giving support for future research.

7.3 Research Implications

Given the number of findings in this under-researched topic, the study presents a number of research implications and highlights a number of topics which provide fruitful opportunities for future research.

A consensus exists in the mainstream literature that small firm growth is heterogeneous and multifaceted in nature, rendering it difficult to arrive at an integrated perspective of what constitutes a higher growth small firm. More particularly, and of more importance to the research at hand, firm growth in female-owned firms has been reported as a “neglected” area making it even more difficult to arrive at an integrated perspective for firm growth (de Bruin 2007). The empirical study concurs with this suggesting that a greater emphasis should be placed on the factors relating to firm growth in female-owned firms, in particular on the characteristics of the female owner-managers, their firms and the strategic-related activities.

From the point of view of advancing empirical research on small firm growth in established female-owned firms, this study provides the platform for future research opportunities. Research recognises that firm growth is of a temporal nature and accordingly should be reflected in gender-specific research. Longitudinal studies provide data about how firm growth varies at different points in time allowing the researcher to track changes at individual and firm levels, capturing strategic-related activities that influence firm growth. Given the above, the study of small firm growth becomes more complex and time consuming for researchers who should focus on growth as a dynamic and longitudinal phenomenon, applying multiple measures of firm growth.

From the review of the literature, a lacuna of rigorous in-depth studies focusing objectively and specifically on firm growth in established female-owned firms was evident, an issue to which this study served to contribute. This study has advanced the understanding of firm growth in established female-owned firms for future research studies providing an in-depth understanding of how internal characteristics of female owner-managers, their firms and strategic-related activities influence firm growth. Research should be extended on the nature of ownership in female-owned firms given its prevalence in the profile of high-growth firms and its positive influence on firm growth. It is promoted that more detailed, in-depth research should be conducted on various aspects of the team, paying particular attention to how female owner-managers form and develop their teams and the influence of networking on team formation. Further attention should be given to investigating the composition of the team (females and/or males), the composition of the technical expertise and also the percentage ownership held by each member of the team. Also deemed important is the examination of the specific roles of female owner-managers in the day-to-day operations of the firm. By developing this profile, a distinguishable set of team characteristics for high firm growth can be achieved using qualitative methods to unearth data on the underlying factors that influence female owner-managers choice of and approach to team formation, then applying quantitative methods to assess the impact of the various dimensions of the team on firm growth.

The findings of this study also provide opportunities for future research on strategic-related activities, focusing research on strategy development and implementation to give meaning to how strategic-related activities such like setting growth objectives, formalisation of strategic plans, strategy type and strategic activities adopted by the female owner-managers influence firm growth. The inclusion of these issues will provide a more integrated comprehension of the relationship between the female owner-manager, their firms and strategic-related activities.

On another note, small firm growth in this study is portrayed as multifaceted in nature, influenced by three sets of factors, non-gender specific in nature. This raises an issue for future studies investigating small firm growth and questions if there is less of a need for single gender studies only, as merit exists to include more females as part of the study of firm growth giving more credence to the distinguishable characteristics of high firm growth, rather than gender.

This study positions gender-specific future research studies on the internal factors influencing small firm growth, of which can be replicated and broadened into a general Irish context to provide some useful regional and sector comparisons.

7.4 Concluding Remarks

These findings report that a range of internal factors, namely the characteristics of female owner-managers, their firms and strategic-related activities positively influence firm growth in a sample of 176 established female-owned firms operating in Ireland. In extending the research even further, this study presents the distinguishing characteristics of female owner-managers, their firms and the strategic-related activities, identifying seventeen high-growth female-owned firms, as defined by the OECD. This research makes a number of important contributions to the policy and research domains.

First, this is one of the few and most recent Irish empirical studies undertaken, focused specifically on firm growth in female-owned firms, thus providing an

important body of empirical evidence . Secondly, it provides insights into the distinguishing internal characteristics of high-growth female-owned firms. Furthermore, the research provides valuable feedback to support agencies on how to identify and target more effectively high-growth female-owned firms and develop more appropriate supports to facilitate the achievement of higher firm growth.

Finally, the completion of a gender-specific Irish study adds value to the international literature on the internal factors that influence firm growth by developing the theoretical and empirical research on the topic.

References

- Achtenhagen, L., Naldi, L., and Melin, L. (2010) "Business Growth"- Do practitioners and scholars really talk about the same thing?, *Entrepreneurship Theory & Practice*, 34 (2), 389-316.
- Acs, Z., Bardasi, E., and Estrin, S. (2011) Introduction to special issue of Small Business Economics on female entrepreneurship in developed and developing economies, *Small Business Economics*, 37 (4), 393-396.
- Acs, Z., Parsons, W., and Tracy, S. (2008) High impact firms: Gazelles revisited, Paper 328, US Office of Advocacy, Washington, DC.
- Ahl, H. (2006) Why Research on Women Entrepreneurs Needs New Directions, *Entrepreneurship Theory & Practice*, 30 (5), 595-621.
- Ahl, H and Marlow, S. (2012) Exploring the dynamics of gender, feminism and entrepreneurship: advancing debate to escape a dead end?, *Organisation*, 19 (5), 543-562.
- Alarape, A.A. (2007) Entrepreneurship programs, operational efficiency and growth of small businesses, *Journal of Enterprising Communities: People and Places in the Global Economy*, 1 (3), 222-239.
- Aldrich, H.E. and Matinez, M.A. (2001), Many are Called, but Few are Chosen: An Evolutionary Perspective for the Study of Entrepreneurship, *Entrepreneurship Theory and Practice*, 25 (4), 41-56.
- Allen, K. and Stearns, T. (2002) Nascent High Tech Entrepreneurs: The Who, Where, When, and Why, *Advances in the Study of Entrepreneurship, Innovation & Economic Growth*, 14, 195-218.
- Allen, I.E., Elam, A., Langowitz, N., and Dean, M. (2008). *2007 Report on women and entrepreneurship*. Global Entrepreneurship Monitor. Wellesley, M.A: Babson College.
- Allen, R.S., and Helms, M.M. (2006) Linking strategic practices and organisational performance to Porter's generic strategies, *Business Process Management Journal*, 12 (4), 433-454.
- Anderson, A.R., Dodd, S.D., and Jack, S.L. (2012) Entrepreneurship as connecting: some implications for theorising and practice, *Management Decision*, 50 (5), 958-971.
- Anderson, A.R., and Atkins, M.H. (2001) Business strategies for entrepreneurial small firms, *Strategic Change*, 10 (6), 311-324.

- Anna, A.L., Chandler, G. N., Jansen, E. and Mero, N.P. (2000) Women Business Owners in Traditional and Non Traditional Industries, *Journal of Business Venturing*, 15 (3), 279-303.
- Ansoff, H.I. (1965) *Corporate Strategy*, McGraw-Hill, New York.
- Arora, A., Fosfuri, A. and Gambiaradella, A. (2001) Markets for technology and their implications for corporate strategy, *Industrial and Corporate Change*, 10 (2), 419-451.
- Audretsch, D. (2012) Entrepreneurship research, *Management Decision*, 50 (5), 755-764.
- Autere, J. and Autio, A. (2000) Is entrepreneurship learned? - influence of mental models on growth motivation, strategy, and growth, Paper presented at the Academy of Management Conference, Toronto, August 4-9.
- Aylward, E. (2007) *Traditional and Non-traditional Female Entrepreneurs: An Exploration into what influences their Selection of Industry Sector*, Unpublished Thesis (M.A), Waterford Institute of Technology.
- Babaeva, L., and Chirikova, A. (1997) Women in Business, *Russian Social Science Review*, 38 (3), 81-92.
- Baker, T, Aldrich, H.E., and Liou, N. (1997) Invisible entrepreneurs: the neglect of women business owners by mass media and scholarly journals in the USA, *Entrepreneurship and Regional Development*, 9 (3), 221-238.
- Barkham, R. (1992) Regional variations in entrepreneurship: some evidence from the United Kingdom, *Entrepreneurship & Regional Development*, 4 (3), 225-244.
- Barkham, R. (1994) Entrepreneurial characteristics and the size of the new firm: A model and an econometric test, *Small Business Economics*, 6 (2), 117-125.
- Barkham, R. Gudgin, G., Hart, M., and Hanvey, E. (1996) *The Determinants of Small Firm Growth An Inter - Regional Study in the United Kingdom 1986-1990* 1st ed., Regional Policy and Development Series, Jessica Kingsley Publishers, London.
- Barkham, R., Gudgin, G., and Hart, M. (2012) *The Determinants of Small Firm Growth: An Inter-Regional Study in the United Kingdom 1986-90* 3rd ed., Regional Policy and Development Series 12, United Kingdom: Routledge.
- Barringer, B.R., Jones, F.F. and Neubaum, D.O. (2004) A quantitative content analysis of the characteristics of rapid-growth firms and their founders, *Journal of Business Venturing*, 20 (5), 663-664.

-
- Barringer, B.R. and Ireland, D. (2006) “*Entrepreneurship- Successfully Launching New Ventures*”, Pearson Education Prentice Hall.
- Baruch, Y. (1999) Response Rates in Academic Studies: A Comparative Analysis, *Human Relations*, 52: 421-434.
- Baum, J.R., Locke, E.A., and Smith, K.G. (2001) A multi-dimensional model of venture growth, *Academy of Management Journal*, 44, 292-303.
- Baum, J.R., and Silverman, B.S. (2004) Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology starts-ups, *Journal of Business Venturing*, 19 (3), 411-436.
- Bates, T. (2002) Restricted access to markets characterises women-owned businesses, *Journal of Business Venturing*, 17, 313-324.
- Beaver, G. and Ross, C. (2000) Enterprise in Recession: The Role and Context of Strategy, *International Journal of Entrepreneurship and Innovation*, 23-31.
- Beer, M., and Eisenstat, R.A. (2000) The silent killers of strategy implementation and learning, *Sloan Management Review*, 41 (4), 29-40.
- Begley, T.M and Boyd, D.P. (1985) Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses, *Journal of Business Venturing*, 2 (1), 79-93.
- Bellamy, S., Bowen, F.E. and Simpson, M. (2003) Small business success factors: an owners’ perspective, *Proceedings of the 26th ISBA National Small Firms Policy and Research Conference: Small and Medium Sized Enterprises in the Knowledge-based Economy, Surrey, 12-14 November*.
- Bennett, R. J. Graham, D. J. and Bratton, W. A. (1999) The location and concentration of businesses in Britain: business clusters, business services, market coverage and local economic development, *Transitions Institute of British Geographers*, 24, 393- 420.
- Berg, N.G. (1997) Gender, place and entrepreneurship, *Entrepreneurship and Regional Development*, 9 (3), 259-268.
- Bhide, A. (2000) *The origin and evolution of new businesses*. New York: Oxford University Press.
- Birch, D.L. (1987). *Job creation in America*, New York: Free Press.
- Bird, B. (1989) Implementing Entrepreneurial Ideas: The Case of Intentions. *Academy of Management*, Entrepreneurship Division.

- Birley, S., Moss, C., and Saunders, P. (1987) Do women entrepreneurs require different training, *American Journal of Small Business*, 12 (1), 27-35.
- Birley, S and Stockley, S. (2000) "Entrepreneurial teams and venture growth" in Sexton, D.L., and Landstrom, H., *Blackwell Handbook of Entrepreneurship*, USA: Blackwell Publishing.
- Blackburn, R. and Kovalainen, A. (2009) Researching small firms and entrepreneurship: Past, present and future, *International Journal of Management Reviews*, 11 (2), 127-148.
- Blackmore, K. and Nesbitt, K. (2012) Verifying the Miles and Snow strategy types in Australian small and medium-size enterprises, *Australian Journal of Management*, 38 (1), 171-190.
- Bloodgood, J. M., Sappienza, H. J. and Almeida, J. G. (1996) The Internationalisation of New High Potential US Ventures: Antecedents and Outcomes, *Entrepreneurship Theory and Practice*, 20 (4), 61-76.
- Boden R. and Nucci A.R. (2000) On the survival prospects of men's and women's new business ventures, *Journal of Business Venturing*, 15 (4), 347-362.
- Bosma, N., Jones, K., Autio, E. and Levie, J. (2004), *Global Entrepreneurship Monitor 2004 Executive Report*, Babson and London Business School.
- Bosma, N., Jones, K., Autio, E. and Levie, J. (2007), *Global Entrepreneurship Monitor 2007 Executive Report*, Babson and London Business School.
- Bosworth, D., Jacobs, C. (1989) Management Attitudes, Behaviours and abilities as barriers to growth, in Barber, J., Metcalfe, J. and Porteous, M., *Barriers to Growth in Small Firms*, London: Routledge, 58-86.
- Boter, H. and Lundstrom, A. (2005) SME perspectives on business support services: the role of company size, industry and location, *Journal of Small Business and Enterprise Development*, 12 (2), 244-258.
- Bourne, L. (2011) Advising upwards: managing the perceptions and expectations of senior management stakeholders, *Management Decision*, 49 (6), 1001-1023.
- Boussoura, M. and Deakins, D. (1999) Market-based learning, entrepreneurship and the high technology small firm, *International Journal of Entrepreneurial Behaviour & Research*, 5 (4), 204-223.
- Bowen, D.D. and Hisrich, R.D. (1986) The female entrepreneur: A career development perspective, *Academy of Management Review*, 11, 393-407.
- Bridge, S., O'Neill, K. and Cromie, S. (1998) *Understanding Enterprise, Entrepreneurship and Small Business*, Macmillan, Basingstoke.

-
- Brinkmann, J., Salamo., S., and Gemueden, H.G. (2011) Financial Management Competence of Founding Teams and Growth of New Technology-Based Firms, *Entrepreneurship Theory and Practice*, 35 (2), 217-243.
- Brock, W.A. and Evans, D.S. (1989) Small business economics, *Small Business Economics*, 1 (1), 7-20.
- Browne, S., Farrell, L., and Sessions, J. (2006) Risk Preference and Employment Contract Type, *Journal of the Royal Statistical Society*, 169 (4), 849-863.
- Bruderl, J. and Preisendorfer, P. (1998) Network Support and the Success of Newly Founded Business, *Small Business Economics*, 10, 213-225.
- Bruneel, J., Clarysse, B., and Wright, M. (2009) "Linking Entrepreneurial Strategy and Firm Growth" Universitet Gent Working Paper, No.571.
- Bruni, A., Gherardi, S. and Poggio, B. (2004) Doing Gender, Doing Entrepreneurship: An Ethnographic Account of Intertwined Practices, *Gender, Work and Organisation*, 11 (4), 406-429.
- Brush, C.G. (1990) Women and enterprise creation. In S.Gould & J. Parzen (Eds.), *Women, entrepreneurship and economic development* (pp.37-50). Paris: OECD.
- Brush, C.G. (1992) Research on Women Business Owners: Past Trends, A New Perspective and Future Directions, *Entrepreneurship Theory and Practice*, 16 (4), 5-31.
- Brush, C., Carter, N.M., Greene, P.G., and Hart, M.M. (2002) The role of social capital and gender in linking financial suppliers and entrepreneurial firms: A framework for future research, *Venture Capital: An International Journal of Entrepreneurial Finance*, 4 (4), 305-323.
- Brush, C.G., Carter, N.M., Gatewood, E.J., Greene, P.G., and Hart, M. (2004), "Women Entrepreneurs, Growth, and Implications for the Classroom", 2004 Coleman Foundation White Paper Series for the United States Association for Small Business and Entrepreneurship.
- Brush, C.G, Carter, N.M., Gatewood, E.J., Greene, P.G. and Hart, M.M. (2006) Women's entrepreneurship in the United States. In *Growth orientated women entrepreneurs and their business*, eds. C.G., Brush, N.M. Carter, E.J., Greene, and M.M. Hart, 184-204. Cheltenham, UK: Edward Elgar.
- Brush, C.G. and Cooper, S.Y. (2012) Female entrepreneurship and economic development: An international perspective, *Entrepreneurship & Regional Development*, 24(1-2), 1-6.

- Brush, C.G. and Hisrich, R.D. (1991) Antecedent Influences on Women-Owned Businesses, *Journal of Managerial Psychology*, 6 (2), 9-16.
- Brush, C.G. and Vanderwerf, P. (1992) A comparison of methods and sources for obtaining estimates of new venture performance, *Journal of Business Venturing*, 7 (2), 157-170.
- Bruyat, C., and Julian, P.A. (2000) Defining the field of research in entrepreneurship, *Journal of Business Venturing*, 16, 165-180.
- Bullock, A., Cosh, A., Fu, X., Hughes, A. and Yang, Q. (2004) 'SME Growth Trajectories: A Pilot Study of UK SME Growth and Survival Using the CBR Panel Data', [online] available: <http://www.berr.gov.uk/files/file38282.pdf>, [accessed 13 Aug 2009].
- Burke, A., Fraser, S. and Greene, F. (2010) The Multiple Effects of Business Planning on New Venture Performance, *Journal of Management Studies*. 47 (3), 391-415.
- Burke, G.I. and Jarratt, D.G. (2004) The influence of information and advice on competitive strategy definition in small and medium-sized enterprises, *Qualitative Market Research: An International Journal*, 7 (2), 126-138.
- Burns, P. (2001) *Entrepreneurship and Small Business*, Palgrave, Basingstoke.
- Buttner, H. (1993) Female entrepreneurs: how far have they come? *Business Horizons*, 36 (2), 59-66.
- Buttner, H. and Moore, D. (1997) Women's organizational exodus to entrepreneurship: self-reported motivations and correlates with success, *Journal of Small Business Management*, 35 (1), 34-47.
- Buzzell, R.D. and Wiersema, F.D. (1981) "Successful share-building strategies", *Harvard Business Review*, 53 (1), 135-44.
- Calvo, J.C.A and Garcia, G.M. (2010) Established Business Owners' Success: Influencing Factors, *Journal of Developmental Entrepreneurship*, 15 (3), 263-286.
- Campbell-Hunt, C (2000) What Have We Learned about Generic Competitive Strategy? A Meta-Analysis, *Strategic Management Journal*, 21 (2), 127-154.
- Carter, N. & Allen, K.R. (1997) Size determinants of women owned businesses: Choice or barriers to resources? *Entrepreneurship and Regional Development*, 9 (3), 211-220.
- Carter, N., Brush, C., Greene, P., Gatewood, E., and Hart, M. (2003) Women entrepreneurs who break through to equity financing: The influence of human, social and financial capital, *Venture Capital Journal*, 5 (1), 1-28.

- Carter, N. and Kolvereid, L. (1997) “*Women starting new businesses: The experience in Norway and the US*”. Paper presented at the OECD conference on Women Entrepreneurs in SME’s, Paris.
- Carter, N., Williams, M. and Reynolds, P. (1997) Discontinuance among new firms in retail: the influence of initial resources, strategy and gender, *Journal of Business Venturing*, 12, 125-145.
- Carter, S. (2000) Improving the numbers and performance of women-owned businesses: some implications for training and advisory services, *Journal of Education and Training*, 42 (45), 326-334.
- Carter, S. and Bennett, D. (2006) “Gender & Entrepreneurship” in *Enterprise and Small Business-Principles, Practice and Policy*” Second Edition, Prentice Hall Financial Times, 176-192.
- Carter, S. and Cannon, T. (1992) *Women as Entrepreneurs*. London: Academic Press.
- Carter, S. and Rosa P. (1998) The financing of male and female-owned businesses, *Entrepreneurship and Regional Development*, 10 (3), 225-241.
- Carter, S. and Shaw, E. (2006) Women’s Business Ownership- Recent research and policy developments, *Report to the Small Business Service*, November.
- Cassar, G. (2004) “Entrepreneur Motivation, Growth Intentions, and Preferences”, University of California at Berkeley.
- Cassar, G. (2007) Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth, *Entrepreneurship and Regional Development*, 19 (1), 89-107.
- Chagnanti, R. (1986) Management in women owned enterprises, *Journal of Small Business Management*, 24 (4), 18-29.
- Chagnanti, R., and Parasuraman, S. (1996) A study of the impacts of gender on business performance and management patterns in small businesses, *Entrepreneurship Theory and Practice*, 21, 73-75.
- Chandler, A.D. (1962) *Strategy and Structure* in Foss, N.J, Resources Firms and Strategy in Resources, Firms, and Strategies: A Reader in the Resource-based Perspective, Oxford, Oxford University Press.
- Chandler, G.N. (1998) An examination of the sustainability of founder’s human and financial capital in emerging business ventures, *Journal of Business Venturing*, 13 (5), 353-369.
- Chandler, G.N. and Hanks, S.H. (1993) Measuring the performance of emerging businesses: A validation study, *Journal of Business Venturing*, 8, 391-408.

- Chandler, G.N., McKelvie, A. and Davidsson, P. (2009) Assets specificity and behavioural uncertainty as moderators of the sales growth-employment growth relationship in emerging ventures, *Journal of Business Venturing*, 24 (4), 373-387.
- Chell, E. (1985) The Entrepreneurial Personality: A Few Ghosts Laid to Rest?, *International Small Business Journal*, 3 (43), 43-54.
- Chell, E. and Baines, S. (1998) Does gender affect business performance? A study of microbusinesses in business services in the UK, *Entrepreneurship and Regional Development*, 10, 117-135.
- Cliff, J. (1998) Does one size fit all? Exploring the relationship between attitudes towards Growth, Gender and Business Size, *Journal of Business Venturing*, 13 (6), 523-542.
- Coad, A. and Tamvada, J.P. (2012) Firm Growth and barriers to growth among small firms in India, *Small Business Economics*, 39, 383-400.
- Coleman, S. (2000) Access to Capital and Terms of Credit: A Comparison of Men and Women Owned Small Businesses, *Journal of Small Business Management*, 38 (3), 37-53.
- Coleman, S. (2007) The Role of Human & Financial Capital in the Profitability and Growth of Women-Owned Small Firms, *Journal of Small Business Management*, 45 (3), 303-319.
- Coleman, S. and Robb, A. (2012), Unlocking Innovation in Women-Owned Firms: Strategies for Educating the Next Generation of Women Entrepreneurs, *Journal of Women's Entrepreneurship and Education*, 1 (2), 99-125.
- Collins-Dodd, C., Gordon, I.M., and Smart, C. (2004) Further evidence on the role of gender in financial performance, *Journal of Small Business Management*, 42 (4), 395-417.
- Colombo, M.G. and Delmastro, M. (2001) Technology-based entrepreneurs: Does Internet make a difference? *Small Business Economics*, 16 (3), 177-188.
- Conant, J. S., Mokwa, M. P. and Varadarajan, P.R. (1990) Strategic types, distinctive marketing competencies and organisational performance: a multiple measures-based study, *Strategic Management Journal* (Special Issue), 365-383.
- Cooper, A.C. (1993) Challenges in predicting new firm performance, *Journal of Business Venturing*, 8, 241-253.
- Cooper, A.C. and Artz, K. (1995) Determinants of satisfaction of entrepreneurs, *Journal of Business Venturing*, 10, 439-457.
- Cooper, A.C. and Gimeno-Gascon, F.J. (1992) "Entrepreneurs, Processes' of Founding and New Firm Performance" in *The State of the Art of*

Entrepreneurship, Ed. D.L., Sexton and J.D. Kasarda. Boston, Mass: PWS-Kent Pub., 301-340.

Cooper, A.C., Woo, C.Y. and Dunkelberg, W.C. (1989) Entrepreneurship and the initial size of firms, *Journal of Business Venturing*, 4, 317-332.

Cooper, S., Bottomley, C. and Gordon, J. (2004) Stepping out of the classroom and up the ladder of learning: an experiential learning approach to entrepreneurship education, *Industry & Higher Education*, 18 (1), 11-22.

Correll, S. (2001) Gender and the Career Choice Process: The Role of Biased Self-assessments, *American Journal of Sociology*, 106, 1691-1730.

Cremins, N. (2006) *Why Irish Small Firms Internationalise and the strategies they adopt?*, Unpublished Thesis (MBS), University of Limerick, Ireland.

Creswell, J.W. (1994) *Research Design: Qualitative and Quantitative Approaches*, Sage, London.

Cromie, S. (1987) Motivations of aspiring male and female entrepreneurs, *Journal of Organisational Behaviour*, 8 (3), 251-261.

Cross, C. and Linehan, M. (2006) Barriers in Advancing Female Careers in the High Tech Sector: Empirical Evidence from Ireland, *Women in Management Review*, 21 (1), 28-39.

Davidsson, P. (1989) Entrepreneurship- and after? A study of growth willingness in small firms, *Journal of Business Venturing*, 13 (6), 523-542.

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

Davidsson, P., Delmar, F., and Wiklund, J. (2006) *Entrepreneurship and the Growth of Firms*, Cheltenham, UK: Edward Elgar.

Davidsson, P., Delmar, F., and Wiklund, J. (2007) *Entrepreneurship and the growth of firms*. Cheltenham: Edward Elgar.

Davidsson, P. and Honig, B. (2003) The role of social and human capital among nascent entrepreneurs, *Journal of Business Venturing*, 18 (3), 301-331.

Davidsson, P. and Wiklund, J. (2000) Conceptual and Empirical Challenges in *The Study of Firm Growth* In D.L. *The Blackwell Handbook of Entrepreneurship*, Sexton, D., and Landstrom, H., (eds.) 26-44 Oxford Blackwell.

Davidsson, P., and Wiklund, J. (2001) Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship Theory and Practice*, 31, 601-618.

- Davis, A.E. and Shaver, K.G. (2012) Understanding Gendered Variations in Business Growth Intentions Across the Life Course, *Entrepreneurship Theory and Practice*, 36, 495-512.
- De Bruin, A., Brush, C.G and Welter, F. (2006) Introduction to the special issue: Towards building cumulative knowledge on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 30 (5), 585-593.
- De Bruin, A., Brush, C. and Welter, F. (2007) Advancing a Framework for Coherent Research on Women's Entrepreneurship. *Entrepreneurship Theory and Practice*, 31 (3), 323-339.
- Deakins, D. and Freel M. (2009) "*Entrepreneurship and Small Firms*", 5th edition, The McGraw-Hill Companies, London.
- Deakins, D., Wilson, L. and Whittam, G. (2002) *National Centre for Women's Enterprise Feasibility Study*, Final Research Report for Department of Enterprise and Lifelong Learning, Scottish Executive.
- Delmar, F. and Davidsson, P. (1999) Firm size expectations of nascent entrepreneurs, in P. D. Reynolds & W. D. Bygrave & S. Manigart & C. Mason & G. D. Meyer & H. J. Sapienza & K. G. Shaver (Eds.), *Frontiers of Entrepreneurship Research 1999*: Wellesley, MA: Babson College, 90-104.
- Delmar, F. and Shane, S. (2006) Does Experience Matter? The Effect of Founding Team Experience on the Survival and Sales of Newly Founded Ventures, *Strategic Organization*, 4 (3): 215-247.
- Delmar, F. and Wiklund, J. (2003) *The effect of the entrepreneur's growth motivation on subsequent growth: A longitudinal study*, paper presented at the Academy of Management Meeting, Seattle.
- Delmar, F. and Wiklund, J. (2008) The effects of small business managers growth motivation on firm growth: A longitudinal study, *Entrepreneurship Theory & Practice*, 32 (3), 437-457.
- Delmar, F., Davidsson, P. and Gartner, W.B. (2003). Arriving at the high-growth firm, *Journal of Business Venturing*, 18 (2), 189-216.
- Dess, G.G. and Davies, P.S. (1984) Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organisational Performance, *Academy of Management*, 27 (3), 467-488.
- DeVellis, R.F. (1991) *Scale development : Theory and applications*. Newbury Park, CA : Sage.
- Diaz-Garcia, C. and Brush, C. (2012) Gender and business ownership: questioning 'what' and 'why', *International Journal of Entrepreneurial Behaviour & Research*, 18 (1), 4-27.

- Dobbs, M. and Hamilton, R.T. (2007) Small business growth: Recent evidence and new directions, *International Journal of Entrepreneurial Behaviour and Research*, 13 (5), 296-322.
- Doern, R. (2009) Investigating barriers to SME growth and development in transition environments: A critique and suggestions for developing the methodology, *International Small Business Journal*, 27 (3), 275-305.
- Donohoe, S. and Wyer, P. (2005) *Towards a Model Examining and Explaining Small Firm Growth in Entrepreneurial Small Businesses* Paper presented at the 28th ISBA National Conference *Illuminating Entrepreneurship - The Theory and Practice of Enterprise Creation and Development* Blackpool November, 2005 www.isbe2005.org
- Ducheneaut, B. (1997). 'Women Entrepreneurs in SMEs'. Report prepared for the OECD Conference on Women Entrepreneurs in Small and Medium Enterprises: A Major Force for Innovation and Job Creation. Paris, France, OECD.
- Ducheneaut, B. and Orhan, M. (2000) Les Femmes entrepreneurs en Paris, Seli Arslan.
- Du Rietz, A. and Henrekson, M. (2000) Testing the female underperformance hypothesis, *Small Business Economics*, 14 (1), 1-10.
- Earle, J.S. and Sakova, Z. (2000) Business Start-ups or disguised unemployment? Evidence on the character of self-employment from transition economics, *Labour Economics*, 7 (5), 575-601.
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) *Management Research: An Introduction*, London: Sage.
- Eddleston, K.A. and Powell, G.N. (2012) The role of gender identity in explaining sex differences in business owners career satisfier preferences. *Journal of Business Venturing*, 23 (2), 244-256.
- Edelman, L., Brush, C., and Manolova, T. (2005) Co-alignment in the resource-performance relationship: strategy as a mediator, *Journal of Business Venturing*, 20 (3), 359-383.
- Edmondson, A. C. and McManus, S. E. (2007): Methodological fit in management field research, *Academy of Management Review*, 32 (4): 1155-1179.
- Eisenhardt, K and Schoonhoven, C. (1990) Organisational Growth: Linking Founding Team, Strategy, Environment and Growth among U.S. Semiconductor Ventures 1978-1988, *Administrative Science Quarterly*, 35, 504-529.
- European Commission (2002), *Observatory of European SMEs*, reports submitted to the Enterprise Directorate-General by KPMG Special Services, EIM Business and Policy Research and ENSR, Office for Official Publications of the European Communities, Luxembourg.

European Commission DG Enterprise (2002), Evaluating Actions and Measures Promoting Female Entrepreneurship-A Guide; [online] available: <http://European+Commission%2C+2002%2C+%E2%80%9CGood+Practices+in+the+Promotion+of+Female+Entrepreneurship> [accessed 19 Feb 2007].

European Commission (2009) She Figures 2009. *Statistics and Indicators on Gender Equality in Science*, [online] available: <http://European+Commission+%282009%29+She+Figures+2009.+Statistics+and+Indicators+on+Gender+Equality+in+Science> [accessed 26 March 2010].

European Commission (2012) She Figures 2012. *Statistics and Indicators on Gender Equality in Science*, [online] available: <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1503> [accessed 20 December 2012].

Fadahunsi, A. (2012) The Growth of Small Businesses: Towards a Research Agenda, *American Journal Economics and Business Administration*, 4 (1), 105-115.

Fairlie, R.W. and Robb, A.M. (2009) Gender differences in business performance: evidence from the Characteristics of Business Owners survey, *Small Business Economics*, 33(4), 375-395.

Feuer, E., Messnarz, R. and Sanchez N. (2002) 'Best Practices in E-Commerce: Strategies, Skills, and Processes' *eBusiness and eWork*" 2002: Conference proceedings Challenges and Achievements in E-Business and E-Work Part 1. IOS Press, Amsterdam, 109–116.

Festinger, L., and Katz, D. (1966) *Research Methods in the Behavioural Sciences*, New York, Dryden Press.

Fischer, E., 1992, Sex Differences and Small Business Performance Among Canadian Retailers and Service Providers, *Journal of Small Business and Entrepreneurship*, 9 (4), 2-13.

Fischer E., Reuber A.R. and Dyke, L. (1993) A theoretical overview and extension of research on sex, gender and entrepreneurship, *Journal of Business Venturing*, 8 (2), 151-168.

Fitzsimons, P. and O’Gorman, C. (2011) *Entrepreneurship in Ireland The Global Entrepreneurship Monitor 2011: The Irish Report*, Enterprise Ireland, Ireland: Dublin.

Fitzsimons, P. and O’Gorman, C. (2012) *Entrepreneurship in Ireland The Global Entrepreneurship Monitor 2012: The Irish Report*, Enterprise Ireland, Ireland: Dublin.

- Fleck, E. (2008) The Growth and Development of Female Entrepreneurial Organisations – Evidence from Ireland, paper presented at Institute for Small Business and Entrepreneurship, Belfast, N. Ireland, 5-7 November.
- Foo, M.D., Sin, H.P. and Yioung, L.P. (2006) Effects of team inputs and intrateam processes on perceptions of team viability and member satisfaction in nascent ventures, *Strategic Management Journal*, 27 (4), 389-399.
- Forbes, D.P., Borchert, P.S., Zellmer-Bruhn, M.E. and Sapienza, H.J. (2006) Entrepreneurial team formation: an exploration of new member addition, *Entrepreneurship Theory and Practice*, 30 (2), 225-248.
- Forfás (2007) “Towards developing a policy for Entrepreneurship in Ireland”, Dublin.
- Freaser, H.R. and Willard, G.E. (1990) Founding strategy and performance: a comparison of high and low growth high tech firms, *Strategic Management Journal*, 11 (2), 87-98.
- Garnsey, E., Stam, E. and Hefermam, P. (2006) New firm growth: Exploring processes and paths, *Industry and Innovation*, 13, 1-20.
- Gately, C. and Cunningham J. (2005) “Strategising and the strategist in Growth-Oriented SMEs” Institute for Small Business & Entrepreneurship 28th National Conference November 2005.
- Gatewood, E.J, Brush, C.G., Carter, N.M., and Greene, P.G. (2009) Diana: a symbol of women entrepreneurs’ hunt for knowledge, money, and the rewards of entrepreneurship, *Small Business Economics*, 32 (2), 129-144.
- Gibb, A.A. (2000) SME Policy, Academic Research, and the Growth of Ignorance Mythical Concepts Myths, Assumptions, Rituals and Confusions, *International Small Business Journal*, 18 (3), 13-35.
- Gibb, A.A. and Davies, L.G. (1990) In pursuit of frameworks for the development of growth models of the small business, *International Small Business Journal*, 9 (1), 15-31.
- Gibcus, P., Vermeulen, P.A. and De Jong, P.J. (2006) Strategic Decision-Making in Small Firms: Towards a Taxonomy of Entrepreneurial Decision-Makers, *EIM Policy Research*.
- Gilad, B. and Levine, P. (1986) B. Gilad, P. Levine A behavioral model of entrepreneurial supply, *Journal of Small Business Management*, 24 (4), 44–53.
- Gilbert, B.A., McDougall, P.P. and Audretsch, D.B. (2006) New Venture Growth: A Review and Extension, *Journal of Management*, 32 (6), 926-947.
- Gill, J. and Johnson, P. (2007) *Research Methods for Managers*, 2nd ed., London: Paul Chapman Publishing.

-
- Gilmore, A., and Carson, D. (2000) The demonstration of a methodology for assessing SME decision making, *Journal of Research in Marketing*, 2 (2), 108-124.
- Gimeno, J., Folta, T., Cooper, A. and Woo, C. Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms, *Administrative Science Quarterly*, 42 (4), 750–783.
- Glancey, K. (1998) Determinants so Growth and Profitability in Small Entrepreneurial Firms, *International Journal of Entrepreneurial Behaviour and Research*, 4 (1), 18-27.
- Goffee, R. and Scase, R. (1985) *Women in Charge: The Experience of Female Entrepreneurs*. London: George Allen & Unwin.
- Goulding, C. (2005) Grounded Theory, Ethnography and Phenomenology: A Comparative Analysis of three qualitative strategies for marketing research, *European Journal of Marketing*, 39(3/4), 294-308.
- Gray, A.W. (1997) *International Perspectives on the Irish Economy*, Dublin: Indecon Public Policy Series.
- Greene, P., Hart, M., Gatewood, E., Brush, C., and Carter, N. (2003) “*Women Entrepreneurs: Moving Front and Centre: An overview of research and theory*”, United States Association for Small Business and Entrepreneurship.
- Greene, P.G., Brush, C.G. and Gatewood, E. (2007) Perspectives on women entrepreneur: Past findings and new directions. In M.Minniti (ed.) *Entrepreneurship: The Engine of Growth*, Vol.1, Perspective Series. Westport, CT, USA and London, UK: Praeger Publisher-Greenwood Publishing Group.
- Gundry, L.K. and Welsch, H.P. (2001) The Ambitious Entrepreneur: High Growth Strategies of Women-Owned Enterprises, *Journal of Business Venturing*, 16 (5), 453-470.
- Haber, S. and Reichel, A. (2005) Identifying Performance Measures of Small Ventures – The Case of the Tourism Industry, *Journal of Small Business Management*, 43 (3), 357-286.
- Hair, J.F., Money, A.H., Samouel, P. and Page, M. (2007) *Research Methods for Business* 3rd ed, US: John Wiley and Sons.
- Hambrick, D.C. (2003) On the staying power of defenders, analysers, and prospectors. *Academy of Management Executive*, 17 (4), 115-118.
- Hamel, G. and Prahalad, C.K. (1989) Strategic Intent, *Harvard Business Review*, 67 (3), 63-76.

-
- Hamilton, R.T. and Lawrence, L. (2001) Explaining size differences in smaller firms, *International Small Business Journal*, 19 (2):49-60.
- Hampton, A., Cooper, S. and McGowan, P. (2007) “Female Entrepreneurial Networks and Networking in Technology-Based Sectors”, paper presented at Institute for Small Business & Entrepreneurship, Glasgow, Scotland, 7-9 November 2007.
- Hampton, A., Cooper, S. and McGowan, P. (2009) Female Entrepreneurial Networks and Networking Activity in Technology-based Ventures, *International Small Business Journal*, 27 (2), 193-214.
- Hampton, A., McGowan, P. and Cooper, S.Y. (2011) Developing quality in female high-technology entrepreneurs’ networks, *International Journal of Entrepreneurial Behaviour & Research*, 17 (6), 588-606.
- Hansen, B. and Hamilton, R.T. (2011) Factors distinguishing firm growers and non-growers, *International Small Business Journal*, 29 (3), 278-294.
- Hart, M. and Levie, J. (2010) *Global Entrepreneurship Monitor, United Kingdom 2010 Monitoring Report*, Global Entrepreneurship Monitor.
- Havnes, P. A. and Senneseth, K. (2001) A panel study of firm growth among SMEs in networks, *Small Business Economics*, 16 (4), 293-302.
- Headd, B. and Kirchoff, B. (2009) The Growth, Decline and Survival of Small Businesses: An Exploratory Study of Life Cycles, *Journal of Small Business Management*, 47 (4), 531–550.
- Hechavarria D.M., Ingram A., Justo R. and Terjesen S. (2012) Are women more likely to pursue social and environmental entrepreneurship, in K.D. Hughes and J.E. Jennings (Eds) *Global women's entrepreneurship research: Diverse settings, questions and approaches*. Cheltenham/Northampton, U.K: Edward Elgar, p135-151. Edited by: Hughes K.D. and Jennings J.E.
- Heirman, A. and Clarysse, B. (2005) “The Imprinting effect of initial resources and market strategy on the early growth path of start-ups”. Ghent University Working Paper Series.
- Henrekson, M. and Johansson, D. (2008) Competencies and institutions fostering high-growth firms, Social Science Research Network, IFN Working Paper 757.
- Henry, C. and Johnston, K. (2003) “State of the Art of Women’s Entrepreneurship in Ireland: Access to Financing and Financing Strategies”, Centre for Entrepreneurship Research, Dundalk Institute of Technology, Ireland.
- Henry, C. and Kennedy, S. (2002) *In Search of a New Celtic Tiger-Female Entrepreneurship in Ireland*, Dundalk Institute of Technology.

-
- Herron, L. and Robinson, R. (1993) A structural model of the effects of entrepreneurial characteristics on venture performance, *Journal of Business Venturing*, 8 (3), 281-294.
- Hill, F., Leitch, C. and Harrison, R. (2006) Desperately seeking finance. The demand for finance by male-owned and led business, *Venture Capital*, 8 (2), 159-165.
- Hill, J. and McGowan, P. (1999), Small Business and Enterprise Development: Questions About Research Methodology, *International Journal of Entrepreneurial Behaviour and Research*, 5 (1), 5-18.
- Hillbrand, C. (2006) Strategy Planning for High Growth Firms: A Complexity Theoretic Framework, *Euromed Journal of Business*, 1 (1), 51-65.
- Hines, T. (2000) An Evaluation of two Qualitative Methods (focus group interviews and cognitive maps) for Research into Entrepreneurial decision making, *Qualitative Market Research: An International Journal*, 3 (1), 7-16.
- Hisrich, R.D. (1990) Entrepreneurship/Intrapreneurship. *American Psychologist*, 45 (2), 209-222.
- Hisrich, R.D. and Brush, C.G (1983) The Woman Entrepreneur: Impact of Family, Educational and Occupational Experience, in *Frontiers of Entrepreneurship*. Ed. J. Hornaday, J.A. Timmons, and K. Vesper, Babson Park, MA: Babson College, 255-270.
- Hisrich, R.D. and Brush, C.G (1984), The Woman Entrepreneur: Management Skills and Business Problems, *Journal of Small Business Management*, 22(1), 30-37.
- Hisrich, R.D. and Brush, C.G. (1986) *The Woman Entrepreneur: Starting, financing and managing a successful new business*. Lexington, M.A: Lexington Books.
- Hisrich, R.D. and Brush, C.G. (1987). Women Entrepreneurs: A longitudinal study. In N. Churchill, J. Hornaday, B. Kirchoff, O. Krasner, & K. Vesper (Eds.), *Frontiers of entrepreneurship research* (pp.187-199). Boston, MA: Babson College.
- Hisrich, R.D. and Brush, C. G. (1991) Antecedent influences on women-owned businesses, *Journal of Management Psychology*, 6 (2), 9-16.
- Hisrich, R.D. and Peters, M.P. (1984) Internal venturing in large corporations, *Frontiers of Entrepreneurship Research*, 21-46.
- Hitt, M.A., Hoskisson, R.E. and Kim, H. (1997) International Diversification; Effects on Innovation and Firm Performance in Product Diversified Firms. *Academy of Management Journal*, 43, 449-467.

- Hofer, C.W. and Charan, R. The transition to professional management: Mission impossible; *Journal of Small Business*, 9 (1), 4-11.
- Holmquist, C. and Sundin, E. (1990) What's special about highly educated women entrepreneurs, *Entrepreneurship and Regional Development*, 2 (2), 181-193.
- Honig, B. (2004) Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning, *Academy of Management Learning and Education*, 3 (6), 258-273.
- Huang, K.H., Mas-Tur, A. and Yu, T.H. (2012) Factors affecting the success of women entrepreneurs, *International Entrepreneurship Management Journal*, 8 (4), 487-497.
- Hughes, K.D. (2003) Pushed or pulled? Women's entry into self-employment and small business ownership, *Gender, Work & Organisation*, 10 (4), 433-454.
- Hundley, G. (2001) Why women earn less than men in self-employment. *Journal of Labor Research*, 22, 817-827.
- Inmyxai, S. and Takahashi, Y. (2010) Performance Contrast and its Determinants between Male and Female Headed Firms in Lao MSMEs, *International Journal of Business and Management*, 5 (4), 37-52.
- Ireland, Department of Jobs, Enterprise and Innovation (2013) "Public Consultation: A National Entrepreneurship Policy Statement for Ireland", Dublin: Department of Jobs, Enterprise and Innovation.
- James, A. (2012) Conceptualising 'woman as an entrepreneurial advantage: a reflexive approach in K.D. Hughes and J.E. Jennings (Eds) Global women's entrepreneurship research: Diverse settings, questions and approaches Cheltenham/Northampton, U.K : Edward Elgar, p226-240.
- Jennings, J.E. and Brush, C.G. (2013) Research on Women Entrepreneurs: Challenges to (and from) the Broader Entrepreneurship Literature, *The Academy of Management Annals*, 7 (1), 663-715.
- Johnson, R.B. and Onwuevegbuzie, A.J. (2004) Mixed Methods Research: A Research Paradigm Whose Time Has Come, *Educational Researcher*, 33 (7), 14-26.
- Julien, P.A. and Ramangalahy, C. (2003) Competitive Strategy and Performance of Exporting SMEs: An Empirical Investigation of the Impact of Their Export Information Search and Competencies, *Entrepreneurship Theory and Practice*, 27 (3), 227-245.
- Kalleberg, A.L. and Leicht, K.T. (1991) Gender and organisation performance: determinants of small business survival and success, *Academy of Management Journal*, 34 (12), 136-161.

- Kangasharju, A. (2000) Growth of the smallest: determinants of small firm growth during strong macroeconomic fluctuations, *International Small Business Journal*, 19(1):28-43.
- Kaplan, E. (1988) Women entrepreneurs: Constructing a framework to examine venture success and failure. *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 643-653.
- Kariv, D. (2012) “Off stage-on stage”: men and women entrepreneurs leading change and business growth, *Journal of Enterprising Communities: People and Places in the Global Economy*, 6 (2), 169-184.
- Katz, J. (2003) The chronology and intellectual trajectory of American entrepreneurship education 1876-1999, *Journal of Business Venturing*, 18 (2), 283-300.
- Keeble, D., Tyler, P., Brown, G. and Lewis, J. (1992) *Business Success in the Countryside: The Performance of Rural Enterprise*, HMSO, London.
- Kelley, D., Brush, C., Greene, P. and Litovsky, Y. (2011) *The Global Entrepreneurship Monitor: 2010 Women’s Report*. Wellesley, MA: Babson College & GERA.
- Kelley, D.J. and Nakosteen, R.A.(2005) Technology Resources, Alliances, and Sustained Growth in New, Technology-Based Firms, *IEEE Transactions on Engineering Management*, 52 (3), August.
- Kepler, E. and Shane, S. (2007) Are male and female entrepreneurs really that different? The Office of Advocacy Small Business Working Papers, <http://www.sba.gov>
- Kerlinger, F. N. (1979) *Behavioural Research: A Conceptual Approach*, New York, Holt.
- Kinsella, R., Clarke, W., Storey, D., Mulvenna, D. and Coyne, D. (1994) “*Fast Growth, Small Firms: An Irish Perspective*” Irish Management Institute, Dublin. MA: Babson College.
- Kjeldsen, J. and Nielsen, K. (2000) *Women Entrepreneurs Now and in the Future*, Danish Agency for Trade and Industry, September 2000.
- Knorr, H. (2011) From top management to entrepreneurship: women’s next move? *International Journal of Manpower*, 32 (1), 99-116.
- Kolvereid, L. (1992) Growth aspirations among Norwegian entrepreneurs, *Journal of Business Venturing*, 7 (3), 209-222.
- Krathwohl, D.R. (1988) *How to prepare a research proposal* (3rd Ed.). Syracuse, NY: Syracuse University Press.

-
- Kraus, S., Harms, R. and Schwarz, E. J. (2006) 'Strategic Planning in Smaller Enterprises-New Empirical Findings', *Management Research News*, 29 (6), 334-344.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V. and Crawford, A. (2002): 'Internet paradox revisited', *Journal of Social Issues*, 58 (1), 49-74
- Lado, A.A. and Wilson, M.C. (1994) Human Resource Systems and Sustained Competitive Advantage- A Competency Based Perspective, *Academy of Management Review*, 19 (4), 699-727.
- Langowitz, N. (2001) The Top Women-led Businesses in Massachusetts. Babson Park, MA: Centre for Women's Leadership, Babson College.
- Leitch, C.M., Hill, F.M. and Neergaard, H. (2010) Entrepreneurial and Business Growth and the Quest for a Comprehensive Theory: Tilting at Windmills? *Entrepreneurship Theory and Practice*, 34 (2), 249-260.
- Leitner, K.H. and Guldenberg, S. (2010) Generic strategies and firm performance in SMEs: a longitudinal study of Austrian SMEs, *Small Business Economics*, 35 (2), 169-189.
- Lerner, M. and Almor, T. (2002) Relationships among Strategic Capabilities and the Performance of Women-Owned Small Ventures, *Journal of Small Business Management*, 40 (2), 109-125.
- Lerner, M., Brush, C. and Hisrich, R.D. (1997) Israeli entrepreneurs: An examination of factors affecting performance, *Journal of Business Venturing*, 12 (4), 315-339.
- Liao J. and Gartner, W.B. (2008) The influence of pre-venture planning on new venture creation, *Journal of Small Business Strategy*, 18, 1-21.
- Liao, J., Harold, P.W. and Pistrui, D. (2001) Environmental and Individual Determinants of Entrepreneurial Growth: An Empirical Examination, *Journal of Enterprising Culture*, 9 (3), 253-272.
- Liao, J., Welsh, H. and Stoica, M. (2003) Organisational absorptive capacity and responsiveness: An empirical investigation of growth-oriented SMEs, *Entrepreneurship Theory and Practice*, 6 (4), 63-85.
- Littunen, H. and Tohmo, T. (2003) The high growth in new metal-based manufacturing and business service firms in Finland, *Small Business Economics*, 21 (2), 187-200.
- Loscocco, K.A., Robinson, J., Hall, R.H. and Allen, J.K. (1991) Gender and Small Business Success: An Inquiry into Women's Relative Disadvantage, *Social Forces*, 70 (1), 65-85.

-
- Lottie, F., Santarelli, E. and Vivarelli, M. (2001) The Relationship between Size and Growth: The Case of Italian New-Born Firms. *Applied Economics Letters*, 8 (7), 451-454.
- Lumpkin, G. T. and Dess, G. G. (1996) Clarifying the entrepreneurial orientation construct and linking it to performance, *Academy of Management Review*, 21 (1), 135-172.
- Lussier, R. T. (1995) A non financial business success versus failure prediction model for younger firms, *Journal of Small Business Management*, 33 (1), 8–20.
- Madsen, M. T. (2002): ‘Managerial Roles in a Dynamic World’, *Proceedings of the 12th Nordic Conference on Small Business Research*, Finland
- Madsen, H. Neergaard, H. and Ulhoi, J.P. (2003) Knowledge-intensive entrepreneurship and human capital, *Journal of Small Business & Enterprise Development*, 10 (4), 426-434.
- Majumdar, S. (2008) Modelling Growth Strategy in Small Entrepreneurial Business Organisations, *The Journal of Entrepreneurship*, 17 (2), 157-168.
- Manolova, T.S., Brush, C., Edelman, L.F. and Shaver, K.G. (2012) One size does not fit all: entrepreneurial expectancies and growth intentions of US women and men nascent entrepreneurs, *Entrepreneurship and Regional Development*, 24 (1-2), 7-27.
- Marlow, S. (1997) Self-employed women. New opportunities, old challenges? *Entrepreneurship and Regional Development*, 9 (3), 199-210.
- Marlow, S. and Carter, S. (2004) Accounting for change: professional status, gender disadvantage and self-employment, *Women in Management Review*, 19 (1), 5-16.
- Marlow, S. and McAdam, M. (2012) Analysing the Influence of Gender Upon High-Technology Venturing Within the Context of Business Incubation *Entrepreneurship Theory & Practice*, 36 (4), 655-676.
- Marlow, S. and McAdam, M. (2013), Gender and entrepreneurship: Advancing debate and challenging myths: exploring the mystery of the underperforming female entrepreneur, *International Journal of Entrepreneurial Behaviour and Research*, 19 (1), 114-124.
- Marlow, S., Carter, S. and Shaw, E. (2008) Constructing female entrepreneurship policy in the UK: is the US a relevant benchmark? *Environment and Planning C: Government and Policy*, 26, 335-351.
- Marlow, S., Henry, C. and Carter, S. (2009), Exploring the impact of gender upon women’s business ownership, *International Small Business Journal*, 27 (2), 139-48.

- Martin, F. (2008) The Motivations of Female Entrepreneurs in Northern Ireland”, Institute for Small Business and Entrepreneurship, 5-7 November 2008, Belfast, N. Ireland.
- Masurel, E. and Smit, H. (2000) Planning Behaviour of Small Firms in Central Vietnam, *Journal of Small Business Management*, 38 (2) 95-102.
- Mata, J. (1996) Markets, entrepreneurs and the size of new firms, *Economic Letters*, 52 (1), 89-94.
- Matlay, H. and Westhead, P. (2005) Virtual teams and the rise of e-entrepreneurship in Europe, *International Small Business Journal*, 23 (3), 279-302.
- Maysami, R.C. and Goby, V.P. (1999) Female business owners in Singapore and elsewhere: a review of studies, *Journal of Small Business Management*, 37 (1), 96-105.
- Mazzarol, T. (2005) Planning and Growth Characteristics of Small Business Owner-Managers’ [online], Available: <http://wwwapp.iese.edu/eisb/papers/full/paperEISB106.pdf>
- Mazzarol, T., Reboud, S. and Soutar, G.N. (2009) Strategic planning in growth oriented small firms, *International Journal of Entrepreneurial Behaviour & Research*, 15 (4), 320-345.
- McClelland, E. (2003) Following the pathway of female entrepreneurs. *International Journal of Entrepreneurial Behaviour & Research*, 11 (2), 84-107.
- McClelland, E. (2004) Irish Female Entrepreneurs: Mapping the Route to Internationalisation, *Irish Journal of Management*, 25 (2), 92-107.
- McClelland, E., Swail, J., Bell, J. and Ibbotson, P. (2005), Following the Pathway of Female Entrepreneurs, A Six-Country Investigation, *International Journal of Entrepreneurial Behaviour and Research*, 11 (2), 84-107.
- McClelland, S. (1994) Gaining competitive advantage through strategic management development, *Journal of Management Development*, 13(5), 4-13.
- McDougall, P. P. and Oviatt, B. M. (1996) New Venture internationalisation strategic change and performance: a follow up study, *Journal of Business Venturing*, 11 (1), 23-40.
- McGowan, P. and Henry, C. (2004) Special Issue: Female Entrepreneurship-A Research Agenda. *International Journal of Entrepreneurial Behaviour and Research*, July, 2004.
- McGowan, P., Redeker, C.L., Cooper, S.Y. and Greenan, K. (2012) Female entrepreneurship and the management of business and domestic roles:

Motivations, expectations and realities. *Entrepreneurship & Regional Development*, 24 (1-2), 53-72.

McKay, R. (2001) Women Entrepreneurs: Moving beyond family and flexibility. *International Journal of Entrepreneurial Behaviour and Research*, 7 (4), 148-165.

McKelvie, A. and Wiklund, J. (2010) Advancing firm growth research: A focus on growth mode instead of growth rate. *Entrepreneurship Theory & Practice*, 34, 381-400.

Menzies, T.V., Diochon, M. and Gasse, Y. (2004) Examining Venture-Related Myths Concerning Women Entrepreneurs, *Journal of Development Entrepreneurship*, 9 (2), 89-107.

Miles, R. and Snow, C. (1978) *Organisational Strategy, Structure, and Process*. New York: McGraw-Hill.

Miller, D. and Toulouse, J.M. (1986) Chief Executive Personality and Corporate Strategy and Structure in Small Firms, *Management Science*, 32 (11), 1389-1409.

Minniti, M. (2010) Female Entrepreneurship and Economic Activity. *European Journal of Development Research*, 22 (3), 294-312.

Minniti, M. and Naude, W. (2010) What Do We Know about the Patterns and Determinants of Female Entrepreneurship across Countries? *European Journal of Development Research*, 22 (3), 277-293.

Minniti, M., Arenius, P. and Langowitz, N., (2004), *Global Entrepreneurship Monitor: Report on Women and Entrepreneurship*, Babson and London Business School.

Mintzberg, H. (1978) Patterns in strategy formation, *Management Science*, 24, 934-948.

Mitchelmore, S. and Rowley, J. (2013) Entrepreneurial competencies of women entrepreneurs pursuing business growth, *Journal of Small Business and Enterprise Development*, 20 (1), 125-142.

Mitchelmore, S. and Rowley, J. (2013) Growth and planning strategies within women-led SMEs, *Management Decision*, 51 (1), 83-96.

Moore, C. and Muller, R. (2002) The transition from paid to self-employment in Canada: the importance of push factors, *Applied Economics*, 34 (6), 791-801.

Moore, S.B. and Manring, S.L. (2009) Strategy development in small and medium sized enterprises for sustainability and increased value creation, *Journal of Cleaner Production*, 17, 276-282.

- Morris, M.H., Miyasaki, N.N., Watters, and Craig, E. (2006) The Dilemma of Growth: Understanding Venture Size Choices of Women Entrepreneurs, *Journal of Small Business Management* 44 (2), 221-244.
- Morrison, A. (2006) Entrepreneurship: what triggers it? *International Journal of Entrepreneurial Behaviour and Research*, 6 (2), 59-71.
- Mukhtar, S.M. (2002) Differences in Male and Female Management Characteristics: A Study of Owner-Manager Businesses, *Small Business Economics*, 18 (4), 289-310.
- Munoz, L.G. and Perez, P.F. (2007) Female Entrepreneurship in Spain during the Nineteenth and Twentieth Centuries, *The Business History Review*, 81 (3), 495-515
- Murphy, G.B., Trailer, J.W. and Hill, R.C. (1996) Measuring Performance In Entrepreneurship, *Journal of Small Business Research*, 1 (36), 15-33.
- Naser, K., Mohammed, W.R. and Nuseibeh, R. (2009) Factors that affect women entrepreneurs; evidence from an emerging economy, *International Journal of Organisational Analysis*, 17 (3), 225-247.
- Nau, D.S. (1995) Mixing Methodologies: Can Bimodal Research be a Viable Post-Positivist Tool?, *The Qualitative Report*, 2(3), available online (<http://www.nova.edu/ssss/QR/QR2-3/nau.html>)
- Ndemo, B. and Maina, F.W. (2007) Women entrepreneurs and strategic decision making, *Management Decision*, 45 (1), 118 – 130.
- Neergaard, H. (2008) The Icelandic female entrepreneur: self-efficacy and growth intentions, 31st Institute for Small Business & Entrepreneurship Conference 5th-7th November 2008 Belfast.
- Neider, L. (1987) A Preliminary Investigation of Female Entrepreneurs in Florida, *Journal of Small Business Management*, 25 (3), 22-29.
- Neiswander, D. and Fulton, M.E (1989) Successful growth management in Brockhaus, R. (Ed) et al., *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA (1989).
- Nissan, E., Carrasco, I., and Castano, M. (2012) “Women Entrepreneurship, Innovation and Internationalisation” in M.A. Galindo and D. Ribeiro (Eds) in *Women’s Entrepreneurship and Economics*, International Studies in Entrepreneurship, Springer Science and Business Media, 125-142.
- North, D., Smallbone, D. and Vickers, I. (2001) Public sector support for innovating SMEs, *Small Business Economics*, 16 (4), 303- 309.

- OECD (2004) “Promoting entrepreneurship and Innovative SME’s in a global economy: Towards a more responsible and inclusive globalisation”, 2nd OECD Conference of Ministers responsible for Small and Medium-sized enterprises (SME’s), Istanbul, Turkey, 3-5 June 2004.
- OECD (2008) *Manual on Business Demography Statistics, Structural and Demographic Business Statistics (SDBS)* European Commission, www.sourceoecd.org/industrytrade/9789264041875
- OECD (2012) “Measuring Women Entrepreneurship”, in *Entrepreneurship at a Glance 2012*, OECD Publishing.
- O’Connor, V., Hamouda, A., McKeon, H., Henry, C. and Johnston, K. (2006) Co-entrepreneurial ventures: A study of mixed gender founders of ICT companies in Ireland, *Journal of Small Business and Enterprise Development*, 3 (4), 600-619.
- O’Gorman, B. (2007) MNE’s and new venture enterprise creation: Do MNEs have a direct impact on the amount of new indigenous high-tech start-ups in Ireland? PhD, unpublished
- O’Gorman, C. (2001) The Sustainability of Growth in Small and Medium sized Enterprises. *International Journal of Entrepreneurial Behaviour and Research*, 7 (2), 60-75.
- O’Gorman, C. (2003) Stimulating High-Tech Venture Creation, *R&D Management*, 33,177-187, March 2003 [online], Available at SSRN: <http://ssrn.com/abstract=513892>
- O’Gorman, C. and Terjesen, S. (2006) Financing the Celtic Tigress: Venture Financing and Informal Investment in Ireland, *Venture Capital*, 8 (1), 69-88.
- O’Gorman, C. and Cunningham, J. (1997) *Enterprise in Action – An Introduction to Entrepreneurship in an Irish Context*, Ireland: Oak Tree Press.
- O’Regan, N. and Ghobadian, A. (2002) ‘Effective Strategic Planning in Small and Medium Sized Firms’, *Management Decision*, 40 (7), 663 – 671.
- O’ Regan, N., Ghobadian, A. and Galleary, D. (2006) In search of the drivers of high growth in manufacturing SMEs, *Technovation*, 26 (1), 30-41.
- Olsen, S.F. and Currie, H.M. (1992) Female Entrepreneurs: Personal Value Systems and Business Strategies in a Male-Dominated Industry, *Journal of Small Business Management*, 30 (1), 49-57.
- Oltra, M. and Flor, M.L. (2010) The moderating effect of business strategy on the relationship between operations strategy and firms results, *International Journal of Operations & Production Management*, 30 (6), 612-638.

- Oppenheim, A. (1992) *Questionnaire Design, Interviewing and Attitude Measurement*, 2nd ed., London: Pinter Publishers.
- Orhan, M. and Scott, D. (2001) Why women enter into entrepreneurship: an explorative model, *Women in Management Review*, 16 (5), 232-47.
- Orser, B., Fischer, E., Reuber, R., Hooper, S. and Riding, A. (1999) Beyond Borders: Canadian Business Women in International Trade Ottawa: Royal Bank of Canada. Available from: http://198.103.104.42/businesswomen/beyond_borders/report-e.pdf (Accessed 5 November 2002).
- Orser., B. and Hogarth-Scott, S. (2002) Opting for Growth : Gender Dimensions of Choosing Enterprise Development, *Canadian Journal of Administrative Science*, 19, 284-300.
- Orser, B., Spence, M., Riding, A. and Carrington, C.A. (2010) Gender and export propensity, *Entrepreneurship Theory and Practice*, 34(2), 934-958.
- Orser, J., Hogarth-Scott, S. and Riding, A. (2000) Performance, Firm size and Management Problem Solving, *Journal of Small Business Management*, 38(4), 42- 58.
- Pallant, J. (2007) *SPSS Survival Manual*, 3rd ed., Glasgow: Open University Press.
- Papadaki, E. and Chami, B. (2002) ‘Growth Determinants of Micro-Businesses in Canada’, *Small Business Policy Branch, Industry Canada research report from CELCEE*, [online] available: [http://strategis.ic.gc.ca/epic/internet/insbrprppe.nsf/vwapj/growth_determinants.pdf/\\$FILE/growth_determinants.pdf](http://strategis.ic.gc.ca/epic/internet/insbrprppe.nsf/vwapj/growth_determinants.pdf/$FILE/growth_determinants.pdf). [Accessed 13 August 2009]
- Papadakis, V., Lioukas, S., and Chambers, D. (1998) Strategic decision-making processes : the role of management and context, *Strategic Management Journal*, 19, 115-147.
- Parnell, J.A. (2005) Managing paradoxes in strategic decision-making, *International Journal of Management and Decision-Making*, 7 (6), 708-724.
- Parnell, J.A. (2013) Uncertainty, Generic Strategy, Strategic Clarity, and Performance of Retail SMEs in Peru, Argentina, and the United States, *Journal of Small Business Management*, 51 (2), 215-234.
- Parnell, J.A. and Hershey, L. (2005) The strategy-performance relationship revisited: the blessing and curse of the combination strategy, *International Journal of Commerce and Management*, 15 (1), 17-33.

-
- Pasanen, M. (2003). In search of factors affecting SME performance : the case of Eastern Finlan. Kupio University Publications H. Business and Information Technology 1. Kupio ; University of Kuopio.
- Penrose, E. (1959). *Theory of the growth of the firm*. New York: Oxford University Press.
- Perry, S. (2002) A comparison of failed and non-failed small businesses in the United States, *Journal of Developmental Entrepreneurship*, 7 (4), 415-428.
- Persson, H. (2004) The survival and growth of new establishments in Sweden, 1987-1995, *Small Business Economics*, 23 (5), 423-440.
- Pihkala, T., Vesalainen, J. and Viitala, R. (2000) Motivational Background as an Explanation for Differences between Male and Female Entrepreneurship. *Conference proceedings, ICSB Conference, Brisbane, Australia*.
- Podsakoff, P.M. and Organ, D. W. (1986): 'Self-reports in organizational research: Problems and prospects', *Journal of Management*, 12 (2): 531-544.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies, *Journal of Applied Psychology*, 88 (5), 879-903.
- Pope, R.A. (2002) Why small firms export: another look, *Journal of Small Business Management*, 40 (1), 17-26.
- Porter, M.E. (1980) *Competitive Strategy*, Free Press, New York, 1980.
- Porter, M.E. (2004) *Competitive Strategy-Techniques for Analyzing Industries & Competitors*, Free Press Export Edition.
- Poutziouris, P. (2003) The Strategic Orientation of Owner-Managers of Small Ventures- Evidence from the UK Small Business Economy, *International Journal of Entrepreneurial Behaviour and Research*, 9 (5), 185-214.
- Quadar, M.S. (2012) A Characteristic Model of Successful Women Entrepreneurs in the UK, *Journal of Services Research*, 12 (1), 89-113.
- Rajagopalan, N. (1996) Strategic Orientations, Incentive Plan adoption and Firm Performance: Evidence from Electric Utility Firms, *Strategic Management Journal*, 18, 761-785.
- Reitsperger, W.D., Daniel, S.J., Tallman, S.B. and Chismar, W.G. (1993) Product Quality and Cost Leadership: Compatible Strategies? *MIR: Management International Review*, 33, 7-21.

- Remenyi, D., Williams, B., Money, A. and Swartz, E. (1998) *Doing Research in Business and Management*, London: Sage.
- Renzulli, L.A., Aldrich, H. and Moody, J. (2000) Family Matters: gender, networks, and entrepreneurial outcomes, *Social Forces*, 79 (2), 523-546.
- Reuber, A.R. and Fischer, E. (2002) The influence of the Management Team International Experience on the Internationalisation Behaviour of SMEs, *Journal of International Business Studies*, 28 (4), 807 – 825.
- Reynolds, P. (1993). High performance entrepreneurship: what makes it different? *Babson Entrepreneurship Research Conference*, University of Houston, USA, March 24-27.
- Ritsilä, J. and Tervo, H. (2006) Effects of unemployment on new firm formation: micro-level panel data evidence from Finland, *Small Business Economics*, 14, 31-40.
- Roberts, E.B. (1991) *Entrepreneurs in High Technology: Lessons from MIT and Beyond*, Oxford University Press, Oxford.
- Robinson, K.C. and McDougall, P.P. (2001) Entry barriers and new venture performance: a comparison of universal and contingency approaches, *Strategic Management Journal Special Issue: Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation*, 22 (6-7), 659–685.
- Robson, C. (2002) *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*, 2nd ed., United Kingdom: Blackwell Publishing.
- Robson, P.J.A., Akuetteh, C.K., Westhead, P. and Wright, M. (2012) Exporting Intensity, human capital and business ownership experience, *International Small Business Journal*, 30 (4), 367-387.
- Roomi, M.A. (2007) The Role of Human and Social Capital in the Growth of Women-owned Enterprises Institute for Small Business & Entrepreneurship 7th-9th November 2007.
- Roomi, M.A., Harrison, P. and Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England: Analysis of factors influencing the growth process, *Journal of Small Business and Enterprise Development*, 16 (2), 270-288.
- Roper, S. (1998) Entrepreneurial Characteristics, Strategic Choice and Small Business Performance. *Small Business Economics*, 11 (1), 11-24.
- Rosa, P., Carter S. and Hamilton D. (1996) Gender as a determinant of small business performance: Insights from a British study, *Small Business Economics*, 8 (6), 463-478.

- Ruane, F. and Sutherland, J. (2007) Firm performance characteristics and gender ownership in a Globalised Economy, Discussion Paper, Institute for International Integration Studies.
- Sandberg, W.R. and Hofer, C.W. (1987) Improving new venture performance: the role of strategy, industry structure, and the entrepreneur, *Journal of Business Venturing*, 2 (5),5-28.
- Sarantakos, S. (1993) *Social Research*, Melbourne: Macmillan Education Australia.
- Sarri, K and Trihopoulou, A. (2005) Female Entrepreneurs' Personal Characteristics and Motivation: A Review of the Greek Situation, *Women in Management Review*, 20 (1), 24-36.
- Saunders, M., Lewis, P. and Thornhill, A. (2007) *Research Methods for Business Students*, 4th ed., Harlow: Pearson Education.
- Schjoedt, L., and Kraus, S. (2009) Entrepreneurial teams: definition and performance factors. *Management Research News*, 513-524.
- Schwartz, E.B. (1976) Entrepreneurship: A new female frontier, *Journal of Contemporary Business*, Winter, 47-76.
- Segal, G. Borgia, D. and Schoenfeld, J. (2005) The motivation to become an entrepreneur, *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 42 –57.
- Sekaran, U. and Bougie, R. (2010) *Research methods for business: A skill building approach*. London: Wiley.
- Sexton, D. L and Similor, R.W. (1997) *Entrepreneurship 2000*, Chicago: Upstart Publishing.
- Shane, S. (2000) Prior knowledge and the discovery of entrepreneurial opportunities, *Organisation Science*, 11 (4), 448-469.
- Shepherd, D. and Wiklund, J. (2009) Are We Comparing Apples with Apples or Apples with Oranges? Appropriateness of Knowledge Accumulation across Growth Studies, *Entrepreneurship Theory and Practice*, 33 (1), 105-23.
- Shiu, E., Hair, J., Bush, R. and Ortinau, D. (2009) *Marketing Research*, Berkshire: McGraw-Hill.
- Shrader, R. and Siegel., D.S. (2007) Assessing the relationship between human capital and firm performance: Evidence from technology-based new ventures. *Entrepreneurship Theory and Practice*, 23 (5), 893-908.

-
- Singh, R.K., Garg, S.R. and Deshmukh., S.G. (2008) Strategy Development by SME's for competitiveness: a review, *Benchmarking: An International Journal*, 15 (5), 525-547.
- Singh, S., Reynolds, R. and Muhammad, S. (2001) A gender based performance analysis of micro and small enterprises in Java, Indonesia, *Journal of Small Business Management*, 39 (2), 174-182.
- Sirec, K., Tominic, P. and Rebernik, M. (2010) Gender Differences in the growth aspirations and technology orientation of Slovenian entrepreneurs. In C.G. Brush, A. de Bruin, E.J. Gatewood, C. Henry (Eds.), *Women entrepreneurs and the global environment for growth (pp.322-344)*. Cheltenham: Edward-Elgar.
- Skrt, B. and Antonic, B. (2004) Strategic Planning and Small Firm Growth: An Empirical Examination, *Managing Global Transitions*, 2 (2), 107-122.
- Slater, S.F., Olson, E.M. and Hult, G.T.M. (2006) The moderating influence of strategic orientation on the strategy formation capability-performance relationship, *Strategic Management Journal*, 27 (12), 1221-1231.
- Smallbone, D. and Wyer, P. (2000) Growth and Development in the Small Firm in S. Carter and D. Jones-Evans *Enterprise and Small Business Principles Practice and Policy*, London: Financial Times Prentice Hall.
- Smallbone, D., Leigh, R. and North, D. (1995) 'The Characteristics and Strategies of high growth SMEs', *International Journal of Entrepreneurial Behaviour & Research*, 1 (3), 44-56.
- Smith, K. G., Guthrie, J. P. and Chen, M. (1986) 'Miles and Snow's typology of strategy, organizational size and organizational performance', *Academy of Management*, 45-49.
- Stam, E. and Schutjens, V. (2005) The fragile success of team start-ups, discussion papers on Entrepreneurship, Growth and Public Policy, Max Planck Institute for Research into Economic Systems, Group Entrepreneurship, Growth and Public Policy.
- Stanworth, M. and Curran, J. (1976) Growth and the small firm: an alternative view, *Journal of Management Studies*, 13 (2), 95-110.
- Storey, D.J. (1994) "*Understanding the Small Business Sector*" London: Routledge.
- Storey, D.J. (2011) Optimism and chance: The elephants in the entrepreneurship room, *International Small Business Journal*, 29 (4), 303-321.

Storey, D.J. and Greene, F.J. (2010) *Small Business and Entrepreneurship*. Pearson Education Limited.

Storey, D. and Tether, B.S. (1998) New technology-based firms in the European union: an introduction, *Research Policy*, 26 (9), 933-946.

Sullivan, D. and Meek, M.R. (2012) Gender and Entrepreneurship: a review and process model”, *Journal of Managerial Psychology*, 27 (5), 428-458.

Tai, A.R. and Sims, R.L. (2005) The Perception of the Glass Ceiling in High Technology Companies, *Journal of Leadership and Organisational Studies*, 12 (1), 16-23.

The Advisory Group for Small Business (2011) *The Voice of Small Business*, Dublin: Department of Jobs, Enterprise and Innovation.

Thompson, P., Jones-Evans, D. and Kwong, C. (2009) Women and Home-based Entrepreneurship: Evidence from the United Kingdom, *International Small Business Journal*, 27 (2), 227-239.

Thornhill, S. and White, R.E. (2007) Strategic purity: A multi-industry evaluation of pure vs. hybrid business strategies, *Strategic Management Journal*, 28 (5), 553–561.

Tornikoski, E.T. and Newbert, S.L. (2007) Exploring the determinants of organizational emergence: A legitimacy perspective, *Journal of Business Venturing*, 22 (2), 311–335.

Tuli, F. (2011) The Basis of Distinction Between Qualitative and Quantitative Research in Social Science: Reflection on Ontological, Epistemological and Methodological Perspectives, *Ethiopian Journal of Education and Sciences*, 6(1).

Turk, T.A. and Shelton, L. (2004) Growth Aspirations, Risk, Gender and Legal Form: A Look at the Services Industries, Available from www.sbaer.uca.edu/research/allied/2004_maui/entrepreneurship/11.pdf (accessed 25th September 2006).

Valiulis, M., Drew, E., Humbert, A, and Daverth, G. (2004) “Springboard for Women in Business Initiative Wicklow Chamber of Commerce”, Centre for Gender and Women’s Studies, Trinity College Dublin.

Van der Sluis, J.A., Van Praag, M.and Vijverberg, W. (2005) Entrepreneurship Selection and Performance: A Meta-Analysis of the Impact of Education in Developing Economies, *World Bank Econ Rev*, 19 (2), 225-261.

Venkataraman, S. (1997) ‘The distinctive domain of entrepreneurship research an editor’s perspective’, in Katz, J. and Brockhaus R., (eds.), *Advances in Entrepreneurship Firm Emergence and Growth*, Greenwich: CT JAI Press:119 - 138.

- Verheul, I. and Van Stel, A.J. (2007) Entrepreneurial Diversity and Economic Growth. Research Paper, Erasmus Research Institute of Management (ERIM).
- Walker, E.A. and Webster, B.J. (2007) Gender, age and self-employment: Some things change, some stay the same. *Women in Management Review*, 22 (2), 122-135.
- Wang, W.K., Huang, H.C. and Lai, H.C. (2007) Design of a knowledge-based performance evaluation system: A case of high-tech state-owned enterprises in an emerging economy, *Expert Systems with Applications*, available online: <http://dx.doi.org/10.1016/j.eswa.2007.01.032>
- Watkins D.S. and Watkins, J. (1984) The female entrepreneur: background and determinants of business choice- some British data, *International Small Business Journal*, 2 (4), 21-31.
- Watson, J. (2002) Comparing the performance of male and female-controlled businesses; Relating outputs to inputs. *Entrepreneurship Theory & Practice*, 26 (6), 91-100.
- Watson, J. and Newby, R. (2005) Biological Sex, Stereotypical Sex-Roles and SME Owner Characteristics, *International Journal of Entrepreneurial Behaviour and Research*, 11 (2), 129-143.
- Watson, J. and Robinson, S., 2003, Adjusting for Risk in Comparing Male- and Female-Controlled Firms, *Journal of Business Venturing*, 18 (6), 773-788.
- Watson, K., Hogarth-Scott, S. and Wilson, N. (1998) Small business start-ups: success factors and support implications, *International Journal of Entrepreneurial Behaviour & Research*, 4 (3), 217-238.
- Weeks, J.R. (2001) The Face of Women Entrepreneurs: What We Know Today?, OECD Proceedings, 2nd OECD Conference on Women Entrepreneurs in SME's: Realising the Benefits of Globalisation and the Knowledge Based Economy, pp. 127-144.
- Weeks J.R. (2008) A Connotation for control: Women Business Owners Seeking Balance AND Growth, paper presented at Institute for Small Business and Entrepreneurship, Belfast, N. Ireland, 5-7 November.
- Weinzimmer, L. (2000) A replication and extension of organisational growth determinants, *Journal of Business Research*, 48 (1), 35-41.
- Welter, F. (2001) 'Who wants to grow? growth intentions and growth profiles of (nascent) entrepreneurs in Germany', *Frontiers of Entrepreneurship Research*: 91-147. Wellesley, MA: Babson College.

-
- Welter, F. and Smallbone, D. (2011) Institutional perspectives on entrepreneurial behaviour in challenging environments, *Journal of Small Business Management*, 49 (1), 107-125.
- West, G.P. (2007) Collective Cognition: When Entrepreneurial Teams, Not Individuals, Make Decisions, *Entrepreneurship Theory and Practice*, 31 (1), 77-102.
- Westhead, P. and Birley, S. (1995) 'Employment Growth In New Independent Owner-Managed Firms-Great Britain', *International Small Business Journal*, 13 (3), 1-29.
- Wickham, P. (2004) *Strategic Entrepreneurship A Decision Making Approach to New Venture Creation and Management* Pitman Publishing London.
- Wiklund, J. (1998) Small firm growth and performance: Entrepreneurship and beyond. Unpublished PhD thesis, Internationella Handelshogskolan, Jonkoping. Sweden.
- Wiklund, J. and Shepherd, D. (2003) Aspiring for and Achieving Growth: The Moderating Role of Resources and Opportunities, *Journal of Management Studies*, 40 (8), 1919-1941.
- Wiklund, J., Davidsson, P. and Delmar, F. (2003). Expected consequences of growth and their effect on growth willingness in different samples of small firms. *Entrepreneurship Theory and Practice*, 27 (3), 247-269.
- Wiklund, J., Patzelt, H. and Shepherd, D.A. (2009) Building an integrative model of small business growth, *Small Business Economics*, 32 (4), 351-374.
- Winn, J. (2004) Entrepreneurship: Not an easy path to top management for women, *Women in Management Review*, 19 (3), 143-53.
- Wright, K. B. (2005): 'Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services', *Journal of Computer-Mediated Communication*, 10 (3).
- Wynarczyk, P. (2008) Growth of women-owned home-based businesses: North East England vs Western Australia, Institute for Small Business and Entrepreneurship.
- Yasuda, T. (2005) "Firm growth, size, age and behaviour in Japanese manufacturing", *Small Business Economics*, 24 (1), 1-2.
- Zafar, B. (2009) College major choice and the gender gap, Staff Report, Working paper series, No.364, Federal Reserve Bank of New York.

Zinn, J., Spector, W.D., Weimer, D.L. and Mukamel, D.B. (2008) Strategic Orientation and Nursing Home Response to Public Reporting of Quality Measures: An Application of the Miles and Snow Typology, *Health Services Research*, 43 (2), 598–615.

Appendix A: Cover Letter - Questionnaire

Dear _____

I am currently undertaking research as part of my PhD studies at the University of Limerick. The overall aim of the study is to identify and examine the factors that influence firm growth in female-owned firms in Ireland.

It is expected that the results from this study can further develop research on female owner-managers in Ireland and will influence policy and the design of more appropriate support structures to assist female owner-managers achieving firm growth.

As a female owner-manager, you are invited to participate in this study which involves completing a questionnaire on your **current** business. Participation is completely voluntary and you or your business will not be identified through any of the information gathered. The questionnaire will take approximately 10 minutes to complete. Findings will be documented only as summaries in which no individual's answers can be identified. All questionnaires are absolutely **confidential and anonymity is guaranteed**. This is to encourage you to be frank and open in your answers.

This research is being conducted by Yvonne Costin (University of Limerick) and supervised by Dr. Briga Hynes and Dr. Naomi Birdthistle (University of Limerick) and has received University of Limerick ethics approval. If you have any queries about any aspect of the research, please do not hesitate to contact me at yvonne.costin@ul.ie or at 061-234613.

I sincerely hope that you will be willing to complete the questionnaire on the link below as your feedback is extremely relevant for this study.

The survey can be completed by clicking on this link <http://www.surveymonkey.com/s/FemaleEntrepreneurs>. (Please note if you have trouble accessing the survey through this link, you can copy and paste the link directly into the address bar).

Kindest regards,

Yvonne Costin.
Lecturer in Entrepreneurship,
Department of Management & Marketing,
Kemmy Business School,
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Appendix B: Questionnaire

Internal Influences on Firm Growth in Female-Owned Firms

Section A: Characteristics of Female Owner-Managers

1. What range includes your age?

18-34
 35-44
 45-54
 55 +

2. What is the highest level of education that you hold?

No formal education
 Third Level
 Secondary Level
 Postgraduate Level

Other (please specify)

3. If you have completed third level education, please indicate which discipline you pursued?

Business
 Education
 Arts, Humanities & Social Sciences
 Science and Engineering

Other (please specify)

4. Was any of your previous work experience in the same sector that your current business is operating in?

Yes
 No

5. Did you occupy a management position in your previous employment?

Yes
 No

6. Have you started any other businesses apart from your current business?

Yes
 No

7. Please identify your main motivation for starting this business:

Section B: Firm Characteristics

8. How many years has your current business been operating?

6-12 mths
 6 -10 years
 1-2 years
 Over 10 years
 3-5 years

Internal Influences on Firm Growth in Female-Owned Firms

9. Please indicate the industry sector that the firm operates in:

- ICT
 Education & Training
 Manufacturing
 Health
 Food and Drink
 Retail
 Professional Services

Other (please specify)

10. Is the business:

- Solely owned and managed
 Owned and managed by a team

11. Please indicate the number of employees (inclusive of full and part time) in your business for the following years

| | |
|------|----------------------|
| 2007 | <input type="text"/> |
| 2008 | <input type="text"/> |
| 2009 | <input type="text"/> |

Section C: Firm Growth

12. Did you establish growth objectives for your business?

- Yes
 No

13. Please describe the growth objective guiding your business for the next three years.

14. Please indicate the turnover of your business for the following years:

| | |
|------|----------------------|
| 2007 | <input type="text"/> |
| 2008 | <input type="text"/> |
| 2009 | <input type="text"/> |

Internal Influences on Firm Growth in Female-Owned Firms

15. In the pursuit of growth for your business, have you engaged in the following activities?

| | Yes | No |
|-------------------------------------|-----------------------|-----------------------|
| Add a new product or service | <input type="radio"/> | <input type="radio"/> |
| Sell to a new market | <input type="radio"/> | <input type="radio"/> |
| Seek professional advice | <input type="radio"/> | <input type="radio"/> |
| Expand marketing activities | <input type="radio"/> | <input type="radio"/> |
| Research and development activities | <input type="radio"/> | <input type="radio"/> |
| Improve ICT in the business | <input type="radio"/> | <input type="radio"/> |
| Operate in an international market | <input type="radio"/> | <input type="radio"/> |
| Other activities (please specify) | <input type="text"/> | |

16. Did you have a formal strategic plan in place when growing the business?

Yes No

17. Please indicate the time frame of the plan:

6-12 mths 3-5 year plan
 1-2 year plan 6-10 year plan

18. Please indicate whether you have used any of the following competitive strategies?

| | Yes | No |
|--|-----------------------|-----------------------|
| A business who is first to market with new products and adapts to changing customer needs on a proactive basis | <input type="radio"/> | <input type="radio"/> |
| Business maintains a stable and limited line of products, while researching the market to identify potential opportunities | <input type="radio"/> | <input type="radio"/> |
| A "wait and see" approach and respond then to competitive pressures to avoid losing customers | <input type="radio"/> | <input type="radio"/> |
| Maintain and defend existing position by securing a market niche with a more limited range of products/services than competitors | <input type="radio"/> | <input type="radio"/> |

19. Please provide the following business details (optional):

| | |
|-----------------|----------------------|
| Name of Company | <input type="text"/> |
| Your Name | <input type="text"/> |
| Contact No | <input type="text"/> |
| Email Address | <input type="text"/> |

Thank you for taking the time to complete the questionnaire. Your input into this research is greatly appreciated. If you have any queries with regard to any aspect of this research, please do not hesitate to contact the researcher.

Appendix C: Reflections from Policy Representatives

Summary Document: An Investigation of the Internal Influences on Firm Growth in Established Female Owner-Managed Firms.

1.0 Background to the Research

This research titled “An Investigation of the Internal Influences on Firm Growth in Female Owner-Managed Firms” was completed in response to a call that the Irish Government should formally adopt a national entrepreneurship policy focused on maximising the number of firms achieving firm growth. Coupled with maximising the number of firms achieving growth is the need to increase the number of established female-owned firms. Whilst there has been an increase in the number of females starting new firms, female owner-managers are recognised as a source of untapped entrepreneurial potential in Ireland due to their underrepresentation in the population of established firm owners (Fitzsimons and O’Gorman 2012), a trend consistent over the last decade.

Despite the knowledge of policy makers of the economic contributions of female-owned firms in Ireland, common issues and challenges emerge for all SMEs, irrespective of gender, on how to achieve sustained firm growth. Indications from research suggest that policy makers, in developing support mechanisms for firm growth do not fully understand; and do not consider the complexities associated with firm growth and the internal factors that influence it, more especially in the female context, thereby implying that the current supports may not be adequate. This brings to the fore the objective of this study which sought to investigate firm growth in established female-owned firms, with a view to providing an understanding of how a range of internal characteristics (characteristics of female owner-managers, firm characteristics) and strategic-related activities influence it. Through a better understanding, more appropriate policies can be implemented to support growing female-owned firms who make a significant contribution to the Irish economy.

The overall aim of this study was to investigate how a range of internal characteristics of female owner-managers (age, motivation for start-up, education, prior employment experience), firm characteristics (industry sector, firm age, firm size and nature of ownership) and strategic-related activities (setting growth objectives, completing a formalised strategic plan, and strategy type) influence firm growth. Firm growth was investigated using three measures namely turnover, turnover per employee and employment.

The objectives of the study were investigated by completing a quantitative survey with established female owner-managers operating firms in Ireland for more than three years. In total, 176 responses were received. The following section outlines a brief overview of the profile of respondents and firm growth achieved over the three year period (2007-2009) of the study:

1.1 Profile of Respondent Firms:

All respondents were the owner-manager of the firms and had been involved in the business since its establishment. With regard to industry sector, the breakdown of respondents across the industry sectors were dominated by professional services (37.5%). The remaining firms were fairly evenly divided between the manufacturing (15.3%), ICT (13.6%) and health sector (11.4%). Other sectors represented by female-owned firms included education and training (9.1%) and retail (7.4%). The industry sector least represented was food and drink (5.75%).

Close to 60% of the sample were represented by young female-owned firms in operation for 3-5 years, followed by 22.2% in operation for 6-10 years. The remaining 18.2% were in operation for over 10 years. A significant majority of firms (84.1%) were categorised as micro-firms, employing up to 10 employees, followed by 13.6% categorised as small firms employing between 11 and 50 people. The remaining firms were represented by medium firms, employing more 51 employees or more (2.3%).

1.2 Firm Growth Achieved

- **Turnover:** The minimum turnover achieved by the respondent firms was €10,500 while at the other end of the continuum the maximum was over €6m. The mean levels of turnover decreased over the three years, ranging from €515,253 in 2007 to €304,035 in 2009. The average mean turnover over the three year period was €453,718.
- **Number of Employees:** In 2007, the total of employees in all of the firms amounted to 1,867 employees (including the owner/managers) increasing to 1,883 in 2009. The minimum number of employees for each year over the three-year period was 1, accounting for a large number of firms where the owner-manager was the sole employee. Furthermore, the maximum number of 650 highlights the disparity that exists between the minimum and maximum number of employees in the firms. The mean number of employees over the three year period ranged between 10 and 11 depicting the majority as micro-sized firms.
- **Turnover per employee:** The highest level of turnover per employee was recorded for 2009 (€66714) showing an increase from the figure in 2007 of €62,047, depicting that labour productivity in these firms increased over the three year period in these firms.

1.3 Key Findings:

The study has established that firm growth is unpredictable and non-linear in nature and is dependent on a range of interlinked factors related to female owner-manager characteristics, firm characteristics and strategic-related activities:

1.3.1 Female-Owner Manager Characteristics:

- **Age:** The study highlighted that younger female owner-managers achieved higher firm growth. More specifically, those aged between 18-34 and 35-44 achieved the highest levels.
- **Motivation for Start-Up:** Starting a business for positive or negative reasons did not have an impact on firm growth.
- **Education:** This study endorsed the importance of high levels of education where female owner-managers with third and postgraduate levels of

education achieved higher firm growth. Furthermore, those who had completed technical disciplines achieved higher firm growth.

- **Sector, Managerial Experience:** This study indicated female owner-managers with experience in the sector where they started their firm achieved higher firm growth. In addition, female owner-managers who had occupied managerial positions in the previous employment achieved higher firm growth. Having experience in starting other firms did not result in higher firm growth.

1.3.2 Female-owned firm characteristics:

- **Industry sector:** Female owner-managers operating in non-feminised sectors (ICT, Manufacturing) achieved the highest firm growth. Of note are the firms operating in the ICT sector. In contrast, feminised industry sectors (e.g. retail, professional services) did not achieve higher firm growth.
- **Firm Age:** Firms in operation for less than 10 years achieved higher firm growth when compared to those in operation for over 10 years.
- **Nature of Ownership:** Female-owned firms owned and managed by teams achieved higher firm growth.
- **Firm Size:** Firm size did not result in higher firm growth in this study.

1.3.3. Strategic-Related Activities:

- Regarding the strategic behaviour of female owner-managers, an important finding of the study was the desire and objective for growth as a key driver of higher firm growth in female-owned firms.
- **Setting growth objectives:** This study concluded that setting growth objectives (either financial or non-financial) resulted in higher firm growth.
- **Formalised Strategic Planning:** Completing a formalised 3-5 year strategic plan was also positively linked with firm growth.

- **Strategic Activities:** The study demonstrates that specific activities such as operating in international markets, improving ICT, and seeking professional advice resulted in higher firm growth.

The study has established that firm growth is unpredictable and non-linear, dependent on a range of interlinked factors, which may vary as the firm develops. Coupled with this were the various measures of firm growth emerging whereby some firms achieved growth across all measures, and others in some, highlighting all measures should be equally recognised and valued given their contribution to revenue, or employment or in some cases, both.

Reflections on the Findings: Issues for Consideration

1. Please indicate whether the findings of this research align with your experiences of established female owner-managers in terms of how owner-manager characteristics, firm characteristics and strategic-related activities influence firm growth?
2. What supports/programmes do female owner-managers currently avail of in assisting them to achieve firm growth?
3. How effective are these supports?
4. In light of the current growth programmes offered i.e. “Going for Growth” and “Leadership for Growth”, do you think the findings of this research are supported appropriately through these programmes?
5. Can you provide any suggestions for future supports required to support female owner-managers in achieving firm growth?